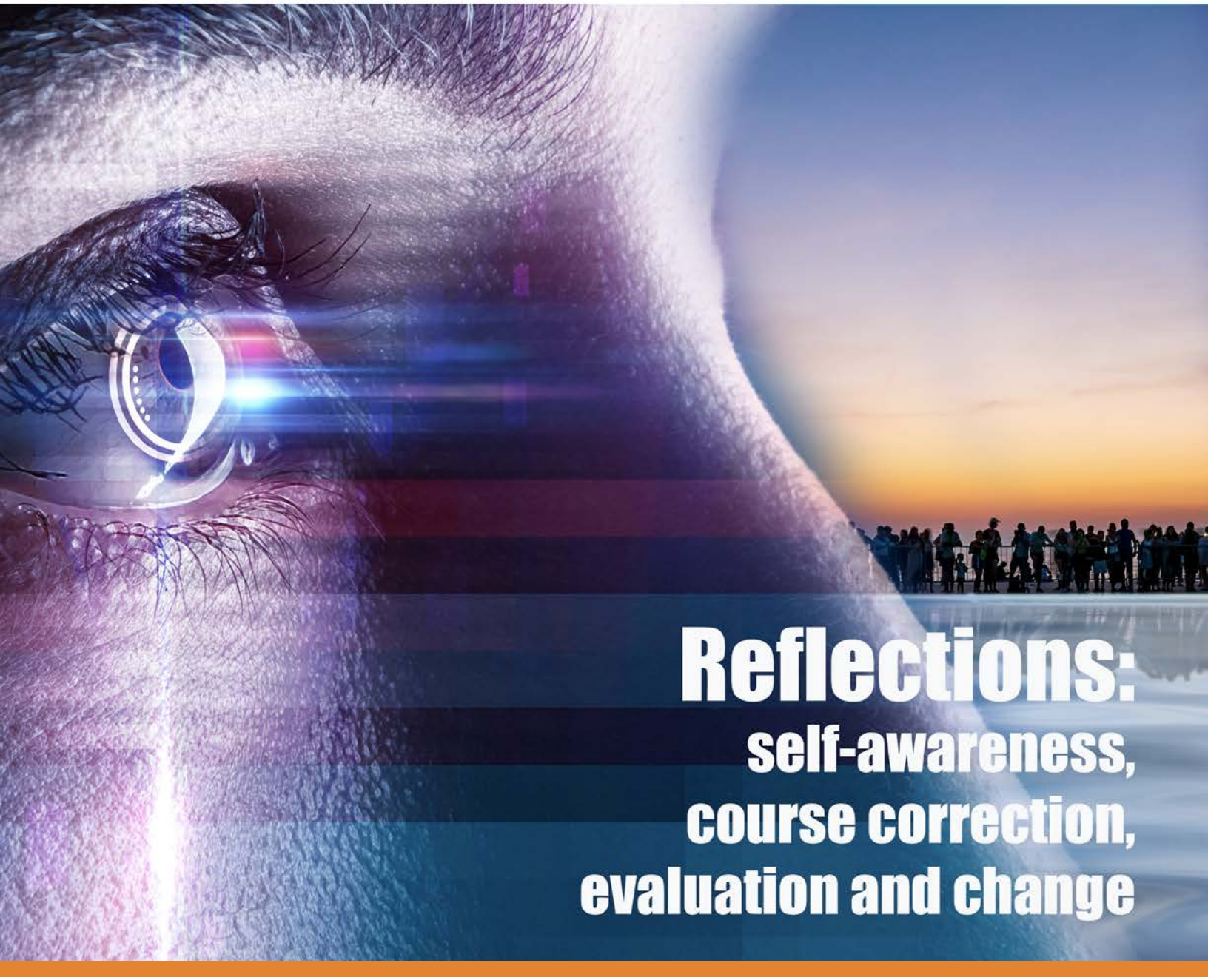
CANADIAN JOURNAL OF
Volume 9 Number 1
2023

Physician Leadership

THE OFFICIAL JOURNAL OF THE CANADIAN SOCIETY OF PHYSICIAN LEADERS



Reflections: self-awareness, course correction, evaluation and change

In this issue

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

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ISSN 2369-8322

EDITORIAL

To better times ahead

Sharron Spicer, MD
Editor-in-chief

As the calendar turned to the new year, it seemed that the common greeting was "May 2023 be better than 2022!" For many of us, last year was grueling. Compounded on pandemic stress were ever-increasing system and capacity issues and added sociopolitical unrest. Getting through the grind of the day-to-day has been a challenge. It's helpful, I think, to reflect on the lessons of our past and look forward with hope to better times ahead. This reflection can shape our experience of the present as we sense the larger context in which we live and work.

In this issue of *CJPL*, we have a collection of articles that look both backward and forward. Several authors have looked back at what has shaped their leadership and curated a few tips for us. We highlight some particular pandemic-response leadership lessons. We examine how to encourage and teach leadership skills to learners. We even look to see the motivating power of hope.

Tragically, in the past year, we have also lost loved ones. Each of them is remembered and missed. I'm grateful to my colleague who shares with readers his eulogy for our mutual colleague, putting into words the sorrow that follows the death of a friend. I'm humbled by the grace of those who show their vulnerability as we grapple with grief.

I hope you gain strength and insight from these articles. Best wishes to all of you in 2023.

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It's time for some things to change

Paul Beaudry, MD

This message was delivered by Dr. Beaudry as a eulogy for Dr. Warren Yunker, a surgeon who took his own life in November 2022. Dr. Yunker was a respected otolaryngologist at Alberta Children's Hospital in Calgary. His wife, Dr. Rebecca Sparkes, is a medical geneticist at the same hospital. Both Dr. Sparkes and Dr. Beaudry have given their permission for this tribute to be published in *CJPL* in an effort to reduce the shame and stigma around mental illness, disability, chronic pain, and suffering and to promote conversations about these issues — including suicide. It is the wish of Dr. Yunker's family that we continue to raise awareness and support each other with courage, love, and empathy.

It's time for some things to change. Warren and his wife Rebecca have been part of what we do at Alberta Children's Hospital for over a decade.

He was highly respected and deeply valued by all of us who were privileged to work with him in pediatric surgery. His passionate advocacy for his patients and their access to excellent surgical care was unwavering.

Even as he was contending with the neurologic disease that shortened his career, for many of us, Warren remained himself: a fiercely intelligent man with clear priorities, an ironic sense of humour, and an unselfish passion for fixing things that need to be better.

Warren's suffering became unbearable, and now we have lost a friend, a colleague, a husband, a father, a son, a brother.

Today, we are here to remember Warren together and, despite our grief, see the value in the incredible things he has left us.

It's time for some things to change.

In remembering Warren, I have been reminded of how proud he was to work at Alberta Children's Hospital, and, in turn, I see how I am the same.

What we do is remarkable and brings tremendous meaning to our lives.

The strength and courage that it takes to care for others, especially these last few years, has been incredible.

Strength and courage.
Warren's death coupled with the recent loss of another colleague in the department of surgery left me feeling the opposite. Not strong or courageous — but vulnerable.

Recently, I had the opportunity to speak with a grief counselor. I didn't think I needed the counseling, but she was at Children's Hospital offering support to those who felt they did, and I wanted to thank her.

What I expected to be a brief conversation turned into a much longer one, and, during that, I realized how much Warren's decision to end his life mattered to me.

She told me that in five years working as a grief counsellor for health care providers, I was the first physician to spend more than 30 seconds speaking with her.

It's time for some things to change.

I challenge all of you to look each other in the eye. To be honest with your feelings, to accept vulnerability as a kind of strength. And be the start of that change.

And if we start the change, if just one person finds a way out of the pain and darkness because we did, then that change has been worth it, and it will become another one of the many incredible things Warren has left us with.

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Paul Beaudry, MD, is a pediatric general surgeon at Alberta Children's Hospital in Calgary, Alberta.

Note: Dr. Warren Yunker's obituary can be found at **https://mhfh.com/tribute/details/38517/Dr-Warren-Yunker/obituary.html#tribute-start**

PERSPECTIVE

Lessons in crisis decision-making learned from Canada's COVID-19 health care response

Wael M.R. Haddara, MD

The rapidly changing nature of the COVID-19 pandemic presented many health care institutions with unique challenges. Although the Canadian response was generally strong, several gaps in leadership and decision-making became apparent. This paper presents reflections on key health care decision-making principles through the retrospective prism of the pandemic.

Keywords: decision-making, COVID-19, leadership

Haddara WMR. Lessons in crisis decision-making learned from Canada's COVID-19 health care response. *Can J Physician Leadersh* 2023;9(1):5–8 doi://10.37964/cr24764

The COVID-19 pandemic presented institutions at all levels with unprecedented challenges. Although the Canadian health care system had been preparing for a pandemic for many years – and had indeed experienced a prior coronavirus-related public health crisis – several factors conspired to make this an unprecedented situation that required new ways of managing. This was, perhaps, not wholly unexpected; as von Molthke astutely observed, no plan survives first contact with the enemy.[1]

The discipline of disaster and crisis decision-making has produced standard operating procedures for managing incidents.[2] A further body of literature exists regarding decision-making under the mnemonic VUCA (volatility, uncertainty, complexity, and ambiguity).[3] Such literature is informed by studies in cognitive and behavioural psychology that tell us that the human mind is complex and that decisions are not always entirely rational.[4]

This paper is a series of reflections about the intersection of front-line leadership and institutional and organizational response. I write from the perspective of a critical care physician at an academic hospital. As chief of critical care, I was heavily engaged in our institutional response to COVID-19. I was also involved in regional and provincial planning as we developed a model for predicting hospitalizations and ICU admissions. Although I occasionally refer to the underlying theory, my primary intent is to share personal experience, rather than to provide a systematic overview of the literature. The hope is that readers will find some utility in these observations when considering their own experiences.

Leadership lessons

1. Evaluate options simultaneously rather than sequentially

In rapidly evolving crises, decisions are often viewed as sequential and binary: mandating vaccines or not; donning N95 masks for all encounters or only for aerosol-generating procedures, etc. Making decisions sequentially based on a limited assessment of options can lead to suboptimal choices that are not completely consistent with individual and organizational values.[5] In more elaborate decision-making processes, multi-attribute utility theory (MAUT)[6] and the Pareto frontier[7] are used to evaluate

many options simultaneously and to generate a set of options. The selected options are then compared. Under rapidly changing conditions, such as an evolving pandemic, such elaborate processes may not be possible or desirable, but the concept should inform the construction and selection of choices.

2. Invest in data infrastructure

Evidence-based decision-making is rooted in relevant, accurate, and widely available data. This is recognized in such standards as the ISO-9001 evidence-based decision-making standard.[2] In novel crises, the data needed to make decisions may not be readily available on a "push," real-time basis. There is a temptation to resort to a manual "pull" approach to extricate relevant data, especially if such information is needed daily. However, building the infrastructure required to automate data collection and verification is essential.

Representing the data in a way that facilitates relevant sense-making and action is another important element. For example, representing the inventory of personal protective equipment (PPE) as "days on hand" using pre-pandemic usage levels is not helpful to guide decision-making at a time when PPE use is an order of magnitude higher than usual.

3. Separate data from analysis

The analysis of data and/or information is at the heart of effective and evidence-based decision-making. Repeatedly presenting raw data to decision-makers rather than its analysis is time-consuming and distracting. Indeed, decision-makers have a vested interest in critical analysis, as "Critical thinking is the bridge between information and decision-making."[5] Try to provide decision-makers with analysis and recommendations.

4. Critically examine underlying assumptions

Analysis is often predicated on certain assumptions. In the context of COVID-19, a common assumption was the applicability of other jurisdictions' experience to our own without regard to similarities or differences in health care systems, the impact of climate, the relevance of population density and age demographics, etc. Public health guidance on the efficacy of masking is an example where critical examination of underlying assumptions was important and ultimately led to changes in messaging: the limited utility of masks at the individual level translated into significant reductions in transmission because of the large population at risk. Understanding assumptions is essential to understanding the limitations and predictions of analyses. Ensuring that assumptions are explicitly shared may help frame the limitations of an analysis for decision-makers and enable better decision-making, especially when evaluating trade-offs.

5. Clarify roles and responsibilities of relevant stakeholders

In the emotionally laden world of crisis, confusion around "decision-making rights" can result in loss of trust and a sense of outright betrayal. In health care organizations, loss of trust can spiral into diminished engagement of physicians and staff. Adopting

a decision-making model, such as RAPID (recommend, agree, perform, input, decide)[8] or RACI (responsible, accountable, consulted, informed),[8] to clarify roles and responsibilities early in the crisis management process is crucial in avoiding such outcomes. As the crisis evolves, the makeup of each group may be in flux. Revisiting the RAPID or RACI chart on a recurrent basis is one way to ensure that relevant stakeholders remain engaged. Open and regular communication through staff forums, daily updates, or other accessible means alerts others to the notion of a changing environment and the need to engage a previously uninvolved group.

6. Embrace feeling uncomfortable

H.L. Mencken noted that for every complex problem there is an answer that is clear, simple, and wrong.[9] Incident management teams are designed to move quickly. When consensus is achieved rapidly, this can confer a misguided sense of comfort with the quality of the decision. Janis theorized that "groupthink" is a stress-reduction mechanism and that crises are stressful situations that may make such approaches even more attractive.[10]

Under conditions of uncertainty and ambiguity, an easily achievable consensus should be a red flag. In any sufficiently diverse organizational structure, some individuals will express alternative ideas, but may feel an inclination to withdraw their dissent to facilitate faster decision-making. This is especially so if they perceive

themselves to be the persistent voice of doom. Yet, there is a case to be made that unwarranted optimism is a greater threat to effective decision-making than pessimism.[11] The elimination of a "contrarian" perspective may well lead to a lower-quality decision process. Leaders should seek out and listen carefully to opinions and views that go against the majority perspective.

7. Do not unduly delay decision-making

Most people are risk-averse, and action is associated with higher perceived risk than inaction. "We hope vaguely, we dread precisely."[12] Risk aversion may be exacerbated by stress[13] and amplified when making decisions for others rather than ourselves.[14] Inaction can be rationalized as a sense that something better may come along. And it is possible that a delay will allow better information to become available; however, in most cases, decision-makers delay a difficult decision simply because the options are unappealing. In those situations, delays can lead to outcomes that are worse for the waiting. When the temptation arises to delay a decision, questions must be asked. Are new/better options likely to present themselves if we delay a difficult decision? What specific information are we waiting for? What is the cost of delaying the decision?

8. Manage the impact of changing information and decisions

In our ICU, we recognized early on that new information about COVID-19 would lead to changing decisions. We found, for example, that emerging safety data on PPE for medical procedures made previous decisions seem suboptimal or even unsafe. We instituted two basic principles and socialized those through frequent staff meetings. The first is that we developed and effectively disseminated information about key processes based on the available best practices, and we reviewed those regularly. The second – and I argue the more important – is that we socialized the idea that using the best available data at the time usually leads to the right decision. If new data lead to a different course of action, that does not mean the original decision was wrong; it was still the best decision under the circumstances. However, just as it was important to revisit decisions, algorithms, and pathway when new data became available, the opposite was also important, which leads to the next point.

9. In the absence of new information, do not revisit decisions

If the decision-making process is robust and nothing has changed in terms of new information or data, leaders should have the discipline to refrain from revisiting decisions.

Although this may seem like a basic management statement, it is difficult to adhere to under rapidly changing conditions. The potential for analysis-paralysis under volatile or uncertain conditions is limitless. The desire to revisit decisions can lead to the diversion of valuable cognitive and other resources from more important tasks. If an organization finds itself repeatedly reconsidering its responses, that should be a warning that the decision-making process is not robust: the appropriate stakeholders are not engaged, enough options are not generated, the pros and cons are not properly evaluated, and so on.

10. Separate the "possible" from the "necessary"

Crises are often associated with resource limitations. As such, choices may have to be based on what is available rather than on best practice. For example, N95 masks were deemed necessary in certain situations, but because of supply shortages, practice moved away from the intended single use of N95 masks to make-shift protocols for prolonged or repeated use with rationing and sterilization. The necessary condition of masking was met by doing what was possible at the time. This is not to say that leaders must reassure people that "everything is fine." In a crisis, everything is not fine. A more truthful and transparent position is to explain that "this is not the safest/best course of action, but it is the safest/best course of action possible. And we will do better as soon as it is possible."[15] Reassurance is better provided through honesty than over-optimism.

Conclusion

COVID-19 was, and remains, an unprecedented challenge to leadership both at the front lines and at the institutional and organizational levels of health care delivery. It is essential that we learn from our experiences while they are still fresh in our collective memories. I hope that the leadership principles I found useful will be helpful for others in managing crises, whether present or future.

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ADVICE

Leadership lessons and observations

Nicole Boutilier, MD

Boutilier N. Leadership lessons and observations. *Can J Physician Leadersh* 2023;9(1):9-11 doi://10.37964/cr24765

My 17 years in physician leadership have come with lots of lessons. Hard ones, ones that had to be repeated, ones that I'll never forget, ones that gave me hope and ones that shattered my confidence.

Leadership is a journey, not a destination. With many curving roads, pit stops, and refueling, you are sometimes headed down a well-trodden road and other times creating a path as you venture into new terrain. The experiences you will have and the training you will receive will only tell part of your story. The leadership skills you attain and your lived experiences will shape you as a leader, but you will also be forced to take a hard look at your purpose, your values, and your resilience. The people you lead and the people who lead you will be formative in establishing a solid foundation that will allow you to grow, fail, and grow again.

Here are 17 observations that you may want to consider (one for each year in which I held a formal leadership position).

1. Be authentic

People want to hear from the real you. What you think, what you say, and what you do matter. Let them know you – the person you try to be and the gap when you don't meet your own expectations. Share your successes, but also share your failures. Be the leader you would want to lead you. Work at it every day. Be humble and honest to all (but most of all to yourself).

2. Listen, listen, and listen again

Physicians are taught in medical school how to listen actively. You know how to mirror body language and tone and to paraphrase the speaker's words. But are you listening for understanding or are you simply waiting for the person to stop so that you can jump in with your own thoughts? The next time you are in a meeting, practise not letting your thoughts be the only thing on your mind. Be curious about others' perspectives and give careful consideration to their ideas.

3. You are not an imposter

You may be new to leadership or you may be experienced and have feelings of inadequacy. You feel like someone is going to realize that you aren't the right person for the role, situation or solution. And you are right, there is no perfect person for every scenario that a leader will face. But you are there and that is enough. You can use powerful questions to get to the root of an issue. Can you tell me more? What can I do to support you? What ideas do you have to solve this problem?

4. No telling, just coaching

The longer you are a leader, the more you may be called upon to use your wisdom and insight. Sometimes it is for problems with which you have had experience and you are an expert at solving. But guess what? An old or recurring problem can be solved with a fresh perspective and in a variety of ways. Telling people what to do does not build capacity or allow for new thinking or innovation. I eventually formalized my coach training as a key component of my leadership style. This helps me focus on giving my team the confidence to solve their own problems and transform the system with the knowledge, skills, and abilities that they possess. As practised in the coaching world, you hold them fully capable.

5. Vulnerability

There is the good, the bad and the ugly. Share it all. Let your team know how you are feeling and when you think you weren't at your best. Most of all, share what you learned and what you want them to know. Sharing your stories builds trust. Let your team share their stories and how they are feeling. Be compassionate and

cultivate belonging. Connecting in this way, while awkward for some team members, creates psychological safety for people to see the humanity all leaders bring when they take their whole selves to work.

6. Know your blind spots

Consider feedback as a gift. Ask others what you could do better. What do they notice about you and your leadership style? Invite people to share their observations about you even when they are hard to hear. Be open to the perceptions of others and check in with your team regularly. As in different cars, different blind spots can arise with new situations. Hire and work with people who complement your strengths and help narrow the gaps. Self-awareness is key.

7. Always be learning and growing

There is no such thing as too much development. Design a plan for yourself for this year, the next 5 years and the next 10 years. Be expansive in your vision of your leadership in terms of values, impact and people. Worry less about titles and recognition. Know what gets you up in the morning and into the flow. If something scares you, that's what you should do next.

8. Borrow unabashedly from your mentors

If you experience or witness mastery by a leader, incorporate those skills into your own toolbox. Ask them questions, understand their process and how they achieve their success as a leader. The more tools you use and develop, the more diverse and versatile you will become as a leader. Mentors can be formal or informal leaders, people you know in your community or even people you read about or whose books you buy. They can be younger, older, in other professions or someone in your organization at a different level of leadership. Look in every direction for inspiration and guidance.

9. Beware of ignoring a persistent issue

As physicians, we all know that you never, ever, EVER ignore a nurse who is trying to tell you something. Leadership is the same. Is your admin or your peer or your direct report getting under your skin about an issue? That's a clue – a clue that you aren't paying attention and may be missing an important point or a need to find another solution. That irritation you feel is at yourself. Recognize your limitations and remedy the situation. Ask for help.

10. Pivot — course correct — pivot

As leaders, we have all had a lot of experience "pivoting" during the COVID-19 pandemic. We are better at it now than we have ever been. Don't lose this! Use this "muscle" regularly, whether creating rapid plan-do-study-act cycles, pilot programs, sprints, or test and trys. Flexibility and nimbleness will help us jumpstart innovative and creative actions. Evaluate everything, and get ready to pivot if things aren't producing the desired outcomes.

11. Extroverts vs introverts

You will have both on your team, and you will identify with one more than the other. Being one or the other does not make you a good leader. You must know who you are and lead anyway. The introverted leader may need to practise speaking up; the extroverted leader may need to take up less airtime and notice who isn't speaking. Tailor your behaviour to suit the situation, even when it's not your underlying preference.

12. The meetings before the meeting

Building consensus, strategic

alignment, and action plans requires a lot of engagement with stakeholders, both internal and external. Understanding your common ground with others is essential to the success of many projects. You might not get everything you want – and neither may everyone else – but knowing where the "pain points" lie in advance can create momentum toward a solution. Preparation is key.

13. Responsiveness matters

Whether it's email, text, phone calls, or face-to-face meetings, make an effort to respond to people in a timely, efficient manner. This builds a reserve of goodwill that you may need to draw on in the future. Practise advance access (leaving some unscheduled time available for arising issues) and provide same-day/next-day service while also setting boundaries for time of day, length of emails, and respecting your needed downtime. Make it simple – if a message requires more than two paragraphs, offer a conversation. If it's between 10 p.m. and 7 a.m., don't text. Be available if you are needed urgently. Reduce meeting length and frequency by making sure everyone comes prepared and solution oriented.

14. Equanimity is essential

For those who practise meditation, "equanimity" will be familiar. My own interpretation is that you accept things as they come. There will be highs and lows, there will be crises, and sometimes there will be a manufactured crisis. You will inevitably hear from someone who is unhappy or angry. Accept this and learn not to react. Calm, assertive energy is a steady state that allows you to breathe and focus. This is hard, but do it anyway. You will never regret not answering an email in haste or not reacting with anger or impulse.

15. Give people permission to fail and stand by them anyway

Let your team know you "have their back" when they try new things, when they are creative and innovative, and even when they make a mistake. You are accountable for their performance, and they need to know you are willing to take a chance on their ideas and plans. Protect them when others are judgemental. Encourage them to take calculated risks and be open and transparent when things don't go as planned. Hold yourself to the same standard.

16. Be ready to go at 60–80% readiness

Perfection is not achievable, and too often the pursuit of a perfect solution prevents the good-enough solution from timely implementation. Be risk tolerant, not risk adverse. Change as you go. Evaluate your strategies, monitor your key performance indicators, debrief your learnings from failures, and spread and scale your successes.

17. Reflection

We all have that feeling in our gut that won't go away and keeps us up at night. Take some time to reflect on the situation. If you practise reflection daily and practise with intent, you will feel better and sleep more. Recognize quickly when you need to circle back to someone and clarify, apologize or hear more. Be open to changing your mind, being wrong and considering other perspectives.

18. Gratitude (Bonus, as I am halfway through year 18)

Express your gratitude on paper daily. We are very lucky to have the privilege, every day, of being a physician and a physician leader. Remember to thank others for their contribution. Send notes, emails, cards, and make phone calls. Recognize good work in front of your team. Let people take credit for their work. Make sure your superiors know the dedicated members of your team. Action your gratitude by elevating your team with opportunities to present their work, for development and for formal recognition.

You spend a lot of time at work and with your team. Celebrate your successes together and know your team as people as well as co-workers. Laugh and have fun when the time is right and share sorrows and grief when appropriate. I have found physician leadership to be a challenging and meaningful career path.

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Virtual objective structured clinical examinations — a novel approach to teaching and evaluating leadership skills in medical students

Michael Aw, MD, Ahmed Shoeib, MD, Craig Campbell, MD, and Charles Su, MD

The objective structured clinical examination (OSCE) is a simulation-based method of learning and assessment that allows for mistakes and feedback. Its uniformity, objectivity, and reproducibility are among its greatest strengths. Unfortunately, OSCEs rarely directly assess non-clinical skills or focus on leadership skills, such as conflict management. Leadership training is an underrepresented component of the medical school curriculum. Although OSCEs cannot evaluate leadership in its entirety, we have demonstrated the feasibility of using OSCEs to simulate realistic scenarios for students to apply and practise communication, collaboration and professional skills associated with leadership.

KEY WORDS: leadership, simulation, examination, OSCE, evaluation

Aw M, Shoeib A, Campbell C, Su C. Virtual objective structured clinical examinations – a novel approach to teaching and evaluating leadership skills in medical students. *Can J Physician Leadersh* 9(1):12-20 doi://10.37964/cr24766

First introduced by Halden and Gleeson[1] in 1979, the objective structured clinical examination (OSCE) has been used internationally, primarily for the assessment of clinical skills (e.g., history taking, physical exam, etc.). It provides an immersive simulation-based method of learning and assessment in a low-stakes setting that allows for mistakes and feedback. Its uniformity, objectivity, and reproducibility are among its greatest strengths. Evidence of better preparedness of medical students for transition to clerkship and residency has also been shown using effective simulation-based learning of clinical skills.[2,3]

Simulation-based learning has also been shown to enhance non-technical competencies, such as foundational teamwork and empathy training among medical students.[4,5] Unfortunately, OSCEs rarely directly assess non-clinical skills or focus on leadership skills, such as conflict management. Currently, no standardized method evaluates leadership skills in medical trainees.[6]

At the University of Ottawa, a student-run leadership elective was developed for pre-clerkship students. This program is a low-cost, 20-hour longitudinal leadership training program that uses a mix of teaching methods, specifically didactic and small-group learning, multisource feedback, and simulation-based

learning in the form of OSCEs. The program's objectives focus on leadership theory acquisition, enhanced knowledge of self, giving and receiving feedback, conflict management, persuasion, and advocacy skills. Unlike traditional OSCEs, which emphasize clinical knowledge, history taking, and physical examination competencies, these scenarios focus on non-clinical skills associated with leadership on an individual level.

To our knowledge, this initiative to provide simulation-based leadership training to medical students is the first of its kind in Canada. Here, we report on our experience with the development and implementation of a minimal resource leadership OSCE using resident evaluators. This framework may be useful as a guideline for replication at other medical institutions.

Developing leadership OSCEs

Content – Eight unique OSCE stations were developed in collaboration with leadership training experts at our medical institution to provide scenarios that a medical trainee might reasonably expect to experience in their clinical learning environment. The content was created to align with CanMEDS roles associated with effective leadership at an individual level: communicator (key competencies 1.1–5.3), collaborator (1.1–3.2), professional (1.1, 1.3, and 4.3), and leader (1.2 and 3.1).[7] The skills needed to succeed in the scenarios were derived from the entrustable professional activities (EPAs) of the Association of Faculties of Medicine of Canada, specifically EPA 7 (provide and receive handover in transitions of care), EPA 9 (communicate in difficult conversations), EPA 10 (participate in health quality improvement situations), and EPA 12 (educate patients and families on management, promotion and prevention).[8] The aim was to create two thematically comparable four-station circuits that were similar in difficulty and scope of skill assessment. Ultimately, four major scenarios were developed: hostile conflict management, shared decision-making, managing expectations, and advocating for others (Appendix 1, p. 17).

Evaluation – The OSCEs were assessed using the modified Oxford Non-Technical Skills (NOTECHS) scale as a guide to provide student feedback.[9] The NOTECHS tool was used because it had been validated to assess the nontechnical performance of residents. It encompasses five domains: leadership and managerial skills, teamwork and cooperation, problem-solving and decision-making, communication and interaction, and situation awareness and vigilance.

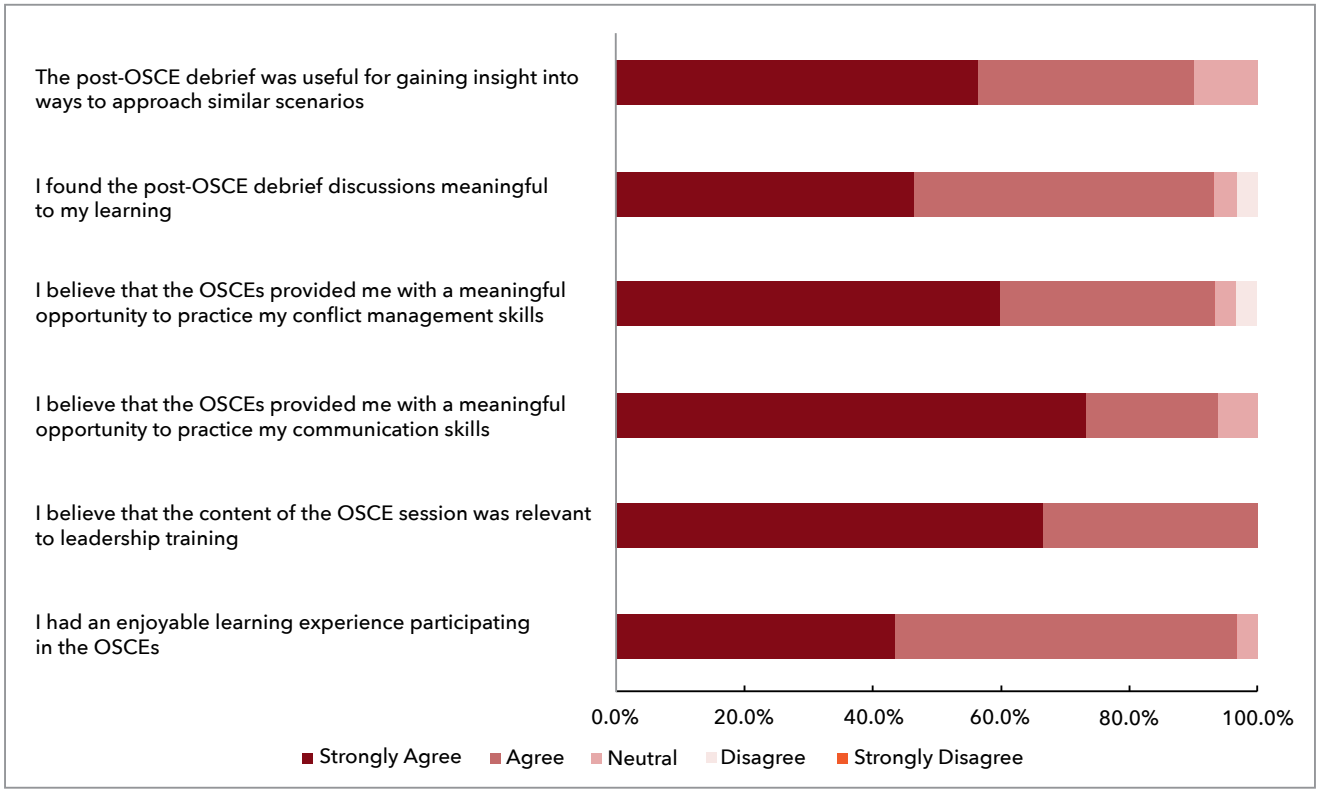
Implementation – The OSCEs were conducted virtually using the Zoom platform (Zoom Video Communications Inc., San José, Calif., USA) with standardized patients. Zoom allows for users to be placed in breakout rooms that mimic real-life stations. Participants completed a circuit of four eight-minute stations with two-minute breaks, during which they were moved to the next breakout room. Participant consent was obtained, and all OSCE encounters were recorded for subsequent feedback by independent evaluators. After each OSCE circuit, participants engaged in a one-hour debrief to share their experiences and approaches for each station with their peers.

Standardized patients (SPs) – SP volunteers were recruited via social media postings. To ensure standardization of tone, language, and behavioural responses among SPs for each unique station, we created basic role descriptions with guiding scripts, included mandatory hallmark phrases and prompting statements to guide participants toward the scenario's climax/conclusion if necessary (Appendix 2, p. 19). During a mandatory two-hour training session, SPs were asked to act out their roles with one another numerous times so that they could further attempt to standardize the demeanor of the SP character.

Evaluators – Program directors distributed a recruitment letter via email to University of Ottawa residents. Ultimately, eight residents agreed to participate in this pilot program. They completed a two-hour training session, in which they were shown video recordings from the pilot and came to a consensus on the benchmark performance quality for each domain described in the NOTECHS tools. Performances on each OSCE scenario were scored by two independent reviewers.

Ethics – Appropriate applications

Figure 1. Post-OSCE participant satisfaction survey, in which participants (n = 16) responded to statements using a five-point Likert scale



were submitted to our institution's ethics committee from which we received exemption under Article 2.5 of Tri-Council Policy Statement 2.

OSCE reception by participants

Sixteen first-year students participated in two four-station OSCEs. We solicited feedback and quantified satisfaction using a five-point Likert scale questionnaire (Figure 1). Narrative comments were summarized using qualitative analysis (Tables 1A and 1B). Major ideas were chronicled in preliminary topic coding. After reviewing the topic codes, thematic coding was performed in which descriptors were grouped according to common themes determined by the primary investigators.

Students generally responded positively to their OSCE experience. All participants agreed that the content of the OSCEs was relevant to leadership training. Specifically, 93% of participants agreed or strongly agreed that the OSCEs allowed them to practise their negotiation and conflict management skills (Figure 1). Nearly all students (96%) agreed or strongly agreed that, overall, the OSCEs provided an enjoyable learning experience.

The most frequently reported positive aspects of the virtual OSCEs related to the realism and relevance of the situations (41%) and the opportunity to apply non-clinical skills and knowledge (38%) (Table 1A and B).

Several students commented on the challenge associated with real-time scenarios, which encouraged them to practise their leadership skills. "This was an amazing and helpful session! It placed us under difficult circumstances with a lot of pressure, especially when the actors were unwilling to compromise. It was an extremely rewarding experience in terms of building communication, negotiation, and leadership skills."

Students reported that their experience debriefing and discussing the cases with their peers was beneficial to their learning and to acquiring different perspectives and strategies to

Table 1A. Themes that emerged from the post-OSCE qualitative survey and frequency of reporting by participants*

What was your favourite part of the OSCE sessions?	No. mentions (%)	What was your least favourite part of the OSCE sessions?	No. mentions (%)	What would you like to see changed/added to future renditions of the OSCE sessions?	No. mentions (%)
Realism and relevancy of the scenarios	13 (40.6)	OSCE logistics (lack of live feedback, timing, in-person)	14 (43.8)	Improve OSCE logistics	14 (43.8)
Opportunity to practically apply knowledge and skills	12 (37.5)	Medical nuances of scenarios	5 (15.6)	Implement learner-level appropriate scenarios	6 (18.8)
Discussion-based debrief	7 (21.8)	Technical difficulties	3 (9.4)	Improve debrief discussion (increase allotted time, smaller groups, more tutors)	5 (15.6)

Table 1B. Feedback from participants on the logistics of the OSCE*

OSCE characteristic	No. mentions (%)
In-person	1 (3.1)
Incorporation of live feedback	6 (18.8)
Increase time in scenarios and debrief discussions	4 (12.5)
Technical logistics (i.e., smoother transitions between scenarios)	3 (9.4)

*16 participants answered the survey for two OSCEs for a maximum of 32 responses for each theme. Not all participants offered an opinion, and some responses fell into more than one theme.

manage difficult situations. "I really loved this session and thought it was incredibly helpful! My favourite part was just having the opportunity to debrief afterwards and see how different people approached the situations."

Areas of improvement pertained predominately to program logistics. Specifically, some students would have preferred live feedback from evaluators (43%), and some felt the time allotted to individual scenarios may have been insufficient (27%). "Receiving more immediate feedback following scenarios would have allowed for a fresher approach per scenario." Likewise, students requested additional time to be allotted to the debrief discussions (22%).

OSCE reception by evaluators

Narrative comments were solicited from resident evaluators regarding the appropriateness of using the NOTECHS tool and their comfort with evaluating non-clinical skills, namely problem-solving, communication, and situational awareness (Table 2). In general, feedback from the evaluators was positive. Most evaluators described the scenarios as realistic and appropriately complex (82%) and agreed that they facilitated variable approaches to managing the conflict associated with individual scenarios (47%). Almost all evaluators reported the NOTECHS tool as user friendly (94%). Specific comments praised the tool's utility for assessing problem-solving, communication, and situational awareness. "It was easy to grade and most elements fit well. Leadership was a bit difficult to grade based on the description; however, communication, cooperation, situation awareness fit really well."

Table 2. Feedback from the resident evaluators on the OSCEs and the appropriateness of the grading tool*

Theme	No. mentions (%)
Scenarios were realistic and complex	14 (87.5)
Scenarios allowed for variation in student responses	8 (50.0)
Grading tool was easy to use†	16 (100.0)
Grading tool was appropriate to assess:	
• Problem solving	7 (43.8)
• Communication	4 (25.0)
• Situational awareness	1 (6.3)
• Not specified	4 (25.0)

*8 evaluators answered the survey for two OSCEs for a maximum of 16 responses in each category. Not all evaluators offered an opinion, and some responses fell into more than one theme.
†Further analysis of the "Grading tool was easy to use" theme was carried out to characterize specific domains that were the most appropriate to evaluate using the NOTECHS tool.

Discussion

The OSCE scenarios were well received, with most student participants reporting a positive

learning experience. Participants reported that the content was relevant and they enjoyed the opportunity to apply and practise their leadership skills. Overall, resident evaluators felt comfortable assessing non-clinical skills and reported that the NOTECHS tool was appropriate for non-clinical, leadership skills assessment and directed feedback. Most constructive feedback related to OSCE logistics, namely the absence of real-time feedback and the desire for additional post-OSCE group discussion.

From our understanding, this is the first non-clinical, leadership skills OSCE delivered to undergraduate Canadian medical students. Varkey et al.[10] discerned that 85% of medical student respondents identified leadership, conflict management, communication and teamwork as necessary skills that should be taught in medical school. Although recognized as important professional competencies, students are often left learning these non-technical leadership skills informally as part of the hidden curriculum.[11] Notably, Bharwani et al.[12] report communication skills and conflict resolution as notable skills missing from medical school leadership programs. Simulation provides the opportunity for students to practise their acquired knowledge of leadership skills and apply them in high-fidelity scenarios, providing a process for enhanced leadership training among undergraduate and graduate medical students.[13,14] Generally, medical students prefer simulation exercises and facilitated small-group discussions as an effective teaching strategy compared with didactic lectures.[10] This highlights the potential value of incorporating simulation-based exercises, such as the leadership OSCEs described here, into formal medical curricula.

A common challenge associated with OSCEs is the cost of SPs and evaluators. A four-hour OSCE for 120 students can cost in excess of $100 000.[15] The major limitations of leadership training programs include human resources, staff training, location availability, as well as time and evaluation costs.[16] As a student-led initiative with a limited budget, we relied on volunteer SPs and resident evaluators. Feedback from these volunteers revealed no concerns regarding standardization, lack of professionalism, or realism among the SPs. To facilitate the involvement of resident evaluators, pre-recording of encounters enabled all evaluators to assess scores independently without compromising their clinical responsibilities. Finally, the virtual platform minimized cost and the need for expensive, logistically challenging in-person examination rooms. Although some students said that the OSCEs would benefit from in-person delivery, previous literature suggests that, regarding communication skill assessment, virtual OSCEs are comparable to in-person sessions.[17] Our successful piloting of OSCEs using volunteers via a virtual format may represent a practical method for other student-run initiatives to incorporate simulation-based learning into their programs.

The OSCE comes with challenges in terms of assessment of non-clinical skills. The use of

standardized checklists limits the ability to assess non-clinical skills, such as conflict management, decision-making, and effective communication. The NOTECHS tool has been validated as effective in assessing non-clinical skills among residents in the context of an operating theatre.[9] We used this tool as a guide to direct evaluator feedback for participants, and it was well received by the resident evaluators. Although not formally assessed here, the NOTECHS tool should be considered for non-clinical skill evaluation among undergraduate medical students.

This innovation was conducted as a pilot project, and the feedback reported here should not be generalized to all medical trainees or institutions. The innovation was limited by a small sample size, thus restricting the ability to draw definite conclusions. It may be advantageous to compare virtual OSCEs with in-person OSCEs to determine an optimal strategy for leadership skills training and assessment. Moreover, further studies are warranted to compare the NOTECHS tool with other non-clinical assessment measures to clarify optimal assessment of non-clinical skills among undergraduate medical trainees. More formal assessments of the quality and appropriateness of resident evaluators for non-technical communication skills is warranted.

Conclusion

Leadership training is an underrepresented component

of the medical school curriculum. Leadership is a multifaceted and complex competency that encompasses many broad skills and attributes. Currently, there is no unified definition of leadership. Although OSCEs cannot evaluate leadership in its entirety, we have demonstrated the feasibility of using OSCEs to simulate realistic scenarios for students to apply and practise communication, collaboration, and professional skills associated with leadership.

This innovation was well received by student participants who reported a positive learning experience and valued the opportunity to practise their leadership skills. Resident evaluators endorsed the NOTECHS tool for assessment that was practical and cost-effective. Further formal evaluation is required to draw definitive conclusions and determine ideal assessment strategies to maximize the leadership training experience for medical students.

Appendix 1: OSCE scenarios

Baseline OSCE

1. Hostile conflict management
In this scenario, an interprofessional conflict arises between a fourth-year medical student (the student) and a nurse (the SP) with regard to orders that have not been completed by the nurse. The nurse has apprehensions about new medical students resulting from past negative interactions. The nurse's primary intent is patient safety and prefers to work with staff over medical students for that reason and, therefore, does not take medical student co-signed orders seriously. The medical student must find a way to collaborate with the nurse and navigate this conflict.

2. Shared decision-making
In this scenario, a conflict arises between a fourth-year medical student (the student) and the father (the SP) of a 14-year-old who has been recommended for surgery to address underlying acute appendicitis. Although this is a very low-risk, safe procedure, the father is hesitant to have it carried out on his son, because of his past negative experience when

his wife died during a complicated surgical procedure. The medical student must try to understand the father's apprehensions, while demonstrating empathy and helping in the decision-making process to let this child have this life-saving procedure.

3. Managing expectations
In this scenario, an uncomfortable situation arises between a third-year clerk (the student) and a patient (the SP). In passing, the clerk tells the patient that her rash was "probably just allergies," which reassures the patient. It is later discovered that the cause of the rash is lupus. The patient feels betrayed and misled by the student's previous statements and is angry. The student must realize the importance of voicing such "reassuring" statements and the importance of being transparent with patients. The student must find a way to calm the patient down while accepting accountability for their error of judgement.

4. Advocating for others
In this scenario, a senior resident (the student) notices that their junior resident (the SP) has been showing up late to work. She looks disheveled and her bedside manner has deteriorated over the last few weeks. Reports from other residents who have worked with her show that in the morning there have been concerns that her breath reeks of alcohol, yet she denies consuming any substances before coming to work. The senior resident must confront this junior resident, gather further information, and advocate for the well-being of their peer and patients.

Final OSCE

1. Hostile conflict management
In this scenario, a disheveled patient (the SP) is brought into the hospital after falling off of their bike. He/she has suffered a fracture to his/her right arm. The patient is extremely distraught that they are being cared for by a female nurse of Caribbean descent. The patient has demanded to speak with his/her physician (the student) to switch nurses. Before you enter the room, you see the nurse crying after being told, "go back to your country, you don't belong here." The physician must talk with this patient, address the situation, and resolve the conflict.

2. Shared decision-making
In this scenario, a conflict arises between a fourth year clerk (the student) and a young adult diagnosed with acute lymphocytic leukemia (the SP) with regard to the proposed treatment plan. The student has been asked to share the evidence-based treatment plan proposed to care for the patient. However, the patient does not wish to undergo the allopathic treatment and instead wishes to pursue homeopathic treatment options. The patient insists that "Western medicine" is not always ideal and wishes to undergo homeopathic treatment instead, even though it might be fatal. The student must find a way to collaborate with the patient and educate him/her on the consequences of pursuing allopathic treatment options alone.

3. Managing expectations
In this scenario, your patient (Mr. Ruth) has advanced dementia and is approaching end-of-life care decisions. The goals of treatment have been switched to palliation by his designated power of attorney (spouse). His family include an adult son, adult daughter, and wife who have come to visit him (three separate households) all the way from rural Quebec (10-hour drive). The hospital policy is that no more than two family members from two separate households are allowed to visit a patient because of the COVID-19 pandemic. The nurse notices that the family members are not wearing masks while in the room with Mr. Ruth, who shares the room with two other vulnerable patients. The senior resident must talk with Mr. Ruth's son/daughter and explain that hospital policy requires them to wear a mask and find a way to help educate all parties and facilitate compliance with hospital policies.

4. Advocating for others
In this scenario, a senior resident (the student) is told by the nurse that one of the junior residents has an unpleasant body odour and that a number of patients have started to complain. She notes this is not the first time this has happened. You, too, have noticed that the junior resident's hair looks unclean and they smell of BO at your weekly rounds' meetings. Your peers have started gossiping and talking about the stench behind the aforementioned resident's back. The senior resident must address this situation with

the junior resident, gather further information and reach a resolution while maintaining a positive interpersonal relationship.

Appendix 2: Sample OSCE script

Case 1: Interprofessional conflict
With multiple health professionals involved in the care of a patient, the potential for interprofessional conflict increases. Poorer patient outcomes have been linked to the inability of physicians and health care workers to use effective conflict-management skills to navigate these interprofessional conflict situations. This scenario is aimed at simulating an inter-professional conflict that a medical student is likely to experience.

Goals and objectives (based on Association of Faculties of Medicine of Canada EPA 9, EPA 5 and communicator/professional CANMEDS roles):

- Applies conflict-resolution skills in the setting of an interprofessional conflict
- Explores ways to facilitate collaborative decision-making between health care workers
- Uses effective communication skills during interprofessional conflict situations.
- Listens actively to colleague's concerns and plans accordingly to attempt to explore options that satisfy both parties

Case description: In this scenario, an interprofessional conflict arises between a fourth-year medical student (the student) and a nurse (the SP) with regard to orders that have not been completed by the nurse. The nurse has apprehensions about new medical students resulting from past negative interactions. The nurse's primary intent is patient safety and prefers to work with staff over medical students for that reason and, therefore, does not take medical student co-signed orders seriously. The medical student must find a way to collaborate with the nurse and navigate this conflict.

Nurse role: You are an inpatient nurse who works at the surgical ward at your local hospital. The latest newly minted clerkship student is approaching you to follow up on some orders they entered into the health record that have not been completed.

You have apprehensions and general "distrust" of new medical students and do not take their orders seriously. You have been working at this hospital for almost 20 years and have familiarity with many of the staff and have seen many residents come through your ward. You like the current "system" and find that working with staff is much better than working with these "not real" doctors. Your reasoning stems from your negative experience working with other medical students throughout the years where multiple medical errors have occurred and you want to prioritize patient safety.

You will maintain a confrontational demeanour and will be stubborn toward the medical student's follow up to their orders at first. Focus on the negatives and your experiences in working with medical students in the past, but you are open to the medical student's exploration of your reasoning (prioritizing patient safety). The medical student must show an understanding of your perspective before you proceed toward an openness for compromise.

Some sample probing statements:

- "I find medical students delay my ability to provide care/ make too many medical errors for my patients, so I prefer to wait until I hear what the 'real doctor' says."
- "I usually work directly with Dr. Lee and Dr. Smith."
- "I've been here 20 years and we have a system that works well on our ward. I prefer to work with staff that I am familiar with."

Resident (student) role: You are a fourth-year clerk who recently started on the inpatient surgical unit. Things have been going well; however, you are finding that the orders you entered into the health record after discussions with your resident and attending physician are either completed late or not completed at all by a certain nurse. You find that this is a good time to approach the nurse at the nursing station and follow up on some of these uncompleted orders.

Student "succeeds" if they

- Acknowledge the nurse's perspective.

- State their stance as a learner and outline the shared responsibility of the nurse/resident toward patient care.
- Make an effort to reach a solution.

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No potential conflicts of interest relevant to this article were reported.

Author contributions: Conceptualization: AS, MA. Data curation: AS, MA. Methodology: AS, MA. Formal analysis: AS, MA. Supervision: CC, CS. Writing, original draft: AS, MA. Writing, review and editing: AS, MA, CC, CS. All authors approved the final article.

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Colleen Galasso
Executive Director

These past three years have placed unprecedented stress and pressure on our health system, leaving it fractured and broken. As physician leaders you are being called upon to make hard decisions and do more with less, all while ensuring that your patients receive the best quality of care. That is why CCPL and its theme, *Healing our Health System: Leadership for Renewal*, is so timely and relevant.

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As CSPL's new Executive Director, I am excited about the conference and hope that you will accept my invitation.

I cannot wait to meet you!

PERSPECTIVE

Physician leadership: 50 shades of great

Johny Van Aerde, MD, PhD

Over the past two plus years, I have had the opportunity to interview 50 health care leaders (mainly physicians) on behalf of the Canadian Society of Physician Leaders for its *Leading the Way* podcast series.[1] These leaders are wrestling with the most significant upheaval in health care in many generations.

Although many of these brief interviews focused on how outstanding physicians have dealt with various phases of the COVID-19 pandemic, a number also provided valuable tips on the skills and attitudes needed to be an effective leader in any situation.

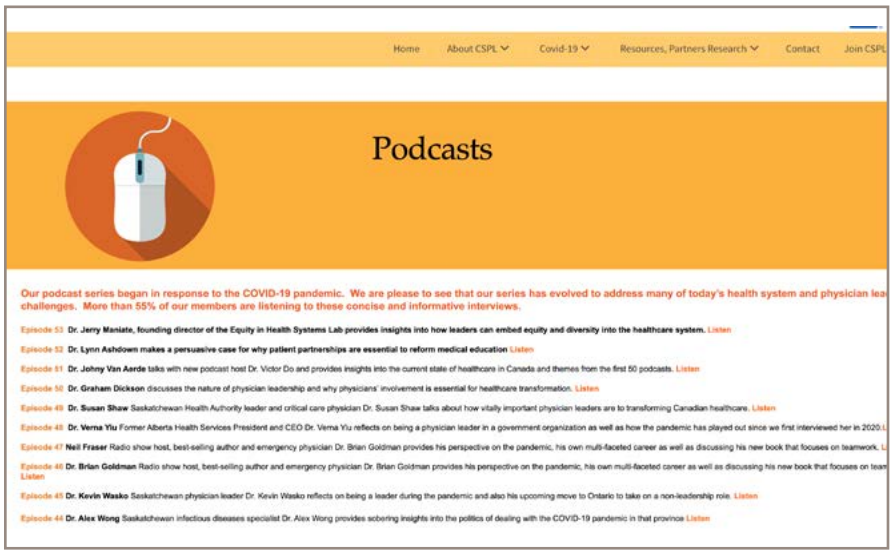
What was unsurprising was the degree to which those I interviewed were committed to caring, not only for their patients, but also for their colleagues and the health care system as a whole.

Although the focus of the interviews changed depending on where we were in the COVID-19 pandemic, that commitment was unwavering.

The series began with an interview with Dr. Gillian Kernaghan,[2] then president and CEO of St. Joseph's Health Care in London. It gave us a glimpse into the world of a physician leader amid what was then the new COVID-19 crisis. The 50th podcast was with Dr. Graham Dickson (PhD),[3] who bluntly described the realities physicians and all of society face in dealing with a failing system. In many of the podcasts, you can hear an acknowledgement of the stress and burnout facing physicians and other health care providers working through the pandemic.

However, the style of leadership that rose to the forefront again and again was collaborative. Many acknowledged that, although a "command and control" approach may have seemed the obvious way to deal effectively with the pandemic, they spoke about the importance of working together with colleagues – supporting them and keeping them engaged.

It is difficult, and perhaps unfair, to single out individuals, but I must admit that my conversations with now CMA president Dr. Alika Lafontaine[4] and Saskatchewan Health Authority's Dr. Susan Shaw[5] were particularly inspiring.



"If I'm commenting on the future of leadership within medicine, we all need to come to an understanding of where we are and whether or not the spaces we fill are the best way to leverage the power and influence that we have," said Alika.

"Physician leadership is a keystone to health system transformation," said Susan. "It's really hard [but] it can be really worth it. Physician leadership is practising medicine at scale. It's allowing you to bring your full self, all your clinical knowledge, all the curiosity that physicians have to that continuing journey of always being a learner, and always being a leader, to the next level."

Although the vast majority of those I interviewed for the podcasts were physicians, two of the most satisfying interviews were with patient advocates, Sue Robins[6] and Marni Panas.[7] Sue was especially eloquent in describing how and why patients and caregivers need to be core members of the patient care team and how physicians need to really listen to what patients have to say, even if what they hear causes them discomfort. Marni highlighted the various forms of external and internal biases embedded in our health care system and in society, in general, how those biases continue to permeate our conversations until we become aware of them, and how we can then make those conversations and our actions safer.

Podcast interviews are snapshots in time, no more so than during trying times when the whole system and those within it are under stress. But if you listen to any of these interviews you will always hear optimism for the future and, in many cases, you will hear explicit statements about how important it is for physicians to help shape that future.

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BOOK REVIEW

The Myth of Normal: Trauma, Illness and Healing in a Toxic Culture

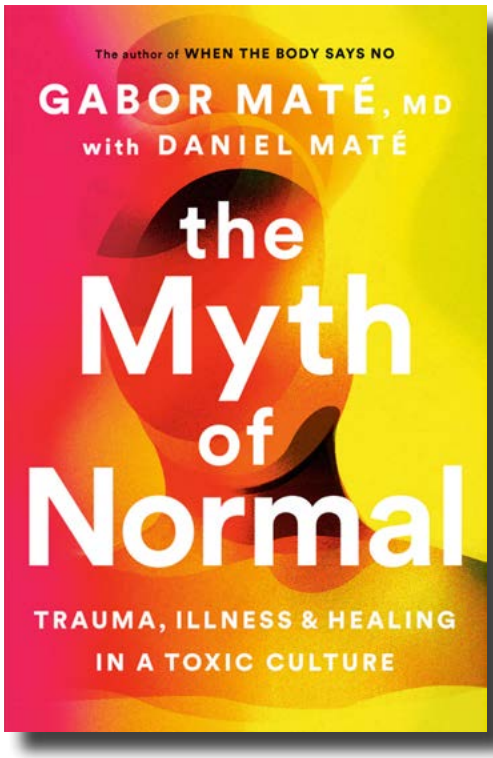
Gabor Maté, MD
Alfred A. Knopf Canada, 2022

Reviewed by Sena Gok, MD

Gabor Maté is a retired Vancouver family physician and the author of several books including: *Hold on to Your Kids*, *In the Realm of Hungry Ghosts*, *When the Body Says No*, *Scattered Minds*, and *The Return to Ourselves*. Published in September, *The Myth of Normal* was listed among bestsellers in North America.

Never one to shy away from challenging our current paradigms, Gabor Maté, in his newest book, makes a bold assertion that trauma, ADHD, cancer, autoimmune diseases, and addiction are all interconnected. He aims to shed light on the ties between our health and our social and emotional lives and, further, how the cultural practices of medicine blind physicians to the effects of emotions and trauma on our health. Throughout the book, mind-body unity is emphasized. Maté suggests that we apply science in a context that seeks to determine how illness and health are related. Reframing our approach to medicine will revolutionize it.

Maté opens the book by providing some definitions. First, "myth" is used in its true sense, being the collective expansion of the human imagination. "Disease" is defined as a result of physiology, childhood trauma, social and cultural conditioning, and generations of suffering. Trauma, as he describes it, means "wound," and how we cope with wounds defines much of our behaviour and shapes our worldview.



The author takes the reader on a ride of learning about trauma and its impacts on health and personal functioning. According to Maté, trauma is endemic and multi-layered in modern life, but its effects are often overlooked or misunderstood. "Normal levels and normal functioning are our goals when we apply treatments or remedies," he says. The healing process, according to him, involves achieving wholeness as a direction rather than a destination.

Maté offers an expansive collection of studies on cancer and autoinflammatory diseases associated with adverse childhood experiences. Oncologists, for instance, have decades of evidence linking anger repression to cancer. Moreover, he claims that childhood maltreatment is a preventable risk factor for adult inflammatory diseases. Especially in specialties dealing with autoimmune diseases, he strongly encourages physicians to ask their patients about childhood trauma. Finally, he reminds us that the mind and body exist within a system of relationships, social circumstances, history and culture, all of which impact health.

In further chapters, he discusses poverty, racism and social isolation as factors that affect genetics and molecular functioning. Early experiences and social environments, especially racism and poverty, shape our biology and development. We see clear associations between racial disparities and adverse health outcomes, including, for example, racism's correlation to inflammatory diseases and mortality. Even without economic disadvantage, the stress of racial prejudice mounts over time, toxifying the body and undermining its capacity to maintain itself, thus resulting in diseases.

Readers are encouraged to note the impacts of trauma in the political sphere and the early childhood experiences of some well-known American leaders. Direct correlations are made between adverse childhood experiences and adult political orientations. As we understand how the suffering in a family system or even in a community extends back generations, the concept of blame on the individual becomes meaningless. Maté adds that trauma awareness and blindness should be discussed in political discourse.

It is promising to read about successful trauma-informed healing approaches for patients struggling with addictions – not just substance abuse, but also food and behavioural issues. Reminding that health care providers can unintentionally traumatize or re-traumatize people, he suggests a view that addiction is anchored in adverse childhood experiences. Focusing on the pain of these often deeply rooted problems and exploring the perceived benefits of the substance/behaviour for the patients is a start to the recovery process. Using trauma-informed care as a universal precaution method can address these concerns for health care providers. Asking patients broad trauma inquiry such as "Have you had any life experiences that you feel have impacted your health and well-being?" allows surgical teams and providers to understand not only acute traumas present, but also collective/structural trauma.[1,2]

The author emphasizes that addiction is a complex psychological, emotional, physiological, neurobiological, social and spiritual process. He touches on neurobiology and neuroscience to provide a perspective based on his own clinical and life experiences.

Throughout the book, we learn repeatedly about Native wisdom, a rich tradition contrasting with western medical thinking. Another healing tool described is the help of psychedelics and ceremonies the author himself attended.

This is a fantastic piece of research by the author, and he deserves credit for gathering such valuable experience and data. It was stimulating to read about his and other physicians' experiences with their own and other individuals' healing work. It is a powerful reminder of the importance of the biopsychosocial approach to recognize the unity of emotions and physiology in everyone.

Maté emphasizes the importance of being vulnerable; life is worth living because of the feelings we experience, the challenges we face, and the opportunities we open ourselves up to. He calls for a radical shift in perspective in our society. He argues that life should not be lived unexamined, adding that self-examination doesn't require years of therapy. Trauma unawareness prevents many people from recognizing the effects of difficult life experiences on others. But developing trauma awareness in medicine and creating a trauma-conscious society are some of the suggested solutions, as trauma plays a central role in population health. Recently, a trauma-informed curriculum has been proposed for medical schools to break the cycle of trauma and promote healing.[3] The author is hopeful and supports a culture shift through creating trauma-informed medical, legal, and educational systems to care for practitioners' and students' emotional well-being.

In *The Myth of Normal*, we discover how our mental health and social connectivity are intimately related and how our health can improve when we find meaning in life. This book is designed for all types of readers and has a lot to offer to physician leaders to shift the culture and inspire more humanistic approaches to people who have experienced trauma.

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BOOK REVIEW

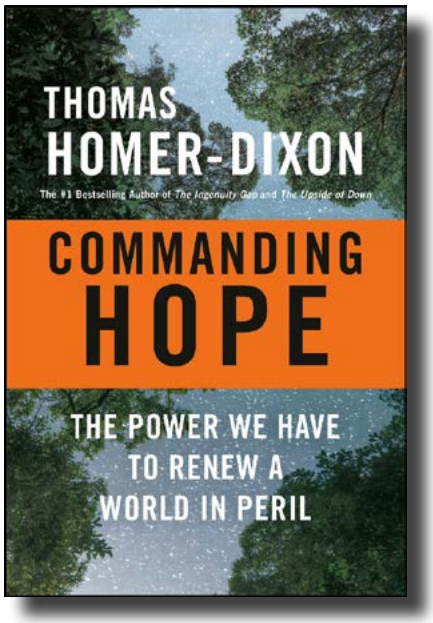
Commanding Hope: The Power We Have to Renew a World in Peril

Thomas Homer-Dixon
Alfred A. Knopf Canada, 2020

Reviewed by Johny Van Aerde, MD, PhD

Thomas Homer-Dixon is a complexity scientist and the executive director of the Cascade Institute at Royal Roads University in Victoria. His latest book, *Commanding Hope*, was released during the second COVID-19 wave. It describes a realistic type of hope that we need at this time of the Anthropocene and that leads to change by action. Although it deals mainly with the survival of humanity within the entanglement of deteriorating environmental conditions, extreme economic stresses, the global spread of new infectious agents, mass migration, and increasing social instability, the main premise of the book can also be applied to our health care system, which is intertwined with many other complex systems in distress.

Homer-Dixon's definition of hope is a state of mind, a person's longing for an imagined, better future. For hope to be a motivating force, it must be positive – a worldview that enables people to see what else is possible. Our individual and collective mental models, beliefs, and perspectives can prevent us from seeing alternative possibilities. Hope is a necessary leadership trait because without hope any situation is unsalvageable and suffused in despair, and there is the belief that things are inevitable and we can do nothing to affect them.



Also, change and transformation can only take place through agency inspired by hope. Hope must be combined with some action toward the desired change. That is where Homer-Dixon makes a distinction between avoiding the timid and passive locution of "hope *that*" (i.e., something magical will happen without any responsibility to take action) and striving for the bold and active "hope *to*", (i.e., a willingness to become an agent to create the desired future).

"Hope to" or "commanding hope" has three characteristics: it is honest, astute, and powerful. Honest hope is a *moral* attitude because it starts from presumption of the moral importance of a commitment to truth and evidence. It means having the courage to fully acknowledge the difficulties we face, informed by evidence, by understanding the stark constraints, while recognizing alternative possibilities within existing or new constraints in changing systems. Lack of honesty leads to false hope. In honest hope, "truth" is a scientifically defensible concept fundamentally tied to trust issues. It makes this reviewer think that, for the health care system, honest hope means imagining new possibilities for the future in the context of the current evidence of severe constraints, resource shortages, increasing demands, and existing successful models of alternative care delivery. What would be a realistic vision of our health care system, and what can realistically be accomplished?

Astute hope is an *epistemological* attitude because it is grounded in deep knowledge of people's worldviews and motivations. It requires us to leverage a savvy understanding of our allies' and opponents' motivations and worldviews, starting from the assumptions that, among our opponents, are good people whom we can mobilize. This aligns (or should align) with the health care system's foundational values of caring, kindness, and compassion. Astute hope is strategically smart, as it makes us more successful on the pathway to our desired future if we develop an understanding of the worldviews and motivations of the diverse people we encounter. It also gives us insight into how our worldview or action might be perceived by others, and how they might respond, thereby allowing us to adjust our course of action. An

example in our health care system might be understanding and having conversations on polarities, such as public and privatized health care, primary general care and specialized tertiary care, hospital and community care, curing disease and caring for people.

Commanding hope is also powerful, as it is a *psychological* attitude that emphasizes a vision of a positive future with a commitment to agency. Powerful hope motivates us to push through adversity and work to solve critical problems as illuminated by honest and astute hope. Its power comes from a pragmatic vision of the future that really matters to us, especially one that invigorates us with moral passion and excitement. The vision must reflect clearly defined values, goals, and identities that bring Canadian citizens together around a compelling purpose with a feeling of "we-ness." As we don't have a common vision on how to establish health care for all citizens, perhaps a better, smaller example might be actions related to the slogan "We are in this together" during the first wave of the pandemic.

Homer-Dixon then turns to systems thinking and complexity science to apply the three dimensions of hope to solving today's major issues. The combinations and interactions can lead to a staggeringly large number of knowable and unknowable possibilities that can command hope by providing realistic innovations to be used as agencies of change. The author quotes Donella Meadows' 12 places where interventions in a system can be influential. The top three are goals of the system, the paradigm or worldview out of which the system arises, and, at the top, the power to transcend worldviews or paradigms.[1]

How can these three interventions be applied to our health care system? The *goal of a system* is the leverage that is superior to the self-organizing ability of a system and must be defined by all stakeholders affected by the system. For the health care system, Canadians need to define its goal and purpose. The system that served our grandparents was never refined as the world changed, and it subsequently collapsed. As we redesign it, would the new leverage point shift to health for all Canadians rather than disease treatment, as pointed out by several royal commissions, but never really implemented?

Such a new goal would be closely linked with and superseded by another leverage point, the *worldview or paradigm out of which the system arises*. If the worldview favours individualism rather than collectivity, and if the politics of a worldview are kept in place by short-term election cycles, then the goal is unlikely to be reached.

Finally, and most important, is the *capacity to transcend worldviews* and paradigms. Do Canadians, health care professionals, politicians, and citizens have the skills to realize that no one single paradigm is true, that every paradigm, including our own, is a very limited understanding of the large number of possibilities beyond our current understanding. Why does Canada resist any possible variation on integrating components of private health care with the public health system, as is done successfully in countries outside north America? Do we have the power, the capacity, to shift our limited thinking from curing diseases to include socioeconomic factors that cause those diseases?

Underlying many of today's problems are inequities in many of our human-made systems, most of which influence people's health and their use of the health care system. If we want to avoid the global calamity of collapsing systems, including health care, if we want to reverse the collective slide, we must address the world's agonizing social and economic injustices. This implies expanding our identity from individualism to we-ness, as we, all Canadians and all world citizens, are in this together. As Homer-Dixon states, "the closer we look, the more it appears that the thing we are really up against is ourselves." Although all domains of the LEADS framework are needed for "commanding hope" to be honest, astute, and powerful, the most important leadership skills will be emotional intelligence, skillful dialogue and listening.

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