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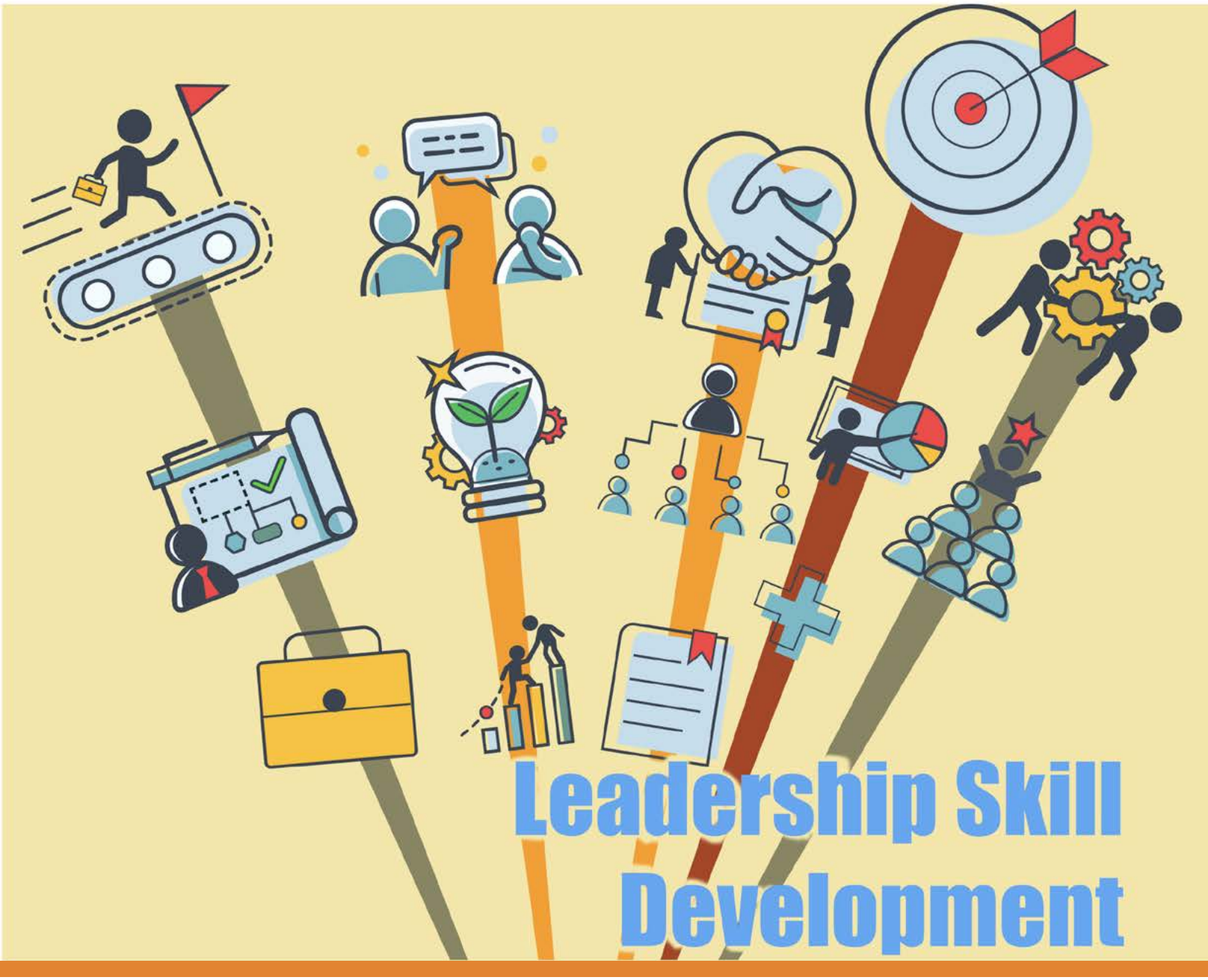

Leadership Skill Development

In this issue

CSPL Canadian Society of Physician Leaders
SCLM Société canadienne des leaders médicaux

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EDITORIAL

No cookie cutter approach to leadership

Sharron Spicer, MD

As a health care leader, I have recently reflected on the fact that my leadership journey has been eclectic, not with a clear destination in mind, and not with any sort of cookie-cutter approach. In fact, my early leadership experiences were not even professionally directed. I certainly never set out on a path to be a leader in a large health care organization. Now that I find myself here, I appreciate opportunities I've had along the way to learn how to lead.

Volunteering has shaped my leadership. For years, I was a Girl Guides leader. Following the tradition of leaders who take on the name of a jewel or gem, I became Moonstone, a mineral that symbolizes intuition and hope. Apparently, it is linked to Cerridwen, the Welsh goddess of inspiration and knowledge – not only qualities I aspire to, but a gentle nod to my own Welsh heritage. Apparently, Moonstone can also refer to a passionate love that will fly you to the moon and back. This myth, however, has not quite yet proven itself true.

With a group of children, we focused on service to others and citizenship. We toured firehalls and dog rescues, learned campfire songs, and sold cookies. Yes – the cookies. When I was with my young charges one day at a pop-up cookie stand, they saw a nearby hot dog vendor and wanted to use the money we had in our cash box to buy ourselves a snack. I explained that the money we collected in return for cookies was used to help us pay for our activities; people bought cookies knowing that they were helping us out, like a charity.

My daughter, about seven at the time (and, even then, a human rights advocate), was incensed. "A charity! We're not a charity. Charity is, like, for people in Africa who don't have clean water. We're just a bunch of kids in North America who want to have fun. We shouldn't ask people for money." So, much to my chagrin, my daughter took a moral stand against cookie-selling.

Many of my leadership skills developed in community organizations. Taking 20 pre-teens backpacking in bear country was an experience in planning and contingencies. In a culture that typically steers kids toward specialization and mastery at a young age, and where competition is part of many of their leisure activities, it was refreshing to encourage curiosity and discovery as we spent time in the outdoors. Seeing children gain skills and confidence as they tried new things was amazing. I discovered that helping people find their passion is the most powerful way to engage them in creating change.

Volunteering provided me with a useful reality check as well. In pediatric palliative care, my work life was filled with sorrow and loss. Getting a good dose of fun was useful medicine for me.

It seems odd to me that I received more formal training in leadership skills in my volunteer roles than I did in my medical training. Nowhere in my medical school or residency was I taught accounting and bookkeeping, but I learned these things in non-profit organizations.

Performance management is a part of leading in volunteer organizations as well. Addressing conflicts is especially important.

Unlike working with others in a profession, where years of training and mentorship shape the professional identity, volunteers coming together bring varied skills and understandings. Setting expectations and giving feedback are key to keeping people working together. Expressing appreciation and showing them the results of their efforts help to keep them motivated.

I also reflect that leadership skills and experience outside of the workplace are sometimes overlooked within the profession. I've had physician colleagues, particularly women, whose experiences on school boards, clubs, and charities are often not considered when they apply for leadership roles in the health care environment. Yet, if we are seeking diversity and equity in our organizations, we would certainly benefit from the experiences of those who have worked with organizations that are composed of and serve diverse groups. My advice is to understand and appreciate the multiple skills that people have used in the many facets of their past experiences.

Fortunately, over the past decade, we are increasingly recognizing that medical leadership is not simply inherent in our personalities, nor achieved in the same ways that we master our clinical acumen. Rather, leadership skills can be taught and learned.

I'm pleased that in this issue of *CJPL* we have multiple contributors who give glimpses of teaching useful leadership skills. We have an article on enabling leadership through quality improvement. There is another on creating shared expectations of resident and attending responsibilities on call. One article describes how teaching negotiation skills can enhance the leadership skills of trainees. There is a review of SimuLEADerShip, a simulation-based learning activity created by the Canadian Society of Physician Leaders and the Royal College of Physicians and Surgeons of Canada, in collaboration with Global LEADS. As always, we have several book reviews of recent publications as well. I hope that you enjoy these articles.

Cookies, anyone? I might just have some in the freezer.

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Development of an institutional "good practices" policy for resident and attending-physician on-call responsibilities: a nominal group technique quality-improvement project

Matthew Lipinski, MD, Shahbaz Syed, MD, and Jerry M. Maniate, MD

On-call coverage by resident physicians is common in academic hospitals, but the interaction between residents and supervising attending physicians varies. Responsibilities are often not clearly defined, which contributes to unclear expectations on the part of both. We developed an institutional "on-call responsibilities" guideline for both residents and attending physicians using a nominal group technique to gain consensus with multiple institutional stakeholders. Three focus groups engaged 31 clinical stakeholders in the development of concise guidelines that include 12 resident responsibilities and 12 attending-physician responsibilities that can be implemented while on-call. Using the nominal group technique allowed us to engage a large number of stakeholders and generate a robust guideline that could be easily operationalized to create a consistent expectation of responsibilities while on call and promote patient safety. It can also potentially reduce resident burnout. This quality-improvement project generated a list of concrete responsibilities that can be used in other centres and provides a robust approach to developing similar policies in other clinical contexts.

KEY WORDS: on call, nominal group technique, quality improvement, residency

Lipinski M, Syed S, Maniate JM. Development of an institutional "good practices" policy for resident and attending-physician on-call responsibilities: a nominal group technique quality-improvement project. *Can J Physician Leadersh* 2022;8(4):127-132
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In any academic hospital where postgraduate medical education (PGME) occurs, resident physicians are often required to provide on-call medical care to patients admitted to their services while also being responsible for seeing new consultations from other services. Although these residents have a supervising attending physician, who is the "most responsible physician," the dynamic between residents and attending physicians while on call varies. In a recent survey of 126 residents at our academic hospital, 71% of respondents were either unsure or did not know of a formal policy regarding contacting attending physicians while on call. In addition, 31% of those respondents cited fear of appearing uncertain and 45% cited fear of appearing incapable as barriers to contacting their attending physician while on call. This revealed a gap in providing expectations of behaviour for both residents and attending physicians at our hospital. Further, medical education emphasizes creating

psychologically safe environments for our trainees. Ensuring standard expectations and communication with on-call staff can help to foster that culture.

Although the literature contains information on desirable attributes of attending physicians while on call,[1,2] there is a lack of research into their application at an institutional level. To support our residents and attending physicians, we sought to develop a "good practices" institutional policy delineating responsibilities that could be used to develop specific on-call policies for each clinical department or residency training program at our institution, The Ottawa Hospital, which is affiliated with the University of Ottawa.

Methods

Between fall 2020 and spring 2021, we held three focus groups, structured using the nominal group technique consensus format,[3] which involves a specific structure of engaging with stakeholders. To generate the responsibilities identified in this policy, we sent an invitation to a broad group of stakeholders: clinical department heads, program directors, departmental vice chairs of education, and chief residents from most residency programs. This group was selected to try to ensure engagement at higher levels of leadership when the final policy was produced.

Nominal group technique was chosen as it allows for the generation of a greater number of ideas, more balanced input from members, and more structured consensus building than traditional brainstorming. The format of the nominal group technique focus group involved presentation of our main question (What should be specific responsibilities for attendings and residents while on call?), followed by individual brainstorming of specific ideas. Subsequently, a round-robin discussion involved the creation of a complete list. A discussion was held to clarify and condense certain responses as a group, with subsequent private voting on the relative importance of each idea.[3]

A final list was prepared of all responsibilities that were voted on by at least one group member. Voting was done by asking participants to rank a fixed number (5 responsibilities for residents and 5 responsibilities for attendings) in order of importance for each group. This list of "good practice guidelines" was then sent out to the initial stakeholder groups for a final round of voting to establish the top responsibilities for both attending physicians and residents.

Ethics approval

Ethics approval for our project was provided by the Ottawa Health Sciences Network Ethics Review Board through an exemption letter for a quality-improvement project.

Findings

In the focus groups, we engaged with 12 participants (6 medical trainees and 6 attending physicians). They identified 28 unique resident responsibilities and 27 unique attending-physician responsibilities. Subsequently, 16 resident responsibilities and 18 staff responsibilities were voted on by participants and included in the final survey to all stakeholders (Table 1).

The final survey was sent to 240 stakeholders, 31 of whom replied for a response rate of 12.9%. Like the focus-group participants, these respondents were asked to provide a weighted ranking list to determine the relative importance of the responsibilities. Survey instructions are available on request. An arbitrary maximum of 12 unique responsibilities for both residents and attending physicians was decided on to ensure that the final policy was sufficiently concise. The final list of responsibilities can be found in Table 2 along with an associated infographic (Figure 1).

The proposed policy, including the final list of responsibilities, was then introduced to the University of Ottawa Faculty of Medicine postgraduate executive committee (members consist of the vice dean of PGME along with residency-training program directors) followed by the hospital's medical affairs advisory committee (members consist of a subset of department heads from the medical affairs committee) for input before final presentation to the medical affairs committee for approval of the policy.

Discussion

Previous literature

Kennedy and colleagues[4] identified clinical, supervisor, and

Table 1. List of on-call responsibilities for ranking by participants (n = 31)

Resident responsibilities	Attending-physician responsibilities
Pre-call	***Pre-call***
• Ask for department-specific algorithms/ • standards of care/tools/protocols that are available. • Introduce yourself to staff (inform them of your skill level, discuss self-identified weaknesses, discuss preferred mode of contact and emergency contact protocol (i.e., if unable to contact staff). • Clarify urgency of contact with attending based on different clinical scenarios.	• Be accessible to residents and reinforce accessibility to residents while identifying any expected absences during call (i.e., scheduled meetings, clinics, or off premises). • Ensure adequate handover of all patients to on-call resident and inform them of any direct admissions or expected patients. • Set criteria for check in with residents and have additional time deadlines to contact residents during their call shift. • Discuss specific expectations of resident while on call and provide orientation to the physical space and location of resources. • Provide preferred mode of communication with resident with an alternate contact method and answer call on first attempt.
During call	***During call***
• Contact attending at "key moments" (start of call, bedtime, wake up, post rounds, new consults, or if overwhelmed from a safety perspective). • Contact attending for major therapeutic decisions, acutely decompensating patients, unexpected deaths, discharges, and coroners' cases. • Contact attending for unexpected procedures and prior to procedures. • When calling attending, ask a specific question or have a specific management plan in mind with justification, or call when uncertain. • Ask for help with medico-legal challenges, documentation, and forms. • Contact attending for interdepartmental conflict and logistical challenges. • Call attending when consults cannot be seen in a reasonable timeframe. • Senior residents to follow up with juniors on patient statuses and update the most responsible physician accordingly. • Discuss with attending and document any telephone advice or interactions with other services regarding patient care.	• Provide a psychologically safe environment to call • attending when resident is outside comfort zone to promote patient safety. • Make sure residents are aware of updated management plan when discussing with other services. • Have access to pertinent investigations while on call in a timely manner. • Supervise and be physically available for all procedures until resident is deemed entrustable. • Provide skill level independence as appropriate for all levels of learners while on call. • Embrace teaching role while on call, answer specific questions and address conflicts discussed while providing teaching on specific cases which should prompt a conversation. • Be available to take over fully if resident has emergency on call. • Touch base with charge nurse to assess residents' management of patient care. • Be within driving distance of the hospital within an agreed upon timeframe. • Be kind and patient with residents and tailor their expectations based on resident skill level. • Be available to assist with family meetings/difficult patient encounters.
Post call	***Post call***
• Be able to give pertinent handover information specific to the service you are currently on. • Finalize all documentation at the end of call shift and document all contact that involved recommendations or management. • Follow Professional Association of Residents of Ontario guidelines for self-regulation and professionalism. • Be familiar with hospital's electronic medical record.	• Plan for completion of entrustable professional activities and feedback at the end of call shift for residents, especially any unsafe management or patient safety issues. • Promote availability for any debriefing after difficult call shifts or patient encounters.

trainee factors that determine a trainee's decision to obtain clinical support from their staff. Specifically, the availability and approachability of a staff supervisor were cited as key considerations of a resident deciding when and how frequently they contacted their supervisor while on call. Multiple studies have shown discordant opinions between attending physicians and medical trainees regarding when it is appropriate to contact supervising staff.[5,6] Ultimately, a systematic review[7] found that improved supervision of learners (i.e., promoting regular communication, soliciting contact when uncertain, reassuring residents not to be afraid to call) resulted in improved patient safety. Residents who felt unsupported by the relationship with their attending physician reported higher levels of emotional

Table 2. Resident and attending-physician on-call responsibilities chosen by participants (n = 31)

Resident responsibilities	Attending-physician responsibilities
1. Contact attending physician for: major therapeutic decisions, acutely decompensating patients, unexpected deaths, discharges, and coroners' cases.	1. Be accessible to post-MD trainee physicians and reinforce accessibility to post-MD trainee physicians while identifying any expected absences during call (i.e., scheduled meetings, clinics, or off premises).
2. Contact attending physician for interdepartmental conflict and logistical challenges.	2. Provide preferred mode of communication with post-MD trainee physician with an alternate contact method and answer call on first attempt.
3. Introduce yourself to attending physician (inform them of your skill level, discuss self-identified weaknesses, discuss preferred mode of contact and emergency contact protocol [i.e. if unable to contact attending physician]).	3. Provide a psychologically safe environment to call attending when post-MD trainee physician is outside comfort zone to ensure patient safety.
4. Contact attending physician for unexpected procedures and prior to procedures.	4. Ensure adequate handover of all patients to on-call post-MD trainee physician and inform them of any direct admissions or expected patients.
5. Contact attending physician at "key moments" (for example, start of call, bedtime, wake up, post rounds, new consults, or if overwhelmed from a safety perspective).	5. Supervise and be physically available for all procedures until post-MD trainee physician is deemed entrustable.
6. Give pertinent handover information specific to the service you are currently on.	6. Provide skill level independence as appropriate for all levels of learners while on call.
7. Ask specific questions or have a specific management plan in mind with justification when calling attending physician or call when uncertain.	7. Be kind and patient with post-MD trainee physicians and tailor their expectations based on the post-MD trainee physician's skill level.
8. Finalize all documentation at the end of call shift and document all contact that involved recommendations or management.	8. Embrace teaching role while on call, answer specific questions and address conflicts discussed while providing teaching on specific cases which should prompt a discussion with the attending physician.
9. Call attending physician when consults cannot be seen in a reasonable timeframe as outlined in the TOH Admission Algorithm – Referral and Consultation Guideline.	9. Set criteria for check in with post-MD trainee physicians and have additional time deadlines to contact residents during their call shift.
10. Be familiar with hospital's electronic medical record (EMR) system.	10. Be within driving distance of the hospital within an agreed upon timeframe.
11. Clarify urgency of contact with attending based on different clinical scenarios.	11. Be available to take over fully if post-MD trainee physician has emergency on call.
12. Ask for help with medico-legal challenges, documentation, and forms.	12. Discuss specific expectations for post-MD trainee physician while on call and provide orientation to the physical space and location of resources.

exhaustion and burnout.[8] These studies indicate that a resident's decision to contact their attending while on call is multi-factorial and not solely based on clinical aspects, but also the characteristics of the attending themselves. Our project provides a process to develop clear hospital policies to standardize that interaction and empower residents to contact their attending supervisor when clinically indicated.

Strengths and limitations

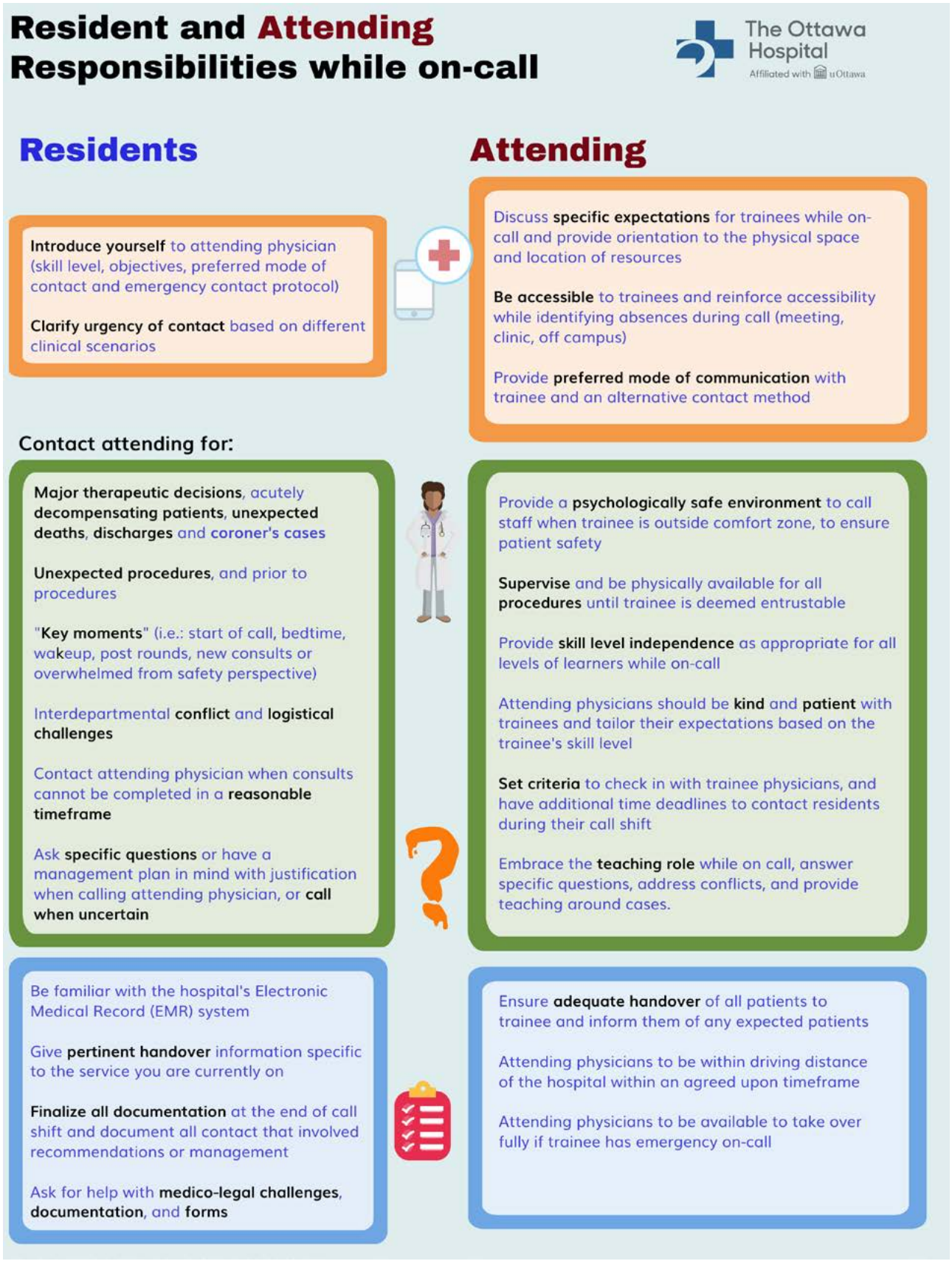
The strength of our study lies in the novelty of the development of an on-call responsibilities guideline, using the nominal group technique for consensus building and then operationalizing at an organizational level. This project outlines how to engage with stakeholders from diverse backgrounds to generate a unified guideline. Both the process for developing the guideline and the content itself may be easily adapted and generalized to other institutions to meet their individual needs.

This process does have some limitations. A large number of stakeholders were contacted to ensure that none were missed, but the response rate was low. A response bias is present, as there was only a single follow up of stakeholders who were initially contacted and only those who were interested in engaging in the process were included. In addition, the nominal group technique, by definition, is the generation of ideas and consensus among stakeholders. As such, the generalizability of the output may be limited as it is significantly influenced by the local context.

Conclusion

Through the engagement of multiple stakeholders across our academic hospital (The Ottawa

Figure 1. Infographic version of responsibilities distributed to all departments and chief residents at The Ottawa Hospital



Hospital), using a consensus-based nominal group technique, we generated a list of concrete responsibilities to provide a standardized approach to the trainee–attending relationship while on call. The findings of this project could be used by other institutions to develop their own policies with respect to on-call responsibilities of trainees and attendings to better enhance patient safety and trainee psychological safety. This project is part of a larger plan-do-study-act cycle, in which we are assessing the current on-call culture in our organization and a post-implementation survey is planned to assess the impact of a formalized on-call policy.

Practice points

- The interaction between residents and supervising attending physicians at academic teaching hospitals varies and expectations are often unclear.[5] In a recent survey of residents at our hospital, 71% were not aware of a formal policy for contacting their attending physician while on call.
- Using a nominal group technique, we developed a "good practices" consensus guideline with the engagement of multiple stakeholders. This resulted in an institutional policy that promotes patient safety and consistent expectations of responsibilities while on call.
- This quality-improvement project provides a road map for the development of consensus policies in other clinical contexts while also creating a list of concrete responsibilities that can be easily adopted in other centres.
- Department and organizational leaders should review whether they have any formal policies guiding supervision of medical learners while on call and, if required, consider developing a similar policy based on their local context.

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Author attestation: Dr. Lipinski was the primary writer of the manuscript and the main creator of on-call policy. Dr. Syed edited the manuscript and developed the infographic. Dr. Maniate edited the manuscript and developed the quality-improvement initiative and process. All authors approved the final version of the article.

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This article has been peer reviewed.

Strategies for enabling physician leadership and involvement in quality improvement: a scoping review

Pamela Mathura, PhD student, Tarek Turk, Liz Dennett, MLIS, Karen Spalding, PhD, Lenora Duhn, PhD, Narmin Kassam, MD, and Jennifer Medves, PhD

Background: The importance of physician advocacy and leadership in quality improvement (QI) in health care is well recognized, but achieving physician involvement is challenging. The purpose of this scoping review was to describe strategies used in physician-led QI models/approaches that include learning about the science of improvement and may enable physician QI capability, participation, and leadership.

Methods: Articles were identified through electronic searches of MEDLINE, Embase, CINAHL, and Scopus, and reference lists were reviewed. For each model/approach, descriptions of strategies were extracted and the frequency of each strategy was determined. Thematic analysis was conducted.

Results: Eleven articles representing nine unique models/approaches were included. From these, 20 enabler strategies were identified, and eight themes emerged: dedicated support staff; operational alignment and leader support; evidence-informed care; sharing QI to encourage QI; financial investment; formal QI leader role and responsibility; physician mentorship; and QI capability. No model/approach included all the strategies, and the number of strategies aligned with each theme varied. Heterogeneity in reporting physician-led QI approaches and broad use of the term "physician-led" increased search complexity.

Conclusion: Comprehensive models/approaches that encourage physicians to participate in and lead QI while learning the science of improvement have not yet been developed. Research on physician QI participation and strategy evaluation, including effectiveness, is required. This review offers a road map of enabler strategies that can be used to support future models.

KEY WORDS: health care, quality improvement, leadership, education

Mathura P, Turk T, Dennett L, Spalding K, Duhn L, Kassam N, Medves J. Strategies for enabling physician quality improvement leadership and involvement: a scoping review. *Can J Physician Leadersh* 2022;8(4):133-141 https://doi.org/10.37964/cr24761

Over the last decade, there has been a greater appreciation of the value of physician engagement in quality improvement (QI) in health

care, in recognition of physicians' unique perspective, experience, and skill set.[1] The requirement to improve clinical outcomes, patient safety, experience and satisfaction, and financial performance has positioned physicians to assume leadership roles with an increased emphasis on QI. Physician QI leadership has been identified as an important factor for successfully "establishing a QI culture… for guiding the group [multiprofessional providers] toward meaningful and relevant improvement efforts."[1] However, physician involvement in health care improvement, at any level of clinical practice, hospital, or health region, is challenging.[2-5]

To address this issue, physician QI engagement approaches are emerging.[6,7] Expansion of physician QI leadership – defined as "the active and willing participation of physicians in local and regional QI projects that develop a strategic partnership with healthcare operations to improve healthcare delivery"[8] – has been modest. There is a paucity of QI models/approaches that include developing one's science of improvement (SI) knowledge, wherein physicians can initiate involvement and lead QI. The Institute for Healthcare Improvement defines SI as "an applied science that emphasizes innovation, rapid-cycle testing in the field… [and uses] the combination of expert subject knowledge with improvement methods and tools."[9]

Physician-led QI models/approaches described in peer-reviewed articles include strategies that have not been thoroughly investigated. The objective of this scoping review was to map and describe the existing peer-reviewed literature about the strategies used in physician-led QI models/approaches that include the learning of SI, which may enable physician involvement in and leadership of QI and safety. The research question was: How are physician-led QI models/approaches described in the literature, and what enabler strategies in these models/approaches promote physician QI capability (SI knowledge and application), participation (QI-initiative involvement and motivation), and leadership (champion/lead a QI-initiative)?

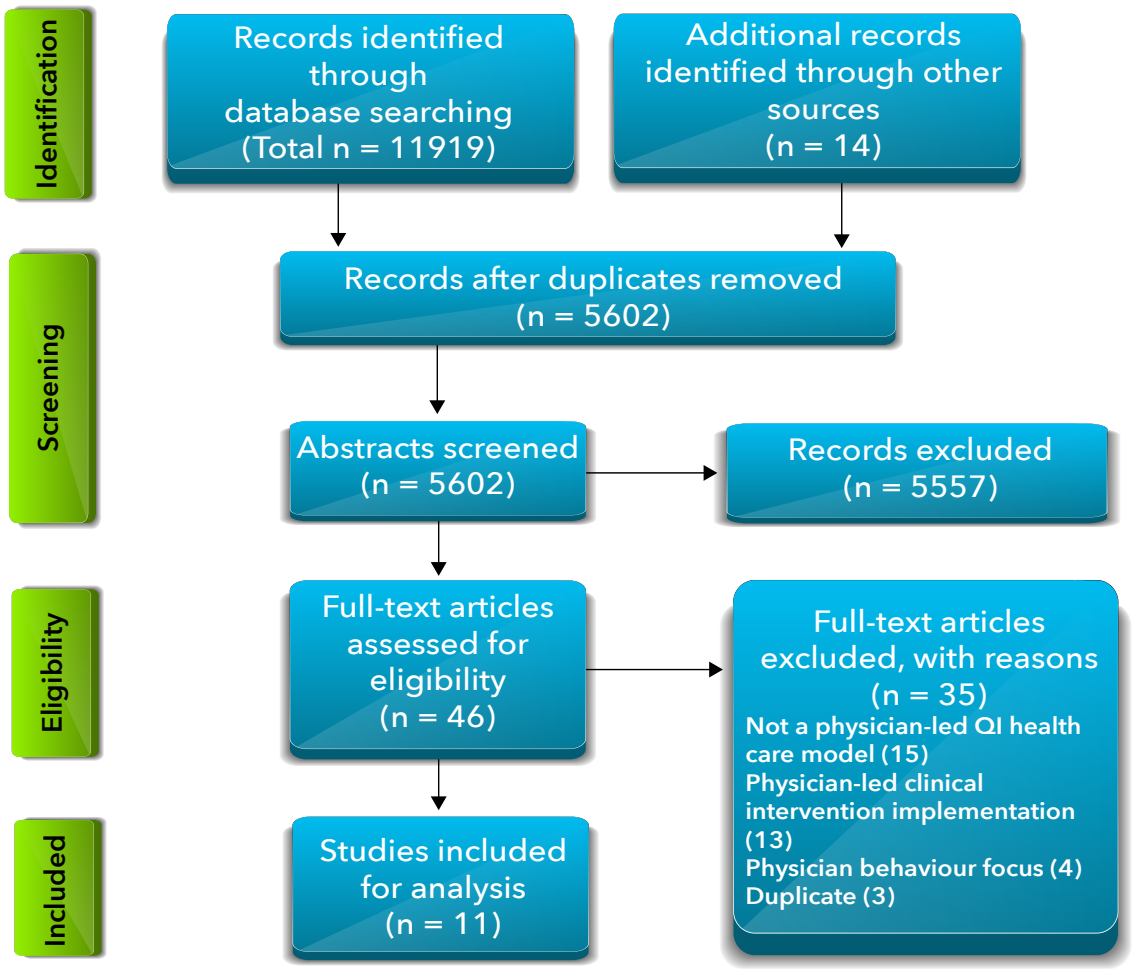
Methods

A scoping review was completed following the framework of Arksey and O'Malley[10] and applying the PRISMA-ScR checklist for reporting.[11] For this review, a physician is defined as a medical doctor practising in any medical discipline and not a medical trainee (resident/housestaff or fellow). A physician-led health care QI model/approach is defined as one in which physicians are in a leadership position (i.e., quality or safety lead, quality officer, QI mentor) with a focus on QI and or patient safety (PS) and are leading the model/approach; there is collaboration among physicians to lead the learning of SI while participating in QI/PS projects with other health care professionals; and a physician is leading QI implementation.

The initial search was completed on 28 April 2020 by a health sciences librarian (L Dennett) and updated on 18 February 2022. The following databases were included: MEDLINE, Embase, CINAHL Plus with Full Text, and Scopus. The search strategy included an extensive list of terms representing two concepts: physician leaders/physician groups and QI. To improve precision, a "relevancy forcer" concept required any one of the following words to be in the title: network, coalition, collaboration, committee, alliance, collaborative, framework, model, physician, clinician, specialist, doctor, leader, or mentor. The reference lists of relevant selected articles were searched manually.

Included articles were from any country, written in English, about descriptions or assessments of any model/approach about health care QI/PS led by physicians, with inclusion of SI learning. The rationale for the focus on physician-led models was to understand the challenges faced by physicians in engaging in and leading QI and to identify strategies used to address barriers. There were no restrictions regarding publication date, study design, research quality, physician specialty, practice area, or type of QI initiative. Excluded articles included models/approaches co-led by physicians with other health care professionals, educational approaches, models led by other health care professionals or learners, models in which physicians were leading only the implementation activities, or models where the primary

Figure 1. Study selection process



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For more information, visit www.prisma-statement.org.

emphasis was data registries without the inclusion of SI learning. All citations were uploaded into Covidence, citation management software (Covidence, Melbourne, Australia). Two of the authors independently reviewed all titles and abstracts to exclude irrelevant articles; there was substantial agreement between reviewers (Cohen Kappa was 0.80).[12] Full-text articles were retrieved and reviewed independently to determine final inclusion. Discrepancies were resolved by discussion and consensus. A data extraction Excel form (version 2013; Microsoft Corp., Redmond, Washington, USA) was developed to facilitate data collection. Both PM and TT independently read the included articles to determine the final list of strategy topics. JM confirmed the included articles and data extraction. A descriptive analysis was conducted to determine the frequency of each strategy topic in the included articles. A thematic analysis[13] was performed by PM, who organized the strategy topics into themes. TT and JM independently confirmed the themes.

Results

A total of 11 919 citations were retrieved. After removing duplicates, 5602 abstracts, published between 1955 and 2022, were screened, and 5557 were excluded. From these, 46 full-text articles were reviewed, and 11 articles are included in this review (Figure 1).

Table 1. Summary of model/approach characteristics from articles included in the review

Article	Model name	Year est.	Location	Coverage	Physician specialty	No. physicians involved	Funding source	Objective
Goitein 2020[14]	Clinician-directed performance improvement program	2015	USA	Hospital	Various disciplines	80	Grant	To provide practising physicians protected time, support, and training to conduct QI projects they believe are most important for their hospital service.
Ahmed 2019[18]	Quality improvement committee	2015	United Kingdom	Region	Not stated	Not stated	Not stated	"To create an ethos where Foundation doctors take a leading role in raising awareness about QI, facilitate and implement QI projects"[18] (p. 536).
Li 2015[20]	Physician-mentored implementation model	2008	USA	Country	Various disciplines	100+	Hospital	To use the expertise of physicians at academic medical centres to be physician QI leaders who mentor and support frontline physicians to implement a QI project.
Walsh 2009,[21] Klugman 2015[19]	Physician quality officer programe	2007	USA	Hospital	Various disciplines	16	Hospital	To create a multispecialty, physician-led QI team where QI priority is based on institutional needs.
Nelson 2014[17]	Performance improvement/ patient safety committee	2009	USA	Hospital	Various disciplines	32	Hospital	To support physician QI capability, participation, and leadership by allowing physicians to select initiatives that "made sense to physicians"[17] (p. 510).
Maynard 2012[23]	Physician Quality Network-Medical Advisory committee	2007	USA	Country	Hospitalists	100+	Variety of resources (foundation, industry, government grants)	"Dual aims of educating and mentoring hospitalists and their QI teams and accelerating improvement in the inpatient setting in three signature programs"[23] (p. 301).
Hayes 2010[7]	Physician Quality Network-Medical Advisory committee	2006	Canada	Region	Various disciplines	20	Hospital	To establish a physician network to share, contribute to QI and PS strategic planning with hospitals, intervention design, and implementation and to support physician QI/PS culture.
Flanders 2005,[15] 2009[16]	The Hospitalists as Emerging Leaders in Patient Safety Consortium	2006	USA	State	Hospitalists	9	Hospital	To identify proven PS practices and then facilitate widespread dissemination of those practices.
Hoag 2019[22]	Physician Quality Improvement program	2015	Canada	Province	Various disciplines	100+	Government	To develop physician QI capability, transform care delivery, and engage physicians and health partners. Provide training and support to physicians, to lead QI projects.

Note: Est. = established, PS = patient safety, QI = quality improvement

Based on the 11 included articles[7,14-23] (Table 1), physician-led QI models/approaches that include learning SI and are exclusively physician-led are few in number and the designs and formats vary. Among the 11 articles, we identified nine unique physician-led models/approaches. The model, HELP consortium, was described in two articles[15,16]: one about the model's proposal and the other about findings after two years. The same model (physician quality officer) is mentioned in two articles[19,21] and, in another, the authors refer to the model website.[22] Articles were published from 2005 to 2020 and were model/approach descriptions with or without evaluation.[7,14-23] Most

Table 2. Enabler strategies identified in reviewed articles

Enabler strategy	Goitein 2020[14]	Ahmed 2019[18]	Li 2015[20]	Walsh 2009,[21] Klugman 2015[19]	Nelson 2014[17]	Maynard 2012[23]	Hayes 2010[7]	Flanders 2005,[15] 2009[16]	Hoag 2019[22]	Total
1. Physician peer mentoring	✓	✓	✓	✓	✓	✓	✓	✓	✓	9
2. Reporting structure and/or alignment with senior organizational leaders	✓	✓	✓	✓	✓	✓	✓	✓	✓	9
3. Hands-on QI skill development	✓	✓	✓	✓	✓	✓	✓	✓	✓	9
4. Dedicated staff	✓	✓	✓	✓	✓	✓		✓	✓	8
5. Evidence-based interventions implemented by physicians	✓		✓	✓	✓	✓	✓	✓	✓	8
6. Operational alignment	✓	✓		✓	✓		✓	✓	✓	7
7. Track and share completed QI projects and goals	✓	✓	✓	✓	✓	✓			✓	7
8. Funded model/approach	✓		✓	✓		✓	✓	✓	✓	7
9. Formal SI education program	✓	✓		✓			✓	✓	✓	6
10. Academic physician collaboration		✓		✓	✓		✓	✓	✓	6
11. Physician-determined QI priority	✓			✓	✓		✓		✓	5
12. Physicians teach QI		✓		✓			✓		✓	4
13. Physician formal QI role: job title and description				✓			✓		✓	3
14. Protected time	✓			✓			✓			3
15. Financial reward (paid role)	✓			✓			✓			3
16. Annual QI event (share and showcase completed projects)	✓				✓				✓	3
17. Additional training and conferences	✓								✓	2
18. Scholarly activities (manuscripts)				✓					✓	2
19. Mandatory participation (part of annual review)		✓								1
20. Financial bonus (for achieving goals)				✓						1

Note: QI = quality improvement, SI = science of improvement

articles represent North American experiences (eight from the USA and two from Canada), with one from the United Kingdom. The models/approaches were referred to as a program (n = 5)[14,19,21-23], a committee (n = 3)[7,17,18], a model[20] (n = 1), or consortium (n = 2).[15,16]Funding came from a hospital, a grant, the government, a combination of the three,[7,15-17,19-23] or was not provided.[18] Geographic coverage and influence is large, with six of nine models/approaches structured across a province, state, region, or country, and three within hospitals. The number of physician members ranged from 7 to over 100, and medical specialties varied.

Based on the included articles, 20 "enabler" strategy descriptions were identified (Table 2).

Themes

Eight themes emerged from the strategy topics (Table 3). No model/approach included all the strategies, and the number of strategies per article aligning with each theme varied. No article included an evaluation to determine physician participation experience or strategy effectiveness.

Dedicated support staff

In all but one article, a significant enabler was dedicated staff with specialized skills in QI, safety, data analytics/statistics, and project management, who provide direct support to physicians with limited experience and demanding clinical schedules to lead QI.[14-23] Authors discussed how clinical improvement requires researching best practices, project design and management, knowledge of QI/PS concepts, and collection and analysis of data – time-consuming

Table 3. Themes that emerged from the strategies

Theme	Strategy topic
1. Dedicated support staff	Skilled staff such as QI advisors/consultants, PS experts, project managers, statisticians, academic researchers, and data analysts[14-23] [topic 4]
2. Operational alignment and leader support	Operational alignment, model "internal" to hospital or health organization[7,14-19,22] [topic 6] Reporting structure and/or alignment with senior organizational leaders[7,14-23] [topic 2] QI priority physician determined[7,14,17,19,21,22] [topic 11]
3. Evidence-informed care	Evidence-based interventions implemented by physicians[7,14-17,19-23] [topic 5]
4. Sharing QI to encourage QI	Annual QI event[14,17,22] [topic 16] Track and share completed QI projects and goals[7,14,17-23] [topic 7]
5. Financial investment	Funded model/approach[7,14-16,19-23] [topic 8] Financial bonus[19,21] [topic 20]
6. Formal physician QI-leadership role and responsibility	Physician formal QI role, job title, and description; protected time and financial reward (paid role)[7,14,19,21] [topics 13, 14, 15] Physicians teach QI[7,18,19,21,22] [topic 12] Mandatory participation; part of physician annual review and promotion[18] [topic 19]
7. Physician mentorship	Physician peer mentoring[7,14-23] [topic 1]
8. QI capability	Academic physician collaboration[7,14,17,18,19,21,22] [topic 10] Formal improvement science education program[7,14,15,18,19,21,22] [topic 9] Hands-on QI skill development[7,14-23] [topic 3] Scholarly activities[19,21,22] [topic 18] Additional training and conferences, i.e., leadership, conflict resolution, etc.[14,22] [topic 17]

Note: PS = patient safety, QI = quality improvement

work that is difficult for a busy clinically practising physician.[14-23]

Operational alignment and leader support

Authors described the concept of operational alignment as an enabler of physician-led QI in eight articles, implying that for the model to function effectively, it must be internally linked to the hospital or health organization.[7,14-19,21,22] In all articles, the authors emphasized the importance of QI/PS objectives, including a reporting structure or linkage to senior organizational leaders to ensure that the quality agenda is aligned with and supported by the hospital or organization.[7,14-23] This is indicative of the importance of mutual collaboration regarding shared QI goals. Another important aspect of engaging physicians in QI is having physicians lead or assist in the selection of QI-project priorities that are meaningful and make sense for clinical service improvement. This strategy is reported to be critical to their enthusiastic participation.[7,14,17,19,21,22]

Evidence-informed care

In most of the included articles, the authors described evidence-informed interventions implemented by physician champions as a key strategy to raise awareness of best practices and SI and to influence peers to change practice behaviour.[7,14-17,19-23] The physician leader was often mentioned

as presenting the evidence-informed practice to frontline physicians, seeking their input, and implementing the change. With a physician as QI leader, authors reported faster implementation and better communication between frontline physicians and hospital administrators.[7,14-17,19-23]

Sharing QI to encourage QI

Often mentioned was tracking of QI projects and goals that are shared broadly. Communicating information about a QI project as well as the outcomes (i.e., clinical, patient, and health system) is facilitated by using hospital and organizational webpages or locally in the hospital community with multiprofessional providers.[14,17-23] Formally sharing physician-led QI-project posters at annual events (i.e., quality summit[17]) was described as an important enabler, not only to recognize and encourage the physicians involved in the project, but also to influence other physicians to participate in future QI efforts.[14,17,22] To acknowledge physicians' QI leadership, QI-project posters include photographs of the physicians who were involved,[17] and QI involvement is part of the annual performance review process.[18]

Financial investment

To ensure implementation and sustainability of the model, several authors identified securing funding and making a financial investment in physician QI leadership as a significant enabler. Funding sources described were hospitals, external grants, government programs, and a combination of funders (i.e., hospital, foundations, grants, and government).[7,14-16,19-23] In one model, physicians received a financial bonus for achieving the QI goals[19,21] and for a few models, project financial outcomes were calculated, which was suggested to have strengthened the financial case for long-term investment.[14,19,21] However, in one article, the authors explained that projects that are not financially beneficial may have a positive effect on physician QI participation experience; thus, intangible benefits and perspectives should be evaluated.[14]

Formal QI-leadership role and responsibilities

The role of physician leaders in these models is described as an unpaid, non-formalized role assumed by physicians with an interest in QI and accepted in addition to their clinical duties, suggesting a strain on physician time.[7,15-20,22,23] Infrequently, the physician leader role is a formal, paid organizational role, with a job title (i.e., physician quality officer, patient safety and medical quality officer, physician quality lead, and clinical-directed performance improvement medical director) and recruitment process, with protected time for leading QI projects.[7,14,19,21] In one article, the authors reported that participation in QI is mandatory for early career physicians.[18] Described less frequently, the physician role includes teaching SI to medical students, residents, and practising physicians.[7,18-22] Some authors suggested that, in the case of academic hospitals, linking physician-led QI efforts to teaching and research is necessary and effective.[19]

Physician mentorship

In all the models/approaches, an essential enabler is the ability of physician QI leaders to mentor, influence, and encourage peer physicians and multiprofessional providers to participate in QI.7,[14-23] In one example, the authors described how one physician QI leader was successful in recruiting frontline physician champions for several QI initiatives.[7] At a corporate and strategic level, physician-led QI models positioned physicians to lead a clinical QI team and provide feedback regarding clinical impact, feasibility, and perceptions of frontline physicians, which can lead to modifications in implementation plans. This approach can increase physician leader credibility and result in greater success.[7,14]

QI capability

Providing physicians with QI knowledge and skills is a recognized enabler. Most authors reported the need to provide formal education about SI to physicians.[7,14-16,18,19,21,22] To support physician capability beyond SI, additional training in leadership, scientific methods, communication, conflict resolution, and patient-centred care concepts, with the opportunity to attend conferences, were mentioned.[19,21,22] In all articles, physicians were provided peer mentoring, with hands-on QI skill and leadership development through the completion of QI projects. In six articles, the authors mentioned collaboration with academic physicians[7,15,17-19,21,23]; however, knowledge dissemination (i.e., manuscript development and submission) was rare.[19,21,22]

Discussion

From the 11 articles reviewed, nine unique models/approaches were discovered, and, from them, enabler strategies were organized into eight themes. The frequency with which these strategies are used can be an indication of their importance and ease of implementation.

It is important to unite senior physician leaders with hospital/organizational leaders committed to and providing long-term financial investment for physician QI leadership. In addition, dedicated quality and analytic staff, QI education, peer mentoring, and the inclusion of a multiprofessional team are all needed. Furthermore, the findings emphasize the need for protected paid time, recognition in performance reviews, annual QI events, and a joint (physician and hospital/organization) QI agenda with shared goals. The identified strategies position and support physicians to develop SI skills and to actively participate in and lead health care improvement. Leveraging the formal and informal influential relationships physicians have with each other is also an important factor.[7,14]

The diversity of geographic coverage suggests that physician-led QI models/approaches, either localized within a hospital or aligned with a large regional span, are of benefit in encouraging practising physicians to learn and apply SI while improving clinical outcomes. Our review revealed enabler strategies similar to others, such as promotion, recognition, engaged and supportive leadership, QI education and training, appropriate compensation, realignment of financial incentives, data collection and analysis support, and protected time.[4,25] For physician and organizational leaders and institutions, this review may aid model design, educational programs, and formalize physician QI roles. This information provides additional insights to stakeholders interested in scaling up and spreading physician-led improvements.

An obstacle to synthesizing findings across the articles is the scarcity of global health care representation, heterogeneity of reporting, and the broad use of the term physician-led. The strict criteria of including articles about exclusively physician-led models to isolate enabler strategies may have introduced selection bias and may not have captured all the relevant articles.

Conclusion

Physician-led health care QI models/approaches based on the general premise of encouraging physicians to participate in and lead QI are relatively new. There is currently minimal research on the experience of physicians participating in QI from which to determine the effectiveness of strategies, making it difficult to draw firm conclusions. Further research is needed to evaluate models/approaches, analyze the effectiveness of enabler strategies, and conduct a qualitative exploration of physician motivation to engage in QI, as well as to standardize the reporting of health care QI models. This review may serve as a roadmap that outlines enablers and may aid future models/approaches.

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Teaching negotiation skills to medical trainees enhances their leadership development

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In health care, negotiation is a crucial skill that physicians apply in many contexts, from delegating clinical duties to navigating work terms. Various strategies and approaches can improve the efficacy of these interactions, and it is increasingly important for medical curricula to be adapted in a way that fosters the development of certain skill sets centred around leadership. Negotiation falls into this category and is crucial in developing both management and clinical capacities. Although the literature identifies the relation between knowledge and skill in negotiating, there has been limited integration into curricular activities. This article provides an overview of negotiation strategies as examined in the literature. It includes the commonly used positional negotiation strategy as well as the more effective principled negotiation strategy developed by the Harvard Negotiation Project. We compare the usefulness of these two strategies using a real-world scenario and summarize the literature exploring the gap in the skill of negotiation among trainees. This can also serve to identify ways in which it can be incorporated as a standard in medical education. Overall, with the push for leadership development, we propose that negotiation should not be a skill that is expected to be gained through work experience, but as a formal part of the medical education curriculum.

KEY WORDS: medical learners, medical education, negotiation, medical curriculum, medical training, leadership skills

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The Royal College of Physicians and Surgeons of Canada uses the CanMEDS framework to guide competency-based training of physicians.[1] The role of collaborator receives a huge emphasis throughout undergraduate and postgraduate medical training through the lens of interprofessional collaboration. Although one of the key concepts encompassed in the CanMEDS role of collaborator is constructive negotiation, this concept is often not formally addressed in medical curricula.

According to Anastakis and colleagues,[2] negotiation can be defined as "a strategy to resolve a divergence of interests, real or perceived, where common interests also exist." Negotiation is typically thought of as a business

skill and is not well taught in medical training. Yet this important skill is needed, as a physician may engage in all sorts of negotiations, such as arranging work contracts or discussing clinical duties. Many medical trainees feel that they have inadequate negotiating competency. For example, Berkenbosch et al.[3] found that Canadian and Danish medical residents felt that their negotiating skills were poor. Similarly, a needs-based assessment in the Netherlands found that 60% of residents did not feel confident in their negotiating skills.[4]

Medical education must adapt to the needs of trainees to ensure that they are well equipped for their future careers. A systematic review found that little attention is paid to management in the medical curriculum, although students recognize there is a need to develop such skills.[5] Although negotiation is perceived as important in fields of business and management, it is also a crucial yet often overlooked skill in health care. Studies demonstrate that with improved negotiation skills, collaboration among physicians also improves.[6] Physicians require collaborative work in their career in many cases, ranging from hospital committees, advocacy and citizen groups, and legal professionals.

Specifically, with the increasing importance of the role of a physician leader, greater emphasis is being placed on the ability to negotiate by balancing limited resources with good patient care.[7] In general, physicians also participate in negotiation during clinical duties in delegating tasks and resources to care teams as well as administratively in finalizing work terms.[8] This overview aims to explore the types of negotiations that a physician may be involved in, identify the different strategies of negotiation, and outline how negotiation training can be implemented in medical education.

Types of negotiation and current best practices

The most common strategy is positional negotiation, which is based on taking a side and successively taking and giving up one's position until a compromise is reached. Parties can play the "soft" or "hard" negotiating game. Soft negotiators aim to maintain the relationship with the other party, by being trusting of the other side and avoiding confrontation by accepting

losses to reach agreement. Hard negotiators demand concessions as a condition of the relationship and are usually distrusting of the other party. However, both strategies can lead to inefficient outcomes and/or damaged relationships.

Principled negotiation, a different approach developed by the Harvard Negotiation Project, focuses on merits rather than the people or positions. Principled negotiation is based on four themes: people, interests, options, and criteria. The negotiator separates the people from the problem by having them work on issues together as partners rather than against each other. The underlying interests of the parties, rather than their positions, should be explored. A party's interests are based on their needs or concerns, which may not be obvious at the onset. However, when one delves into getting to know interests, both compatible and incompatible interests can be found and used to maximize benefit for both sides and minimize undesired outcomes.

Furthermore, multiple options should be explored for mutual gain rather than focusing on only one option. Often, people go into negotiations with a pre-set goal. However, lack of flexibility may cause them to miss better, less noticeable options that benefit both parties. The focus should be on the exploration of options, with the decision coming later.

Finally, objective criteria should be used to reach a result. It is easy to be guided by emotions; however, that may lead to an unfair or unwise outcome. One should give in on principle not pressure. By engaging in principled negotiation, parties can reach amicable and efficient outcomes. This information, as well as additional details about the principled negotiation strategy, can be found in *Getting To Yes* by Roger Fisher and William Ury.[9] A video created by the Erich Pommer Institut also provides a detailed summary of this technique.[10]

In practice: developing leadership through principled negotiation

Let's explore the two negotiation strategies through an example. In rural medicine settings, limited access to resources, such as

diagnostic imaging, impose challenges to care. In this case, a trauma patient arrives at 11 p.m., and the physician is concerned about missing a source of internal bleeding. He wants imaging done immediately to avoid possible decompensation overnight. This will require the technician to come to the imaging centre after standard working hours.

In positional negotiation, the physician may take the stance that the technician must come in at night, whereas the technician may feel that this is outside work hours and they are not obligated. Discussion may lead to worsening of their relationship, as the physician refuses to budge and the technician feels pressured by the physician's authority.

In general, medical residents indicate a need for incorporating negotiation training into teaching.[11]

In principled negotiation, the problem is that the patient requires urgent imaging and no technician is available at late hours. The physician is worried about the patient's clinical status and feels that this information is critical to the patient's management. At the same time, the technician has spent several late nights at the hospital and has not spent time with his family lately. By exploring the problem and interests together, they both come up with options including seeing whether other imaging modalities can be used that don't require a technician, assessing whether the imaging will change immediate management, asking if another technician is available, or agreeing that the technician will come in tonight but get to leave early the following day. Finally, they refer to objective criteria, in this case, hospital policy to decide on an option independent of their will. Ultimately, they choose to have the technician come in tonight with reduced hours the following day and also plan a meeting with the department head to create a scheduling system to prevent these types of situations.

Compared with a positional negotiation approach, which could have contributed to feelings of resentment or frustration, principled negotiation helps develop a more supportive and compassionate workplace culture. The physician's use of principled negotiation also represents a positive form of leadership that creates a collaborative environment among team members.

Integrating negotiation training into curricula

In general, medical residents indicate a need for incorporating negotiation training into teaching.[11] Although literature on including negotiation training in medical school curricula has been limited, there has been success in other professional programs. For example, in the biomedical science graduate program at West Virginia University, a training program helps students develop skills in conflict resolution and negotiation.[12] It includes didactic lectures, but a major emphasis is on interactive role-playing activities. Based on surveys conducted to evaluate the efficacy of these sessions, this training appears to give students new tools to negotiate.

In medical schools, similar strategies can be employed while planning for additional curriculum development in this field. To identify the key factors to consider when integrating these concepts into curricular teaching, a report evaluated a program to teach negotiation skills in a health care setting in Australia.[13] The researchers identified key themes that could be translated into the medical education setting. These included providing more flexible training hours, providing specific tools for negotiation, creating opportunities to practise negotiation, and addressing long-term sustainability. Although negotiation skills have not generally been incorporated into medical education, using knowledge gained from parallel professions and other training settings could be valuable in informing curriculum development.

A key component of skilled negotiation is the attitude of the participants. The literature suggests that different attitudes are taken by medical residents during negotiations based on who they are having the discussion with. For example, assertiveness was predominant among supervisors, but empathy was predominant among nurses.[11] As a result, how to negotiate in health care must be understood in the context of the hierarchies

present. Differences in personality, culture, or religious beliefs between negotiating parties may appear as barriers preventing an outcome that is satisfactory to both parties. However, the art of negotiation requires adaption, which is integrated into the principled negotiation approach. It is important to respect the other party's beliefs and customs, but also avoid assumptions or stereotyping. Making assumptions may harm the working relationship and prevent both parties from reaching a win–win outcome. Thus, to successfully negotiate in these circumstances, one needs to listen actively to the other party and adapt their approach to negotiation in a way that is persuasive to their way of thinking.

Conclusion

Unless medical trainees engage in business training, they are unlikely to be taught negotiation and many other basic business skills. Instead, it is expected that these capabilities will be gained through experience in the health care field. However, negotiation is a concept that falls under the collaborator competency and is an important part of being a skilled physician. Similar to the push for leadership development for medical trainees, management development is also required. Teaching medical trainees the principled negotiation approach may lead to more fruitful outcomes.

We propose that the skill of negotiation be taught beginning at the undergraduate level of medical education. Medical schools and residency training programs must provide trainees with the tools to navigate conversations and discussions. This will serve to best position students in their careers and, as a by-product of improved training in negotiation skills, we may be able to facilitate further leadership development among our future physicians.

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This article has been peer reviewed.

ONLINE EDUCATION REVIEW SimuLEADerShip

A simulation-based learning activity developed by the Canadian Society of Physician Leaders and the Royal College of Physicians and Surgeons of Canada, in collaboration with Global LEADs*

Reviewed by Serena Siow, MD

Physicians interested in building leadership skills should consider this engaging learning activity. Using simulation, the participant navigates situations common to medical leaders at a fictional hospital set in the future. The ability to "choose your own adventure" provides a fun and interactive way to assess and develop personal leadership competencies applicable to multiple specialties and practice settings.

This activity challenges previous thinking that leadership skills are fixed. Rather, leadership capabilities can be developed with conscious and intentional effort. Similar to the development of clinical skills during training, this activity provides a safe environment for physicians to practise and refine their skills. After an initial self-assessment, the participant selects responses moving through various simulated situations that lead to earning or subtracting points. A debrief provides personalized evidence-based feedback for the responses selected, as well as guidance for future development efforts.

The content explores concepts related to domains and capabilities within the LEADS framework. Participants will gain knowledge fundamental to any leadership role, including leadership styles, workforce challenges, and using meaningful data. There is an emphasis on caring for people as leaders through empathetic listening and inviting input about priorities. There is also an acknowledgement of real challenges that come with taking on leadership roles, such as reduced personal time and occasional self-doubt. Promoting mistakes as part of learning, the module offers encouragement but cautions that the leadership journey involves reflection, growth, and may be non-linear.

Two minor opportunities for improvement are noted. Family physicians who are not members of the Canadian Society of Physician Leaders do not have access. The ability to reflect on learnings with other participants would be nice. As more participants complete the activity, hopefully reflective discussions will happen in real time within groups of medical leaders.

Three hours passed quickly, thanks to solid educational content and the use of humour and creative simulation. The ability to complete this activity asynchronously while earning CME credits makes it highly recommended for anyone with access. Emerging leaders will learn foundational concepts of medical leadership, whereas more seasoned leaders will gain advanced insights. This activity should be essential for all medical leaders.

*Royal College of Physicians and Surgeons of Canada, Continuing Professional Development
https://cpd.royalcollege.ca/product?catalog=LEADS-EN
Use code: CSPL001 to access the site.

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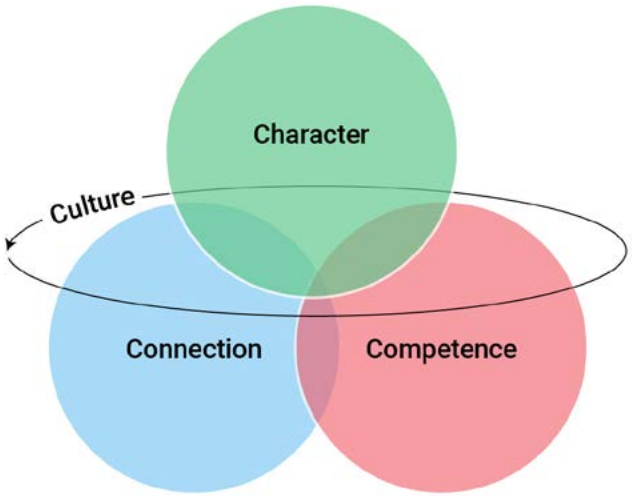
NEW - CSPL FALL COURSE - online!

Bringing Your Leadership to Life Through the 4Cs: Character, Competence, Connection and Culture



When? Tuesdays, November 8th, 15th and 22nd / 7 PM EST / 2-hr classes

How much? $375 members / $475 non-members

Introduction:

Leadership development is an integral physician skill. Competence, Character, Connection and Culture are critical for effective influence and leadership. "The 4Cs of Influence Framework", integrates these four key dimensions of leadership, and prioritizes their longitudinal development, across the health professions and medical education learning continuum. As leadership requires foundational skills and knowledge, a leader must be competent to exert positive influence. Character Based Leadership stresses development and commitment to values and principles, in the face of everyday situational pressures. If competence confers the ability to do the right thing, character is the will to do it consistently. Next, leaders must build relationships, fostering connection. Building coalitions with extensive and diverse networks ensure different perspectives are integrated and valued. Connected leadership involves inspiration, authenticity, collaboration and engagement. To create a thriving, health promoting learning environment, culture will hold everything together.

Program Learning Objectives:

At the end of the program, participants will be able to:

- Describe the 4Cs of Influence Framework along with their relationship to effective influence and leadership
- Reflect on current leadership practices using the 4Cs of Influence framework
- Integrate the 4Cs of Influence Framework into leadership approaches across the health system, including within education and mentorship

Teaching/facilitation methods:

Using a clinical case-based illustrative model, the course provides a reimagined but practical framework to prepare physicians, medical learners, and other health care providers to be engaging influencers and leaders in the health system based upon the 4Cs of Character, Competence, Connection and Culture. Dialogue around each of the Cs, relating to the case and to personal scenarios provided by participants will be facilitated. Practical application of the 4Cs framework will be integrated throughout the program.

Implications:

The 4Cs of Influence provides a novel framework for influence and leadership education in the health professions. This framework is a way of thinking and practicing leadership that goes beyond competence approaches and provides educators with an accessible and practical means to address this complex issue.

Target Audience:

All physicians interested in developing their leadership and influence skills. In particular, early and mid career physicians hoping to add to the leadership toolbox. There are special sections in our program centered around educating and mentoring others.

REGISTER NOW / SIGN ME UP!

Special Note:

All staff physicians who register are asked to identify a medical learner (medical student or resident) who you have a mentee relationship with. We will be hosting a free 1.5 hour session specifically for medical learners around the 4Cs, scheduled for Wednesday, November 16th at 7 PM ET. Please provide your medical learner's name to **deirdre@physicianleaders.ca**

Faculty:

Dr. Victor Do
University of Toronto, The Hospital for Sick Children, Toronto

Dr. Jerry M. Maniate
University of Ottawa, The Ottawa Hospital, Ottawa

Dr. Lyn K. Sonnenberg
University of Alberta, Glenrose Rehabilitation Hospital, Edmonton

Dr. Nabil Sultan
Western University, London Health Sciences Centre, London

Please note that due to the interactive nature of this course, it will not be recorded.

BOOK REVIEW

The Power of Teamwork

How We Can All Work Better Together

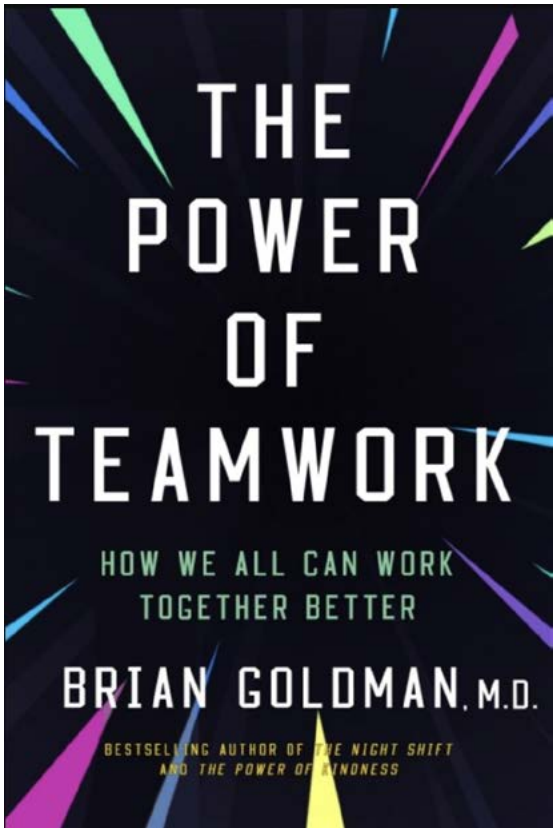
Brian Goldman, MD
Collins, 2022

Reviewed by Sena Gok, MD

Dr. Brian Goldman is an ER physician, author, and radio show host of CBC's White Coat Black Art. His other books are *The Night Shift* and *The Power of Kindness*.

The Power of Teamwork helps the reader understand and revisit the meaning of "team" and provides practical and easy strategies to increase efficiency through teamwork. In the author's words, "A group is not always a team, and any group can become a team." Throughout the book, he describes how teamwork can improve care and improve the overall satisfaction of staff in complex health care settings.

The book has 13 chapters and provides fascinating examples of novel training methods implemented in some medical schools and hospitals. For example, medical training can be improved through art appreciation. Playing escape rooms as a team could enhance communication and out-of-the-box thinking within health care. Medical improvisation classes are being used to flatten the hierarchy in medicine, recognizing that, in reality, physician–patient



interaction is, to some degree, improvised. Improv exercises help draw attention to others' facial expressions and tone of voice, prompting one to change the role accordingly.

In addition, these experiences build trust between team members. Young trainees in health care may hesitate to express a concern about a patient because they may be wrong or might not want to deal with the implications. In most medical cultures, accepting help is a sign of weakness, and offering support is an accusation of incompetence. These simulation activities help individuals learn to speak up, provide feedback, or take a leadership role when necessary.

According to Goldman, workers in health care can learn a lot about teamwork by learning to be less serious. Games, improv, simulations, and even drumming can help them learn how to play together while also preparing for medical crises. In addition, when it comes to games, people learn to "play for the team." Readers will find descriptions of the team-building exercises entertaining.

The book turns several times to a patient case from the Introduction, addresses it from different perspectives, analyzes the situation, and provides suggestions. Each chapter describes a new training method. Throughout the book, examples are given from physicians, paramedics, and experts from the military and aviation, encountering all types of disaster scenarios. Essential steps of efficient teamwork and culture are discussed. For example, aviation experts began to create and maintain a culture of safety when they moved away from the "pilot as boss" model to a team-based approach.

To be a team, individuals must be interdependent regarding the knowledge and materials they work with. According to the author, teams begin failing when group members become sensitive to criticism and hesitant to give feedback. There are some anti-teamwork habits that can maintain a vicious cycle. In the author's experience, elaborating

on feedback/rejection of an idea and asking for the critical thinking behind it helped them maintain the team spirit instead of feeling defensive and falling out. At these times, the "tell me more method" you will find under "visual thinking strategies" in the book can empower the members of the team.

It is incredible to read, in each chapter, the life story and ambitions of the author and his mentioned mentors, so we get to know these people and their aspirations better.

The main message in the book is that health care isn't about winning championships – it is mainly about curing, repairing, and saving lives and sharing a common goal. Through all the strategies and experiences, the book leads the reader to evaluate the meaning of teams we are involved in. Are we interested and invested in making everyone else look good, too, or are we in it for ourselves? I believe this book creates hope and resilience for mentors. The strategies can strengthen the teams in health care and trainees at all stages of their careers.

Author

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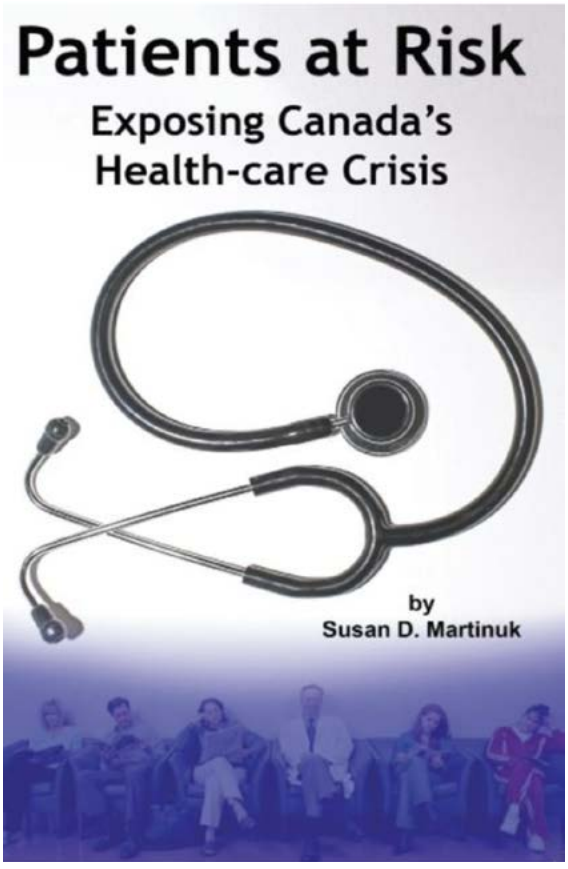
BOOK REVIEW

Patients at Risk: Exposing Canada's Health-care Crisis

Susan D. Martinuk
Frontier Centre for Public Policy, 2021

Reviewed by Johny Van Aerde, MD, PhD

Canadians should no longer accept the current state of their health care system. Open a window and shout, "I am mad as hell, and I am not going to take it anymore!"[1] That is what Susan Martinuk suggests in *Patients at Risk: Exposing Canada's Health-care Crisis*. The outcomes of our health system are about the worst of all Organisation for Economic Co-operation and Development (OECD) countries, while the cost is the same or more (except for the United States, which is the worst in cost and outcomes). When Dr. Jane Philpot was federal minister of health, she summarized the situation well: "It's a myth that Canada has the best health care system in the world."[2]



Using painful and sometimes lethal stories, sharing plenty of data, and recounting the history of Canada's health care since the Second World War, Martinuk describes how Tommy Douglas' dream turned into an outdated, bureaucratic, government-controlled nightmare. The dream was that patients would have access to universal health care, but the recurring nightmare has them stuck in wait lists, while health care workers, including physicians, are trapped in a regulatory dungeon without a chance of escape.

Sixty years ago, it started well as Douglas introduced a system to provide acute relief for a farmer with a broken leg or for a child with pneumonia. However, his system was not designed to deal with the tsunami of baby boomers with multiple chronic ailments, the explosion of expensive technology that analyzes us down to

molecules, or the ever-increasing greed of the pharmaceutical industry perpetuating the illusion of needing more and more slightly different pills, even if the evidence for benefits is limited to non-existent.

The Canadian health care system was created when the common good and socialism prevailed. If we accept that it is a moral duty to have health care as a common good, then don't we also have the moral obligation to provide healing and medical care to those in need? There is limited evidence that the *Canada Health Act (CHA)* protects that common good and some of the five principles might even be damaging to the act:

- *Accessibility* was meant to guarantee access to health care but has deteriorated to access to wait lists. Only life-threatening conditions receive timely care, most of the time.
- *Universality* does not apply to some groups with preferred access, including professional teams and athletes, workers compensation boards, personnel of the army and the RCMP, members of Parliament, federal civil servants, judges, and inmates at federal prisons.
- *Portability:* Although this principle should imply that the same health services are available to all Canadians across Canada, much variability exists between provinces.
- *Comprehensive* applies to little else than in-hospital services and most services provided in physicians' offices.
- *Public administration* might be detrimental to the CHA itself, as bureaucracy is the biggest barrier to the innovation and creative change needed in our health system.

Although top-down bureaucratic control of government-rationed medicare might make Canadians feel powerless to change the system, Martinuk's last two chapters show possibilities. In "How to make health care better," some suggestions for further exploration include proactive patient advocates, patient education, minimizing bureaucracy, investing in health care personnel and physicians, building networks for data and information sharing, while adding technology and artificial intelligence.

In the last chapter, "Where do we go from here?", Martinuk advocates abandoning the polarization that proponents of both medicare and private health care create, which stokes fear in Canadians and prevents real dialogue. We need a long-term plan for health care, we need to separate politics from health care, and (re)create a real system rather than the fragmented hodge-podge of silos we have now. We deserve a commitment from all levels of government to stop bickering and work together, to act with all stakeholders to create a health system that is truly universal and accessible. Neither the public nor a private system can accomplish those principles. In many European countries, hybrid systems that combine the public health system with additional, controlled, and competing private insurance have been successful. Unfortunately, the top-down government control of our health system and fear that the right thing might cost votes prevent us from exploring a hybrid model.

Martinuk finishes by sharing what each of us can offer in the moment: kindness and finding small actions to make things simpler, better, and more pleasant for each other. That is the most important form of healing we can always offer. What has been tried for the last 60 years no longer works, and it behooves us to look at alternatives, based on data, outside the traditional way of thinking. By looking both inside and outside the health care box, this book helps Canadians with urgently needed redesign and improvement to our health system.

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