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Change & its Management

In this Issue

The occult of efficiency: frank, and Stein's, advice for physician leaders

The physician executive's crash course on AI in health care

Physician insights on strategies for leading quality improvement



Contents



EDITORIAL: Continuity and innovation

Abraham (Rami) Rudnick, MD, PhD, Colleen Galasso

HEALTH INFORMATICS: AI in health care: a tool for physician leaders

Tyrone A. Perreira, PhD, MEd, Sundeep Sodhi, PhD(c), MSc, Alia Karsan, LLB, MPP, Hazim Hassan, MBA, Anthony Dale, MPA

HEALTH INFORMATICS: The physician executive's crash course on AI in health care: Part 2 - What patients and physicians think.

Alexandra T. Greenhill, MD

RESEARCH: Physician insights on strategies for leading quality improvement

Pamela Mathura, PhD, Sandra Marini, MAL, Elaine Yacyshyn, MD, MSChQ, Yvonne Suranyi, BSc, RN, and Narmin Kassam, MD, MHPE

OPINION: We must change our mindset about our health care system

Johny Van Aerde, MD, PhD

COACHING CORNER: Canadian Physician Coaches Network: what coaching could mean for you as a medical leader

Debrah Wirtzfeld, MD, MBA

HEALTH ECONOMICS: The occult of efficiency: frank, and Stein's, advice for physician leaders

Jeffrey S. Hoch, PhD, and Carolyn S. Dewa, MPH, PhD

BOOK REVIEW: The Good Life: Lessons from the World's Longest Scientific Study of Happiness

Robert Waldinger, MD, and Marc Schulz, PhD

Reviewed by Johny Van Aerde, MD, PhD

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EDITORIAL

Continuity and innovation



Abraham (Rami) Rudnick, MD, PhD
and Colleen Galasso

The *Canadian Journal of Physician Leadership (CJPL)* starts the first issue of 2024 with innovation as well as continuity. As the new editor-in-chief of CJPL, and as part of the innovation, I have co-authored this editorial with the Canadian Society of Physician Leader's (CSPL's) executive director, Colleen Galasso, to address collaboratively both content and process related to CJPL.

From a content perspective, CJPL has added new sections, two of which appear in this issue: Health Economics and Health Informatics. Jeffrey Hoch, professor and chief of the Division of Health Policy and Management in the Department of Public Health Sciences at the University of California at Davis, who has done much work in Canada as a health economist, is leading the Health Economics section. Its first article addresses efficiency and cost-effectiveness, provides tools and examples, and is a reminder that effectiveness is necessary for health care and its systems. The second article in the Health Informatics section is part 2 in a series of five articles on artificial intelligence (AI). Another Health Informatics article in this issue provides a multi-level framework to address AI. A third new section to be developed this year addresses Physician (and other relevant) Leadership Education; more to come on this soon. As well one issue a year will be dedicated primarily to CSPL's Canadian Conference on Physician Leadership. CJPL will continue to publish various articles as before and will continue to enhance the accessibility and quality of all its articles, including adding lay summaries of technical articles, such as scientific papers.

From a process perspective, a senior learner has been added to the journal's editorial board. Please welcome Dr. Nikhita Singhal, a senior psychiatry resident transitioning to a fellowship in child and adolescent psychiatry. Nikhita has been a contributor to physician leadership initiatives, such as the task force on structural racism and discrimination of the Canadian Psychiatric Association; she will co-lead CJPL's new section on leadership education. In relation to other process aspects, CJPL continues to be published online, while changing from a whole PDF to links that can be read online or printed as PDFs or otherwise for each article. We will tally readership periodically, both for our accountability to revise content as well as to inform the process of CJPL according to its popularity as well as its quality. And we will explore opportunities to expand readership and sponsorship by means of selective marketing and ethical advertising.

This new vision and corresponding changes for CJPL are informed in part by the results of the 2023 survey of the CSPL membership, which are suggestive (although not conclusive because of the survey's low response rate, i.e., 6% of membership). Key findings of this survey were that many respondents benefited from CJPL at least in part but wanted the journal to expand its scope and diversity – for example, by addressing both academic and practical matters – as well as to enhance its visual aspect. CJPL continues to request input on its content and process, including format and style. Please feel free to provide ongoing feedback to its leadership, including its editor-in-chief and CSPL's executive director. Last, but not least, many thanks to CJPL's editorial board who continue to provide valuable contributions.

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HEALTH INFORMATICS

AI in health care: a tool for physician leaders

Tyrone A. Perreira, PhD, MEd, Sundeep Sodhi, PhD(c), MSc, Alia Karsan, LLB, MPP, Hazim Hassan, MBA, Anthony Dale, MPA

Artificial intelligence (AI) in health care is rapidly expanding, with the daily emergence of new initiatives, topics, and critical issues, making it challenging for physician leaders to organize and distill this complex topic. We offer a simple approach that involves classifying topics by three levels of scale: the individual, the organization, and the system or sector. Despite the widespread adoption of AI applications across all aspects of our daily lives, its implementation in health care remains limited. There is a need to engage, in all stages of development, key stakeholders, specifically governments, technology companies, health care providers, patients, and civil society. Cultural, social, and/or regional disparities can impact the integration of AI in health care, reflecting varied beliefs, attitudes, and practices. Our simplified approach to structuring and organizing this complex subject can serve as a valuable tool for physician leaders in conducting more focused discussions with stakeholders and decision-makers.

KEYWORDS: artificial intelligence, engagement, diversity, implementation, health care, physician leadership

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While health systems globally strive to recover from the SARS-CoV-2 pandemic¹ and improve, the field of artificial intelligence (AI) is rapidly expanding, with the daily emergence of new initiatives, topics, and critical issues. It is understandably challenging for physician leaders to stay abreast of the latest evidence, advances, applications, and opportunities in AI. Leaders may feel an urgency to act and a fear of being left behind. The literature suggests

that AI-induced fear can have a negative effect on adoption rates.^{2,3}

We offer a simplified framework to help physician leaders organize and distill this intricate topic, hopefully enabling them to have more targeted discussions that can help expedite decision-making and project-implementation processes.

Basic levels of analysis

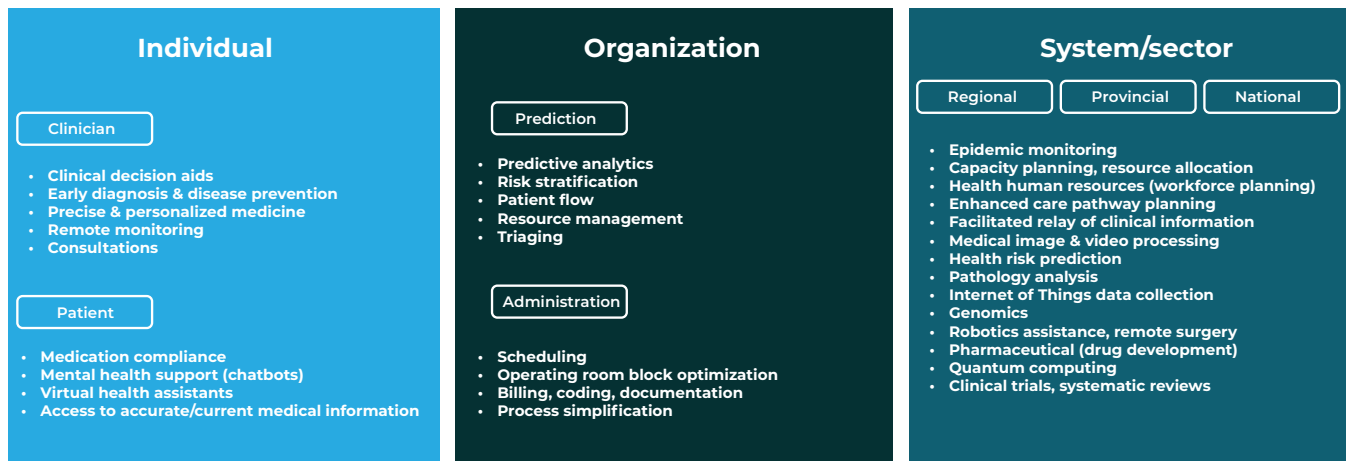
Getting started and identifying where to focus can be extremely challenging, especially for new physician leaders. Across scientific disciplines, phenomena can be examined in many ways. Although levels of analysis can be quite comprehensive,^{4,5} a simple approach can be taken that involves three basic levels of scale: the individual, the organization, and the system or sector.

The individual level is the smallest unit of analysis. In health care, this is usually the clinician and the patient. The organization level refers to multiple individuals working together in an institution. The system or sector level refers to entities external to an organization; it can include multiple organizations and/or networks and can span various domains.

Examining AI across different levels of scale

Recent systematic reviews of AI and health care are quite detailed, complex, and extensive.⁶⁻⁹ Examining the AI literature through an individual, organization and system/sector lens can help interlocutors clearly lay out and visualize the plethora of topics and issues (Figure 1).

A simple way to start is by considering the user and the purpose for which they are employing AI. For example, clinicians use AI to aid in clinical decisions, early diagnosis and disease prevention, precise and personalized medicine, remote monitoring of patients, and consultations. Similarly, patients use AI to improve medication compliance, as mental health support (chatbots) and virtual health assistants, and to access accurate/current medical information. Topics and critical issues can be categorized at the organization level by purpose or function. Categories

Figure 1. Examining AI uses at different levels of scale

may be broad, such as using AI for prediction of future events or more narrowly focused on assisting with administrative tasks.

Finally, topics and critical issues can be categorized at a system/sector level, with the possibility of further classification into local, regional (state or province), and national applications. The framework can be extended to include international classifications as well.

Practical applications

This model is simple to apply and easily adaptable to accommodate new emerging topics and critical issues as they arise. Examining and discussing AI in health care at the individual, organizational, and system level has proven helpful in the following instances.

Preliminary conversations about AI in health care – Regardless of audience and expertise level – system leaders, hospital board members, or frontline physicians – the framework helps provide a clear and comprehensive overview of AI in health care. It offers a systemic outlook, fostering an understanding of the broader context, while enabling individuals to identify their position and interests within the overarching landscape.

Crafting a risk management strategy for AI deployment – The framework helps one rationally think through the potential risks, concerns, and mitigation strategies required at each distinct level.

It enables one to identify risks at different levels and prioritize the highest, most pertinent, risks. For example, at the individual level, a clinician using AI as a clinical decision aid has a much higher risk than, say, an organization that is using AI to simply send appointment reminders.

Identifying barriers and enablers for AI adoption

– The individual, organization, and system levels each have unique barriers and enablers when it comes to the adoption of AI. The framework helps leadership to think through and identify the unique challenges at each level. For example, at the individual level, both physicians and their patients must have confidence and trust regarding the accuracy and reliability of AI prediction; otherwise, they will not use it. Hence, education and engagement are key components to successful adoption at the individual level. At the system level, depending on the AI initiative, interoperability and integration of electronic health records and other technology platforms across organizations pose substantial challenges for successful deployment.

Strategic planning and resource allocation – When strategic planning and identifying where to dedicate resources, it is helpful to have a systems perspective. Methodically discussing the topics at an individual, organization, and system level can help focus thinking and achieve consensus on what falls in and, just as important, outside one's purview. This approach also enables one to consider and identify key stakeholders at each level.

Policy development – A structured approach enables the identification of key stakeholders across various tiers. Government bodies, health professionals, provider organizations, patient advocacy groups, and research institutions, to name a few, each possess different strengths and can contribute to different aspects of policy development based on expertise, experience, and perspective. Thinking through and identifying key stakeholders at the individual, organization, and system levels can assist leaders in identifying where they are best suited to act, while simultaneously discerning areas where other stakeholders may be better positioned and equipped to develop and implement guidelines, ensuring a well-rounded and inclusive policymaking process.

Cultural, social, and regional disparities in AI adoption

Perceptions and trust in AI technologies play a crucial role in determining acceptance and adoption rates.¹⁰ Cultural, social, and/or regional disparities can impact the integration of AI in health care, reflecting varied beliefs, attitudes, and practices.¹¹ Central to the adoption of any new practice is engagement.¹² Building trust and relationships, especially in small rural and remote communities, is vital to the successful introduction and adoption of AI and technology. Identifying AI-educated community liaisons who understand local cultures and are able to communicate the benefits of AI and technology could assist in bridging the gap between technology advancement and community acceptance.¹¹

AI implementation in health care

The optimism for AI's role in advancing health care delivery is universally recognized.¹³ However, despite the widespread adoption of AI applications across all aspects of our daily lives, its implementation in health care remains limited.¹⁴ Recently, the World Health Organization issued guidance on ethics and governance for the use of AI in health, emphasizing the need to engage, in all stages of development, key stakeholders, specifically governments, technology companies, health care providers, patients, and civil society.¹⁵ The literature also suggests that

additional facilitators of AI in health care include active involvement and oversight in implementation processes, as well as identification of barriers related to generalizability and interoperability of new interventions with existing systems and the quality and accessibility of data.¹⁴

Conclusion

AI is a multifaceted field that continues to evolve. Having a simplified approach that is structured and organized can help physician leaders navigate this complex topic and engage in more effective dialogues with stakeholders and decision-makers. By demystifying these complexities and helping to focus discussions, we strive to facilitate faster integration and acceptance of AI in health care settings, recognizing that AI can have risks that must be identified and addressed (which can be a topic for a separate article).

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HEALTH INFORMATICS

The physician executive's crash course on AI in health care

Part 2: What patients and physicians think



Alexandra T. Greenhill, MD

This second in a series of articles on artificial intelligence (AI) in health care presents six core concepts that will help physician leaders frame their understanding of the rapidly evolving state of what patients and physicians think of AI. It covers biases in data collection, the need for rules, the implications for health care workers, how to avoid assumptions, patients' attitudes, and hidden inequities.

KEY WORDS: artificial intelligence, health data, data collection, interpretation

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Artificial intelligence (AI) is such a massive force of change in this decade, understanding the knowledge level and perspectives of patients and physicians is crucial, because the successful integration of AI into health care requires their support. It is also important to realize how patients feel about the collection of personal health data and provider actions, as these data sets are key to the creation and optimization of AI solutions. When patients and physicians do not

understand, accept, or trust AI applications, this slows down the adoption rate and causes delays in time to benefit from these promising technologies.^{1,2}

Numerous published studies in medical journals are heterogeneous regarding the study population, study design, and the field and type of AI under study.³ Similar issues exist with surveys being done by various health care organizations, governments, policy groups, and consulting firms.

Although it is, of course, useful to stay aware of the latest published results, the beliefs and concerns of patients and physicians are rapidly evolving, driven by the fast entry of AI tools into work and life outside of health care. This creates an additional challenge to understanding the trends. Here are six core concepts that will help physician leaders stay better informed about what is actually happening.

Biases related to surveys can lead to gaps in the data collected and inaccurate insights

Always consider that a survey may not have been able to collect the perspective of important subgroups of people or may be overreporting or underreporting key dimensions. After screening over 2500 articles on patient and public perception of AI from 2000 to 2020, reviewers concluded that the quality of the methods of these studies was mixed, with a frequent issue of selection bias.³

What is termed systemic bias can also be introduced when some survey participants simply don't respond. Studies have shown that there are often important differences between respondents and nonrespondents. People may choose not to respond for a number of reasons, including who is doing the survey, how the survey is described, how long it is, its format, how it's distributed, and how easy it is to understand the questions. Random selection is often used to ensure that participants are representative; however, this does not ensure that those who respond are also representative.

The design and reporting of survey questions may be biased, especially in summaries. Many surveys tend to use leading questions instead of open-ended questions and include generalizations in the

summary that reflect the bias of the organization or author. For example, "How concerned are you about the use of AI?" is very different from "How do you feel about the use of AI?" The abstract of the 2021 Canada Health Infoway's Canadian Digital Health Survey⁵ states that "half of Canadians surveyed feel knowledgeable about AI." However, the full report shows that, although it is technically true that "50% of people surveyed said they are very or somewhat knowledgeable about AI," only 8% said they feel "very knowledgeable" while 42% said they are "somewhat knowledgeable." In addition, 32% said they are "not very knowledgeable" and 16% said they "not at all knowledgeable." Therefore, these results could also have been reported in the abstract as: "Almost all people (92%) don't feel very knowledgeable about AI." It is key to access the original questions and look at the actual response rates.

Beyond surveys, it is also important to do qualitative studies.^{1,2,5,8} When evaluating AI in health care, we found that patients draw on a variety of factors to contextualize these new technologies, including previous experiences of illness, interactions with health systems and established health technologies, comfort with other information technology, and other personal experiences. Key informant interviews, deliberative dialogue, and a multistakeholder design lab process about how AI should be implemented in health care have revealed important insights that a survey would not have been able to capture, including key differences between deploying AI versus other health care innovations.^{1,2}

There are also significant differences between opinions and behaviour. Studies that assess people's reactions to available AI tools are, therefore, different from ones that assess hypothetical, broadly defined AI.³ For example, in surveys, people say almost universally that they are very concerned about their privacy. However, most people don't even look at how the apps and devices they use collect and manage their data, and 25% of health care apps, many of which have hundreds of thousands of downloads, don't even have a privacy policy or terms of use.⁶ It is important to ask what people think, feel, and say, but just as important to monitor what they actually do.

Need and convenience are powerful drivers of behaviour that differs from what one would have

imagined one would do. For example, the COVID-19 virtual agent is an AI chatbot attached to the BC Center for Disease Control. Launched in April 2021, by early December, it had had conversations with over 2.89 million people and answered approximately 25 000 questions a day regarding COVID-19. There were no issues and concerns with users, especially as it was not collecting any personal health information.⁹

Patients and the general public are becoming more informed and excited about AI in health care, all while signaling the need for rules and caution

Numbers vary, but more and more studies and surveys show that people report feeling more knowledgeable about AI and are more comfortable with the use of AI as a tool in health care, especially if there is transparency on whether AI is being used or not and there are legal and policy assurances that privacy and personal data are protected, both when building and when running an AI system, and that their data is not used to harm or discriminate against them.^{4,5}

Most people report wanting control over their personal health data, and their willingness to share depends on what organization is collecting the data and the intended use. The framing and information provided about proposed use also influence how people feel about AI.^{4,5}

Finally, most people feel that it is important to continue to invest in innovative technologies, such as AI in health care, especially to improve access and outcomes.⁵

Health care providers are interested in being more informed about AI in health care, but they are tired and innovation weary

Physicians and providers are interested in AI, but are cautious as they have experienced the challenges of moving from paper to digital records in hospitals and clinics. There are several domains for their concerns: matters related to technology performance (for example, evidence, accuracy, safety, bias); and people-and-process factors (for example, impact on workflows, equity, reimbursement, doctor-patient relationship, liability).¹⁰ In addition, their reactions to AI tools that improve access, care outcomes, and experiences are different from how they view tools that support back office administration practices

focused on efficiency gains and cost containment. The staggering level of burnout of the profession in the wake of the COVID-19 pandemic also influences providers' attitude to new innovations that will require learning and adaptation of existing workflows.

Be cautious about assumptions and make efforts to gain more granular insights

For example, studies have shown that there is no truth behind the hypothesis that younger people, who are assumed to be more exposed to and knowledgeable about emerging technology have more favourable opinions and responses to the use of AI in health care compared with older people.¹¹ Similarly, studies have voided the hypothesis that having previous experience with digital technologies that use AI, as well as being satisfied with the reaction, would predict more positive perceptions of Canadians.¹¹

Despite being less knowledgeable about AI, older Canadians are significantly more comfortable with AI in specific branches of health care than younger Canadians.¹¹ Common assumptions about older groups' difficulties with navigating technology, lack of experience or knowledge of technology, and preference for traditional methods of care over web-based care are also not accurate, as older individuals are increasingly more comfortable with the use of technology, and technologies are becoming simpler to use.¹¹

People's attitudes toward the human versus machine dynamic are more unexpected and complicated than initially assumed

In surveys, most people indicate that they value continued human contact and discretion in service provision more than any speed, accuracy, or convenience that AI systems might provide, and that they are very concerned about the loss of human interaction with health care providers.⁵ However, in real life scenarios, many patients show a preference for the speed and reliability of a chatbot and even report feeling it was easier to discuss sensitive issues with a machine than a human; a chatbot has been rated significantly higher for both quality and empathy.¹²

People in general tend to perceive machines as less emotional and, therefore, more objective, secure, and impartial than humans; many don't realize that AI

algorithms are a product of human design, and they often inherit our mistakes and biases. An AI system carries the bias of the data used and of the creators of the algorithms; therefore, it's not a question of "is there bias" but rather "what bias exists."¹³

Patients can now access AI tools that are often better than those used by providers, which can democratize access, but also deepen inequities

Consumer-grade health care AI, which is by definition not clinically validated, is different from medical-grade AI, which requires clinical validation and regulatory approval.⁷ However, increasingly, consumer-facing health technologies are on par or even remarkably better than those made available to physicians, as companies forgo the time and expense related to medical approval of their inventions and choose the straight-to-consumer route, positioning their innovation as a wellness product. This can cause issues, as physicians are not prepared on how to respond to patients who use such new AI-based tools.⁶

There are also concerns about deepening the divide between "haves" and "have nots," as ability to pay often determines access to these consumer-grade tools, and direct experience with AI then informs acceptance of AI. The concern about creating more inequities not only applies to access to AI tools, but also in terms of access to health care services, based on consumer-grade tools being able to detect issues at an earlier stage, leading to "queue jumping," or to cause false negatives that must be assessed, using health system resources. "Pro-AI" patients tend to be more comfortable with clinical AI use, have a higher degree of education, are more knowledgeable about AI use in their daily lives, and see AI use as a significant advancement in medicine, while "AI-cautious" patients report lack of human qualities and low trust in the technology as detriments to AI use.¹⁴ A number of organizations now provide free access for everyone to digital health tools, including AI, in an effort to close the gaps in population health needs and address inequities.⁶

Summary

These six core concepts can help physician leaders frame their understanding of the rapidly evolving thinking of patients and physicians about AI. Digital

technologies – in general and in health care – have led to unexpected positives and negatives. However, the most important thing to remember is that assumptions must be verified. It's important to think about what may be missing rather than just how to interpret trends that are being shown.

Future articles in this AI-focused series will cover some successful and unsuccessful uses of AI in health care, how to successfully deploy AI solutions in health care, and how to address the challenge of balancing innovation and learning with the need for control and regulations.

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RESEARCH

Physician insights on strategies for leading quality improvement

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Background: The Strategic Clinical Improvement Committee (SCIC) was established in 2015 to foster physician leadership in quality improvement (QI). In this study, we examined the experiences of physician committee members to determine leadership strategies perceived to support their involvement in QI.

Methods: A voluntary online self-assessment questionnaire was developed and sent to physician SCIC members. Descriptive statistics and thematic analysis were conducted, and identified themes were organized into two groups: strategies that support physician QI leadership and participation and strategies to improve their QI involvement.

Results: Twelve physicians (out of 35) completed the survey, revealing 17 strategy themes. Physicians joined the SCIC because of shared leadership goals, prior QI/research experience, or personal interest. Hands-on QI project experience, QI-personnel support, and sharing completed QI activities were perceived as beneficial for personal and professional growth. The coalitional leadership approach facilitated physician QI learning, involvement, mentorship, and interaction with medical trainees. Additional strategies for promoting physician QI involvement included: clarifying the project selection process, optimizing meeting frequency/duration, and involving medical divisions in establishing QI priorities. Requirements for physician QI participation and leadership included: formalizing QI roles and responsibilities, providing hands-on QI opportunities, sharing past project protocols, providing access to QI and data personnel, funding, peer mentorship, and communication and collaboration among physicians for broader intervention dissemination and implementation.

Conclusion: Evaluation of physicians' experience revealed that the coalitional leadership approach and enabling strategies can provide others with a practical method for supporting physician QI leadership and participation. The SCIC's next steps include development, trial, and evaluation of the additional strategies identified.

KEYWORDS: health care, quality improvement, physician, leadership, committee, Alberta

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Physician leadership is increasingly regarded as essential for enhancing the quality of care and sustainability of the health care system.¹ Physicians must take on leadership roles in quality improvement (QI) that they have not previously pursued.¹ The lack of physician leadership and involvement in QI is a result of numerous factors: high clinical workload, limited time, lack of trained practising physicians to teach and mentor QI skills,²⁻⁴ lack of data, scarce assistance with QI-related activities, limited support from hospital or health organization administration, and no financial reimbursement or promotion for participation in QI projects.^{1,5-8}

Innovative approaches to overcome participation barriers have integrated QI education with a QI leadership project, such as the physician quality-officer program, a physician-mentored implementation model, and a clinician-directed program.^{5,7,9-11} These approaches and the effectiveness of the incorporated strategies have lacked evaluation from participating physicians, making it difficult to determine which were impactful. This study asked physician members of an innovative physician-led QI committee to self-assess their experience, identifying the strategies they believe were effective in enhancing their QI knowledge, participation, and leadership, and identifying future strategies to sustain their involvement.

The Strategic Clinical Improvement Committee in action

In 2015, the Strategic Clinical Improvement

Committee (SCIC) was established to develop physician QI leaders in the Edmonton health zone in Alberta, Canada. This physician-led committee strategically joined three health system partners – the University of Alberta (UA) Department of Medicine (DoM), Alberta Health Services (AHS), and Covenant Health (CH) DoM programs.¹² The goal was to advance physician QI knowledge, participation, and leadership while assisting the DoM and local health organizations in making strategic clinical improvements at all levels of the Alberta health care system.¹³ The committee physician members, AHS, and CH executive directors and quality management partners collaborated to establish six key approaches and ¹⁴ enabler strategies to reduce barriers to physician QI involvement in addressing clinical issues as change leaders.⁹ The SCIC used the LEADS framework to identify four priority areas – QI education, QI leadership, mentorship, and QI recognition – to guide members in leading self, developing hands-on QI skills, building QI interdisciplinary teams that mobilize knowledge, and leading frontline clinicians toward a culture of health system improvement.¹³

Since its inception, this approach¹⁴ has successfully increased the number of physician-led and physician-involved QI projects in the Edmonton zone. Leveraging improvement and implementation science to develop and test interventions aimed at improving clinical outcomes and the health care system. The SCIC has evolved into a platform for QI leadership development, mentorship, sharing QI projects, highlighting results, and, most important, fostering an improvement culture among physicians that encourages them to co-create interventions and identify health system improvement opportunities. However, sustaining and advancing this QI leadership approach requires evaluation of physician participation experience to determine enabler strategies.

Methods

A mixed-methods design was used to create a questionnaire.¹⁵ Closed and open-ended questions were complementary, where open-ended questions provided additional understanding. All SCIC physician members ($n = 35$) from the January 2020 membership list were eligible to participate.

LEADS capabilities framework

The LEADS framework, which was developed by practising leaders,¹⁶⁻¹⁸ includes 20 capabilities, organized into one outcome domain (Achieve results) and four process domains (Lead self, Engage others, Develop coalitions, and Systems transformation).¹⁹ Lead self involves awareness of one's assumptions, values, principles, strengths, limitations.²⁰ Engage others involves the people challenges of effective interpersonal relationships.²¹ Develop coalitions establishes relationships and develops support across departments/programs/organizations and with patients and the public.²² Systems transformation is strategic leadership, exercised through policy, procedure, structure, and culture.²³ Achieve results represents future outcomes from the processes of leadership, both personal and strategic.²³

Survey instrument development and recruitment
A 57-question self-assessment questionnaire was adapted from validated tools and anonymously administered.^{24,25} It consisted of 47 scaled and 10 open-ended questions covering eight topics related to the SCIC: goals and collaboration, governance, decision-making process, members, leadership, capacity and capability, effectiveness, and institutionalization. An equal number of questions fell into each of the LEADS capabilities framework domains.²¹ A review of the draft questions by a non-committee physician researcher resulted in minor changes in sentence structure. The final questionnaire was entered into an organizational enterprise platform (see Appendix).

The organizational email addresses of committee members were provided to SM, who sent each participant an individually addressed email describing the study and the survey link. The questionnaire remained open for six weeks, during which two reminder emails were sent. The only mandatory question was the one seeking written consent. If consent was not obtained, the questionnaire would exit/close, and no results were included.

Data collection and analysis

For the scaled questions, descriptive statistics were used and Excel v. 2016 (Microsoft, Redmond, Washington) facilitated the analysis. For the open-ended questions, a thematic analysis was

completed.²⁵ Two researchers (PM and SM) independently read and grouped the textual responses to generate themes. The researchers discussed and refined themes based on consensus. Themes were divided into two groups: strategies promoting physician QI leadership and participation and strategies to improve QI involvement. Both data sources were integrated into a joint table to determine further insights.²⁶⁻²⁸

Ethics approval

The University of Alberta Research Ethics board provided an ethical waiver on 12 March 2021.

Results

Twelve (out of 35, 34%) physician SCIC members responded to the survey. Closed questions received a range of 10-12 responses, open-ended questions 5-10 responses. From the textual data, 17 themes emerged: eight identified physician strategies promoting their QI leadership and participation and nine determined strategies to improve their involvement (Table 1).

Lead self

Physician members initially engaged with the SCIC because it aligned with their personal goals (10/12, 87%), advanced QI/research experience or interest professionally (8/12, 67%), and was beneficial to their personal and professional growth. Most (10/11, 91%) viewed leading a QI project as organizational leadership development; 50% felt comfortable assuming a QI role. Respondents said the SCIC improved their awareness and understanding of improvement science (10/12, 84%) and increased their capability to participate in and lead QI projects (8/12, 67%). Almost half (5/12, 42%) attended all or some meetings and many (9/12, 75%) felt that they influenced SCIC priorities/projects.

Three themes influenced physicians to Lead self regarding QI: **Previous QI or research experience**, **Personal interest in QI/innovation**, and the fact that **QI knowledge and application promotes personal and professional development**. Respondents said: “[I did] previous work at different institutions in QI” and “[I joined] based on my previous research experience.” Others mentioned “innovation is important for the present and future, for our [physician] legacy” and “I

have an interest in QI.” Another said, “It has spurred me to look into taking QI courses to improve my knowledge, taking on a formal QI leadership role.”

Two themes were identified in the area of improving physicians’ ability to lead themselves: **QI project/protocol repository** and **Physician QI role and responsibility clarity**. Respondents mentioned “sharing a database of QI project/protocols, to help physicians less experienced” and “A repository of information would be beneficial.” Another stated, “Knowing the [formal] physician QI role and expectations [is necessary].”

Engage others

SCIC chairs were recognized as dedicated to the committee’s ideals (11/12, 92%), and as collaborative (10/12, 83%) and credible leaders (9/12, 75%). All respondents felt valued and most thought their voices were encouraged (11/12, 92%). Half (6/12, 50%) were unsure of membership expectations, and many suggested developing documented roles and responsibilities (8/12, 67%). SCIC meetings were viewed as efficient (11/12, 93%) and a good use of one’s time (7/12, 58%).

To support physician QI involvement, three themes were identified: **Strengthen communication and collaboration between physicians**, **Optimize committee meetings**, and. Communication and collaboration could be improved: “Knowing roles and hospital sites of each member could allow for collaboration or advice/mentoring” and “better communication of projects [interventions] between members” was also suggested. Respondents indicated that shortening meetings, but increasing the frequency could promote collaboration. One mentioned that the “reduced frequency of meetings has made it more challenging for collaboration.” Respondents indicated that each medicine division they represent should “have clear divisional QI priorities beyond just representation,” while recognizing the “challenge to engage others in the division [regarding QI].”

Achieve results

The SCIC defined key development strategies and goals and communicated them to its members. Many

Table 1. Summary of responses (n = 12) to self-assessment questionnaire to determine the strengths and challenges of the Strategic Clinical Improvement Committee (SCIC) in increasing physician involvement in quality improvement (QI).

LEADS domain	Responses to scaled questions by topic	Responses to open-ended questions*
Lead self (process)	<p>SCIC goals and collaboration</p> <ul style="list-style-type: none"> 87% believe that their QI goals align with those of the SCIC. 67% felt that their talents were used as members of the SCIC; 33% were unsure. 	<p>Previous QI or research experience</p> <p>"Previous work at different institution in QI." "I wanted to initiate QI projects and [could] receive mentorship from the committee." "Was asked to join based on my previous research." "I volunteered in quality improvement [project] before."</p> <p>Personal interest in QI/innovation</p> <p>"Innovation is important for the present and future, for our [physician] legacy." "I have an interest in Quality Improvement."</p> <p>QI knowledge and application promotes personal and professional development</p> <p>"It has spurred me to look into taking courses in QI to improve my knowledge, taking a formal QI lead role for the department at my hospital." "Improved my knowledge by me leading QI projects." "Fostered my QI involvement." "Increased awareness that QI is a priority." "Greater interest in QI and mentoring residents in QI." "Greater value placed on QI." "The benefits of QI work are seen a greater."</p> <p>QI project/protocol repository</p> <p>"Sharing a database of QI project protocols, to help junior faculty less experienced in QI methodology." "A repository of information including past projects [protocols], goals, etc. in a place that can be easily accessed."</p> <p>Physician QI role and responsibility clarity</p> <p>"Knowing what the physician QI role and expectation are."</p>
	<p>SCIC goals and collaboration</p> <ul style="list-style-type: none"> 87% believe that their QI goals align with those of the SCIC. 67% felt that their talents were used as members of the SCIC; 33% were unsure. 	
	<p>Governance</p> <ul style="list-style-type: none"> 70% felt that a clearly written committee purpose was present; 20% felt that information was limited. 58% were unsure about their role as a division QI leader on the SCIC. 	
	<p>Decision-making</p> <ul style="list-style-type: none"> 75% felt they had some influence in SCIC-selected projects or education priorities and selection. 58% were comfortable with how the SCIC makes decisions and prioritizes projects or education; 25% were unsure. 	
	<p>Membership</p> <ul style="list-style-type: none"> 33% attended all meetings; 42% only attended some. 100% agreed that they are recognized for their SCIC contributions. 92% felt comfortable asking for help to carry out a QI task. 	
	<p>Leadership</p> <ul style="list-style-type: none"> 67% shared a reason for involvement with the SCIC. 	
Systems transformation (process)	<p>Capacity and capability</p> <ul style="list-style-type: none"> 91% viewed completing QI projects as a form of organizational leadership and 50% felt comfortable in a QI leadership role. 84% noted that their improvement science knowledge has improved. 100% agreed that participation in the SCIC has been beneficial both personally and professionally. 67% are confident with participating and leading QI projects. 	<p>Physician peer mentorship with hands-on experience</p> <p>"Opportunities for members who are new to QI to assist [colleague physicians] or even observe through the process of a project from beginning to end." "Starting a project from scratch with no real hands-on experience is not realistic." "Teach how to do QI in a practical way, with more hands-on help such as involving interested people [physicians] in active projects just for learning and experience sake." "Assistance for members who are not confident in QI to become more comfortable."</p> <p>Funding QI</p> <p>"Funding for QI projects is needed." "Fund QI work."</p>
	<p>SCIC goals and collaboration</p> <ul style="list-style-type: none"> 83% agreed that SCIC provided QI support and shared resources among different members. 100% agreed that SCIC actively promotes QI planning, implementation, and evaluation. 	
	<p>Effectiveness</p> <ul style="list-style-type: none"> 92% believed they would recommend joining SCIC to others. 	
Engage others (process)	<p>SCIC goals and collaboration</p> <ul style="list-style-type: none"> 100% agreed that the SCIC values members' input. 92% felt that the committee chairs were committed to the committee ideals and worked collaboratively with the members (86%) and were seen as local credible leaders for the members (72%). 	<p>Strengthen communication and collaboration between physicians</p> <p>"Knowing roles and hospital sites of each member could allow for collaboration or advice/mentoring." "Better communication of projects between members." "More collaboration between divisions and hospitals."</p> <p>Optimize committee meetings</p> <p>"Shorten the meetings length." "Reduced frequency of meetings has made it more challenging for collaboration."</p> <p>Engage each specialty division in the DoM to establish QI priorities</p> <p>"Having clear divisional QI priorities beyond just representation." "Challenging to engage others in the division [regarding QI]."</p>
	<p>Governance</p> <ul style="list-style-type: none"> 36% saw documented roles and responsibilities for all members. 	
	<p>Membership</p> <ul style="list-style-type: none"> 83% share the SCIC's mission and QI objectives; 92% agreed that differing points of view are encouraged and can be voiced openly. 50% were unsure of the expectations for their membership. 	
	<p>Effectiveness</p> <ul style="list-style-type: none"> 93% felt that meetings were efficient. 58% felt that the SCIC made good to excellent use of their time; 100% felt the SCIC was effective at managing meetings. 	
Develop coalitions (process)	<p>Governance</p> <ul style="list-style-type: none"> 84% felt the SCIC made good attempts at collaboration with different DoM divisions. 50% felt that the current structure was fair to good. 75% saw an established communication process. 67% felt that SCIC had permanent staff designated, had broad-based membership and a designated meeting space. 33% noted that the SCIC structure was reviewed annually for relevance; 50% were unaware or unsure. 33% felt that committee structures were in place; 50% were unaware or unsure. 75% agreed that the SCIC uses resources skillfully. 	<p>Committee leadership approach for QI</p> <p>"Increases awareness, sharing QI ideas and the approach taken to address the issue." "Brings multiple members from different hospital sites together to share their projects and findings to allow collaboration and possible spread to other hospitals." "Diversity of members across the department. Breaks down silos of [QI] interested people." "Focus on building physician leaders in this space, building collaboration across divisions." "Greater value placed on QI." "The benefits of QI work are seen a greater."</p>
	<p>Membership</p> <ul style="list-style-type: none"> 100% agreed that the SCIC encourages collaboration and partnership among members. 	
	<p>Capacity and capability</p> <ul style="list-style-type: none"> 67% noted that their involvement in QI has improved as a result of being a member of SCIC. 	

<p>Achieve results (outcome)</p> <p>SCIC goals and collaboration</p> <ul style="list-style-type: none"> 67% agreed that the SCIC-defined roles and responsibilities for all members were easy to understand. <p>Governance</p> <ul style="list-style-type: none"> 75% recognized the presence of documented goals and objectives for the SCIC. 96% recognized that meetings were regular and well structured. <p>Decision-making</p> <ul style="list-style-type: none"> 58% were unsure whether the SCIC follows a standard decision-making process. <p>Membership</p> <ul style="list-style-type: none"> 50% were unsure whether the SCIC communicated member expectations. <p>Leadership</p> <ul style="list-style-type: none"> 100% felt that the SCIC co-chairs valued members' input. <p>Capacity and capability</p> <ul style="list-style-type: none"> 100% agreed that the QI consultant demonstrated knowledge of and skill in improvement science. <p>Effectiveness</p> <ul style="list-style-type: none"> 75% felt that the SCIC is able to carry out comprehensive QI activities to accomplish its objectives. 	<p>Hands-on QI experience</p> <p>"Assisting [involvement] with QI projects." "Opportunity to do a project with support."</p> <p>Formalized dissemination of physician involvement in QI</p> <p>"Sharing QI projects [during committee meetings] and having peer feedback and comments." "It is good to hear about other projects that are being done." "QI Day allows one to see the full scope of QI occurring."</p> <p>Dedicated committee QI personnel</p> <p>"Personal consultation and availability of [the committee dedicated] QI consultant to assist members with project design, analysis, and presentation."</p> <p>QI education for medicine trainees</p> <p>"The training component of the committee has been possibly the most effective as it ensures medicine trainees [residents, fellows] have a good understanding of the principles of QI." "An opportunity for trainees and staff to work in QI together." "Availability of summer [medical] students to engage [and assist] in QI projects."</p> <p>Clarify priorities for improvement/project selection</p> <p>"It is not clear to me how projects are chosen and supported and what the criteria is - this would be helpful." "How can we try to find the common [priority] areas and build the [approach] together?"</p> <p>Improve access to QI and data personnel</p> <p>"More QI support for each division." "A clear and easily accessible access to a [QI and Data/statistician personnel] for help with the QI project and data analysis."</p>
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*In each section, quotes are from different respondents. Green indicates strategies promoting physician leadership and participation in QI; red indicates strategies to improve physician QI involvement.

respondents (9/12, 75%) felt that the SCIC did well in terms of completing QI activities. All agreed that the SCIC QI personnel demonstrated improvement science expertise and provided support to members. The SCIC created experiential opportunities and mentorship while carrying out successful QI projects (7/10, 70%).

Four themes support members to achieve results: **Hands-on QI experience, Formalized dissemination of physician involvement in QI, Dedicated committee QI personnel, and QI education for medicine trainees.** One respondent remarked, [the SCIC provided an] "opportunity to do a project with support." Three respondents highlighted the importance of "learning together," "sharing QI projects [during committee meetings]," "having peer feedback and comments," and "hearing about other projects being done." One said, "annual QI day allows one to see the full scope of QI occurring." Respondents recognized the need for dedicated support personnel, commenting "personal consultation and availability of QI personnel to assist members with project design, analysis, and presentation aided in QI completion." They acknowledged that physician QI education is a learning continuum. A physician stated, "the training component has been possibly the most effective as it ensures medicine trainees have a good understanding of the principles of QI." Another emphasized the importance of "[medical] students

to engage [and assist] in QI projects." Further, a respondent mentioned that this approach provides "an opportunity for trainees and staff to work in QI together."

Two strategic themes would support achieving results: **Clarify priorities for improvement/project selection and Improve access to QI and data personnel.** One respondent suggested, "it is not clear how projects are chosen and supported by the committee" and another stated, "knowing what criteria are used would be helpful." They mentioned the need for "access to QI and statistician personnel" to improve physician involvement.

Develop coalitions

This leadership approach encouraged collaboration and partnership among SCIC members, departments, divisions, and the larger health care community (10/12, 83%). Respondents indicated that the committee structure was good (6/12, 50%); however, 50% were unsure what processes could improve the approach. Many recognized established communication processes (9/12, 75%) and acknowledged that dedicated staff (8/12, 67%) and skillful resource stewardship (9/12, 75%) existed.

Respondents viewed the **Committee leadership approach for QI** as important because it "brings multiple members from different hospital sites together to share their projects and findings to allow

collaboration and possible spread to other hospitals.” Another stated, “increases awareness, sharing QI ideas and the approach taken to address the issue.” In addition, a physician noted that this approach encouraged “diversity of members across the department. Breaking down silos of [QI] interested people.” Another mentioned the “focus is on building physician leaders in this space, building collaboration across divisions.” One respondent stated that the coalition provided a formal platform for “the benefits of QI work to be seen and [shared].”

Systems transformation

Respondents agreed that the SCIC promoted QI planning, implementation, and evaluation, provided support, and shared resources (10/12, 83%) through clearly defined roles, responsibilities, governance, and accountability (10/11, 91%). Participation was integral to their organizational leadership role (9/12, 75%), increasing their ability to participate in QI (10/12, 84%), and building confidence in mentoring colleagues (7/12, 58%). Most (11/12, 92%) said that they would encourage colleagues to join the SCIC because it is “a strong functional organizational structure, efficiently using our time, making available mentorship, and adding the presence of QI support.”

In terms of enhancing physician QI, two themes aligned with this LEADS domain: **Physician peer mentorship with hands-on experience** and **Funding for QI projects**. A respondent stated, “Teach how to do QI in a practical way, with more hands-on help and involve interested [physicians] in active projects just for learning and experience sake.” There should be “opportunities for members who are new to QI to assist or even an opportunity to observe.” Three respondents indicated the need for funding to support involvement.

Integrating the findings into a table identified the LEADS domains and strategic themes promoting physician QI involvement, revealing the need for a multistrategy approach. The domains of System transformation and Engage others lacked QI development strategies, suggesting associated challenges. Although strategies were aligned with Leads self and Achieve results, further strategies are needed to enhance physician QI involvement.

Discussion

The SCIC is an innovative approach to fostering physician QI leadership and participation.¹³ This study gathered physician members’ experiences and perspectives about the coalitional leadership approach and identified enabler strategies for QI leadership and participation. Seventeen strategic themes were identified and aligned with the LEADS framework,²¹ eight themes were effective in promoting physician QI leadership and participation, and nine themes needed development. These findings corroborate evidence that multiple strategies are necessary to enable physician QI leadership,^{5,29} thereby mitigating barriers to participation.^{2,4}

Similar to other studies, SCIC member physicians felt that the coalitional approach facilitated physician QI leadership and participation.³⁰⁻³³ By engaging individuals with expertise or interest in QI, the SCIC established a physician-to-physician QI community, cultivating QI leaders and leveraging formal and informal physician networks to expand influence and provide mentoring.^{15,34} Physicians believed that receiving QI education – integrated with hands-on project application, mentoring medical trainees, and QI personnel support – contributed to their personal and professional growth.^{5,33-35} Having a platform to share completed QI activities encouraged physician QI role modeling, mentoring, and involvement.^{5,35}

To improve and sustain the SCIC, development of internal processes for clarifying QI project selection and prioritization, optimizing meeting frequency and duration, engagement across DoM divisions, and improved communication and collaboration among physicians are needed for continued participation and committee sustainability.³³ Physicians believed that funding QI initiatives, providing physician peer mentorship with practical experience, ensuring access to QI and data personnel,^{5,35} and developing a formalized physician QI role^{33,35} are all necessary to establish physician QI leadership and participation. An interesting finding was the desire for a repository of QI project protocols to bridge the knowledge-to-practice gap, implying the need to understand how to complete a QI project from start to finish.

Limitations

The scope of the inquiry was cross-sectional, limiting

the study to current SCIC members as of 2020, the low survey response rate could be attributed to the on-going increase in clinical service duties brought on by a COVID-19 outbreak wave. Although representation was broad across the DoM speciality divisions, it may not have captured the views of the larger physician population. The results do provide insights from physician QI experience and identify effective strategies that others can adopt. Respondents had the freedom to choose which questions to answer, leading to variations in response rates. The data collected relied on self-reported information, which could introduce social desirability bias.³⁶ To address this limitation and enhance the study, an additional method, such as semi-structured interviews, could have provided opportunities to validate and expand on the results. Because of the COVID-19 pandemic, this option was not available.

Conclusion and future direction

Evaluation of physician experience revealed that the coalition leadership approach and enabling strategies have the potential to provide others with a practical method to consider for supporting physician QI involvement. The SCIC's next step includes development, trial, and evaluation of the additional strategies identified.

Appendix: survey questionnaire

The Strategic Clinical Improvement Committee (SCIC) was established in 2015 in the Edmonton zone (EZ). The primary mandate of the SCIC is to build organizational capacity for clinical quality improvement within the Department of Medicine (DoM) at the University of Alberta. The objective of this physician QI leadership coalition is to support:

- Physician QI capability and capacity
 - Knowledge: Physician and resident QI education
 - Leadership: Increase physician led QI projects
 - Participation: Hospital/unit councils and QI projects
- Alignment of DoM and AHS QI priorities through partnerships

- Increase scholarly QI activities (manuscripts and posters)

By providing your feedback, you will assist the SCIC learn about its strengths and challenges and identify actions that can be taken to improve and sustain successes achieved. The data generated from this survey questionnaire will be shared as summaries (graphics), quotes, and themes.

We invite you to participate in this voluntary survey that seeks to understand different aspects of the SCIC. It will take about 15 minutes to complete and the survey is designed to allow you to express your opinions and provide information regarding your experiences anonymously (no personal identifiable questions). It is your choice whether to complete this survey or not and it is your choice to decide which questions you complete. Further, you can exit the survey at any time for any reason, without pressure or consequence of any kind. There are no right or wrong responses; thoughtful and honest responses will provide the SCIC the most valuable information.

Thank you for sharing your insights regarding the SCIC.

Do you consent to completing this survey questionnaire?

Yes, please proceed to the next section
No, thank you and please exit the survey

All questions have been adapted from Butterfoss, 2007 Coalition Effectiveness Inventory (CEI). All questions have been linked to the LEADS framework (Vilches 2016) reflecting L - Lead self; E - Engage others; A - Achieve results; D - Develop coalitions; and S - System transformation.

The SCIC's goals and collaboration

L	1. The SCIC and I share the same QI goals 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
S	2. The SCIC provides QI support, shares the resources amongst different members 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
S	3. The SCIC actively promotes QI planning, implementing, and evaluating of QI activities 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
A	4. The SCIC defines roles and responsibilities for all members that are easy to understand 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
E	5. The SCIC values members' input 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
L	6. I feel my talents are fully utilized as a member of the SCIC 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
E	7. What would you change about the SCIC goals and collaboration?

The SCIC's governance

8. For each of the items in the table below please place an (X) in the corresponding column for each

E	Absent	Present but limited	Present	Not applicable	Do not know
Clearly written purpose					
Documented goals and objectives					
Provides regular meetings					
Provides structured meetings					
Established communication mechanisms					
Effective communication					
Documented roles and responsibilities for all members					
SCIC structure reviewed annually for relevancy					

D	9. Collaboration with different DoM divisions is: 1) Excellent 2) Very good 3) Good 4) Fair 5) Poor
D	10. Collaboration with different EZ hospitals is: 1) Excellent 2) Very good 3) Good 4) Fair 5) Poor
L	11. I understand my role in the SCIC as a division QI physician leader 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
D	12. SCIC resources are used skillfully 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
D	13. The current structure of the SCIC is: 1) Excellent 2) Very good

	3) Good 4) Fair 5) Poor
E	14. What do you think would improve the overall structure of the SCIC?

15. For each of the items in the table below please place an (X) in the corresponding column for each

E	Absent	Present but limited	Present	Not applicable	Do not know
Permanent staff is designated					
Membership is broad based (includes AHS and CH leaders, QI staff, various hospital who represent QI)					
There is designated meeting space					
There is designated meeting time					
Coalition structures are in place (see questions above)					

SCICs decision-making process

L	16. In your opinion, how much influence do you believe you personally have in SCIC QI project or education priority or selection decisions? 1) A lot of influence 2) Some influence 3) No influence
L	17. I am comfortable with how the SCIC makes QI project or education priority or selection decisions. 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
A	18. The decision-making process used by the SCIC follows standard process 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree

SCIC members

L	19. Choose the option that best describes you 1) I attend all SCIC meetings 2) I attend most SCIC meetings 3) I attend some SCIC meetings 4) I rarely attend SCIC meetings
E	20. The members share the coalition's mission and objectives regarding QI 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
E	21. The SCIC encourages collaboration and partnership amongst members. 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
E	22. The SCIC recognizes members for their contributions. 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
A	23. The SCIC effectively communicates expectations of members. 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
L	24. In instances where I do not understand how to carry out a QI task, I am comfortable asking for help 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
D	25. Different points of view are encouraged and can be voiced openly, i.e., in meetings 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree

SCIC leaders

D	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
26. The co-chairs are committed to the coalition mission and objectives					
27. The co-chairs of the SCIC work collaboratively with SCIC members					
28. The SCIC leader provides leadership and guidance in the maintenance of the SCIC					
29. The SCIC leader facilitates and supports team building, and capitalizes upon diversity and individual, group and organizational strengths					
E	30. The SCIC co-chairs value members' input 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree				
L	31. What led you to become involved in the SCIC?				

SCIC QI capacity and capability (knowledge, participation, and leadership)

L	32. Completing QI projects is a form of organizational leadership 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
L	33. I am comfortable being put in a position of QI leadership in the SCIC 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree
A	34. The SCIC QI consultant demonstrates knowledge and skill of improvement science and QI projects 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree

		Strongly disagree	Disagree	Unsure	Agree	Strongly agree
A	35. Joining the SCIC, my science knowledge has improved					
S	36. Joining the SCIC, my awareness and understanding of both AHS Quality Management Framework and Covenant Health Quality partners has improved					
D	37. By participating in the SCIC, my involvement in quality improvement projects has increased					
S	38. By participating in the SCIC, I have become more capable (knowledge and ability) to participate and lead QI projects					
L	39. Participating in the SCIC has been beneficial for my own personal and/or professional growth					
S	40. Participating in the SCIC has been beneficial in supporting my formal DoM/organizational physician leadership role					
A	41. I am confident with both participating and leading QI projects on my own 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree					
S	42. Please select the statement that best describes your QI mentorship 1) I am confident with mentoring others how to carry out QI projects 2) I am comfortable with mentoring others how to carry out QI projects 3) I can but rather not mentor others how to carry out QI projects 4) I am not confident enough in my own QI abilities to show others how to carry out QI projects					

Please rate the effectiveness of the SCIC

The SCIC objectives are:

- Physician QI capability and capacity
 - Knowledge: Physician and resident QI education
 - Leadership: Increase physician led QI projects
 - Participation: Hospital/unit councils and QI projects
- Alignment of DoM and AHS QI priorities through partnerships
- Increase scholarly QI activities (manuscripts and QI posters)

A	43. How well was the SCIC able to carry out comprehensive QI activities to accomplish the objectives of the SCIC? 1) Not well at all 2) Not so well 3) Somewhat well 4) Very well 5) Extremely well					
E	44. Organization of SCIC meetings are efficient: 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree					
E	45. Please choose the statement that best describes how well the SCIC uses your time. 1) The SCIC makes excellent use of my time 2) The SCIC makes very good use of my time 3) The SCIC makes good use of my time 4) The SCIC makes fair use of my time 5) The SCIC makes poor use of my time					
E	46. The SCIC is effective in managing meetings 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree					
S	47. Based on my own experience, I would recommend others to join the SCIC 1) Strongly disagree 2) Disagree 3) Unsure 4) Agree 5) Strongly agree					

SCIC institutionalization

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
S	Do you believe that...				
	48. SCIC is aligned and included in the AHS and CH QI frameworks				
	49. Long term funding is needed for sustainability of the SCIC				

	50. SCIC strategies are updated as required				
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Open-ended questions

E	51. What are the key SCIC-coalition strengths?
A	52. Of all the activities of the SCIC, please list which you think have been most effective?
A	53. What are the areas that the SCIC needs to improve?
L	54. What things could have improved your coalition experience?
A	55. Think about what the SCIC is trying to do, are there groups not being reached? YES or NO a. If yes, what are some of these groups?
S	56. What impact has the SCIC had on a. Your personal QI leadership and involvement? b. Organizational clinical improvements? c. UA DoM physician QI culture?
A	57. What suggestions do you have for sustaining the SCIC work long term?

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OPINION

We must change our mindset about our health care system*



Johny Van Aerde, MD, PhD, FRCPC

healthydebate

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Our health care system is complex. Because it is human made, its behaviour can be changed by intervening at specific leverage points or spots of influence. Some leverage points are weak because changes resulting from the intervention don't make much difference; others are strong because they transform how the system works. Unless we choose different and more powerful points of influence, our health care system will continue to be stuck in the status quo.

Weak leverage points are external to the system and rarely change its behaviour. Examples include using numbers and quantitative parameters, constraints and standards, subsidies and taxes. Yet, these interventions are used most frequently because decisions can be made quickly and create the perception that they work, even though they only deliver short-term results.

People like quick fixes because the human brain is programed to think short term and denies the need for long-term investment. Politicians like short-term

solutions because they satisfy and distract voters until the next election. But history shows that money transfusions are a weak leverage point that creates little change. Money transfers over the past decades have not improved access to health care; the burden of disease for Canadians has not decreased; and most outcomes and quality indicators have fallen below those of other Organization for Economic Cooperation and Development countries.

And not only the health care system, but health itself has deteriorated and continues to do so: diet-related diseases are now the leading risk for death, according to the Heart and Stroke Foundation, mainly because Canadians get half their calories from highly processed foods. Health Canada reports that obesity is one of the top preventable risk factors for many chronic diseases including type 2 diabetes, heart disease, and some cancers. Similarly, the rate of obesity and overweight increased from one in two adults in 1978 to two in three in 2017. Currently, one in three children is overweight. Other examples of deteriorating health and wellness are the increasing number of unhoused people and, recently, a reduction in average life expectancy because of the number of young people dying from street drugs.

“Last century's paradigm of treating disease no longer works because the context of illness has changed.”

Strong leverage points are internal to the system and, as a result, change our way of thinking and our actions, leading to changes in the behaviour of the entire system. Among the strongest levers leading to transformation are paradigms or collective mindsets. Paradigms are shared ideas, beliefs, and assumptions that form the collective mental models on which a society's culture is built and sustained by structures like goals, laws, rules, and policies.

However, last century's outdated paradigm of treating disease no longer works because the context of illness has changed, the workforce and budgets are under tremendous stress, and, most important, all the societal factors that affect health and wellness are not reflected. A real paradigm shift would change our thinking and behaviour from curing disease for the individual to enabling and maintaining health and wellness for everybody. This necessitates redefining



our health system's purpose, not only in the context of changing demographics and advanced technology, but also in the context of limited workforce and finances.

Currently, our health institutions serve two masters: the patient and the government. The paradigm that health care must be controlled, owned, and closely directed by government must shift toward one in which the health system is kept at arm's length from governments, making all citizens, not just patients and government, stakeholders and co-owners of the system. As a result, the public, not the government, would also determine ways of payment and delivery for health and disease services.

To accomplish that, the existing public health care model that gives the perception of being universally accessible must be replaced by one that truly offers more health services for Canadians. This means developing new models for both funding and delivery. As an example, the Enoch Cree Nation in Edmonton is piloting a new Indigenous orthopedic centre that is sovereign rather than private or public. Enoch will pay for and own the building, which will include other medical facilities, at a cost of up to \$50 million. Alberta provided planning funds for the project and will staff the facility.

Western European countries offer examples of successful hybrid public-private partnerships (3P), in which citizens are offered more services, such as the

Netherlands' Buurtzorg nurse-led model of holistic care,¹ with superior outcomes compared to Canada. This requires determining the best models or mix of partnerships for funding and delivering health care by defining the roles of government, business, workers, and all patients. Successful western European countries clearly delineate which health services are covered by the state and which are not. They also invest more in social welfare² than in treating sickness. Defining the purpose of health and health care clearly allows them to strictly regulate the public-private fault lines so that care is delivered in an equitable and affordable manner, regardless of whether services are offered publicly, privately, or both. Unfortunately, the purpose of Canada's health system has become vague and ill-defined since it was formulated 60 years ago.

No system, public or private, can cover all the health needs and wants of every person all the time. That requires another paradigm shift where "everything" and "all the time" are delineated.

Access to opportunities and choices leading to health and wellness should be a right for all, but to have the system cover everything for everybody all the time is unsustainable. The shortage of health workers demonstrates that point, as does the increasing financial pressure. Ask yourself, what good is universal access to chronic dialysis or a heart transplant for a person without a home or without access to decent food or income? What if

today's paradigm "right to free but limited access to disease care" shifted to "right to universal health and wellness?" That way of thinking requires not only equitable access to essential and health-promoting services, but also the limiting of access to non-essential or low-evidence items often pushed by media and self-interests.

Would Canadians reject the idea up front as an infringement on their freedom if access to some unhealthy choices was limited and discouraged? Or would they accept some personal responsibility in making healthier choices if they were available and affordable? For example, how would they react to a very high price for addictive and highly processed foods and drinks, smokes and alcohol, while the extra monies generated would be used to drop the cost of fresh, healthy and sustainable foods?

Much of the existing paradigm is enshrined in the Canada Health Act (CHA), a law that defines access to treatment of disease, not health. Why do we accept the unchallenged paradigm that the CHA is the be all and end all? Are we willing to rewrite the law such that it enshrines health and wellness in the Canadian fabric rather than just access to treatment of diseases?

Although laws can and should be adjusted to the changing times and cultural context, we have never revisited last century's CHA, written at a time when we didn't know as much about health and disease as we do today. We continue adding more buildings, different equipment, and expensive drugs to a dysfunctional health care system, but the system itself is structurally and culturally still the same as 60 years ago. What if, in re-writing the CHA, we no longer saw health and the health care system as costs but as investments, acknowledging that the health care system and a healthy society contribute to the economy. Health is wealth and wealth is health.

The most fertile condition for innovative and transformative ideas is at the time of collapse. That is why, now more than ever, we need to point out the anomalies and failures of the old paradigm and insert people with the vision of a new paradigm in places of public visibility and power. In the health system, it is not politicians but health care workers, in particular physicians, who need to play the role of advocates in partnership with patient groups and all citizens.

To expose and transcend an existing mindset requires our collective abilities and power. Do we as Canadians truly have the will and the skills to question what else is possible, or are we too preoccupied by self-interest and self-importance? Do we possess the art of real dialogue, and can we create safe forums for all to have conversations around redefining health, wellness, and health care? Or are we too hyped by subconscious persuasion and extreme polarization by political parties?

Recent polls show a sharp drop of trust in governments, and that might become an obstacle to accepting any change from politicians, even if it means an improvement. This is why the new paradigm for our health system must place the ownership in the hands of citizens, in partnership with balanced 3P arrangements. Would we act differently if we saw ourselves as owners of the health system, rather than it being government's business, a view that absolves us from responsibility for our own and others' health?

The most powerful leverage comes from new ways of thinking. Therefore, Canadians must stop tinkering with old, outdated institutions and find the courage to create interventions that make a foundational difference in the health care system, that reject the status quo, and that rebuild our dysfunctional and collapsed system.

The necessary conversations are difficult, but most of us are reasonable, middle of the road, and common-sense people. Indeed, we are Canadian!

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COACHING CORNER

Canadian Physician Coaches Network: what coaching could mean for you as a medical leader



Debrah Wirtzfeld, MD, MBA

Many of you are familiar with the axiom that becoming a successful leader is a combination of gaining knowledge, acquiring on the job experience, and engaging in leadership coaching.

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The International Coaching Federation defines coaching as “partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential.”¹ Unlike mentoring, coaching assumes that the client has the capacity for self-reflection and discovery through a process of engagement with a coach who challenges them with deep, thought-provoking questions. The coach accepts that the client can define their own path forward. Coaching can be a powerful component of a leader’s toolbox.

The Canadian Physician Coaches Network (CPCN) is a not-for-profit organization formalized in early 2020 following an initial discussion over coffee between Dr. Mamta Gautam and Dr. Ted Bober around what might be possible. With close to 60 accredited coach

members, globally, it is the largest organization of independent coaches serving the needs of physician clients. Members have a passion for enhancing both the personal and professional success of Canadian physicians. All members have previous experience working with physicians and recognize the unique challenges that come with being a member of the medical profession. Although not all member coaches focus on leadership or executive coaching per se, each has an interest in serving the many and varied needs of our physician clients.

Engaging with a coach is an essential aspect of reaching full leadership potential. This is why CPCN has chosen to come together with CSPL to produce a quarterly Coaching Corner. We seek to educate physician leaders around the value of coaching for leadership development. In this first article, I address some basic questions you may have around a coaching engagement.

What does coaching look like?

Coaching is a confidential engagement between an accredited professional coach and a client (coachee) who is interested in further exploration and development around a personal or professional situation. The initial interaction or discovery session is meant to provide the coachee with information around what coaching is and is not, explore what the coachee hopes to achieve, provide information around the type of and length of coaching engagements the coach offers, and provide a space for reflection on both parts as to whether the two can work together, i.e., are a match. A coachee might opt to seek out two or three coaches to find the best fit.

Coaching can be time limited or long term. Sessions generally take place once or twice a month and should be held in a space and time free from outside distraction. Coaching generally consists of goal setting around a particular vision of what success might look like; an exploration of possibilities on how best to move toward the goal; deep reflection and personal observation of strengths, values, and limitations that bear on the journey; and attention to insights gained through the coaching process. The role of the coach is to ask open-ended and reflective questions, actively listen, challenge around growth

edges or blind spots, and encourage continuing self-discovery. The role of the coachee is to be willing to deeply reflect and hold themselves accountable to being able to define and actively move toward their preferred future state.

How do I know if I need a coach?

Coaching is a valuable tool in the path to leadership success. Any time a leader finds themselves asking How might I do this? How could this be better? or What is the next step?, they could benefit from engaging with a coach who will work with them to better define and understand the answers to these questions. Leadership is a continued path of self-development and reflection that requires education and coaching to enhance potential.

How do I find an appropriate coach?

Many physicians find a coach through recommendations from others or word of mouth. The CPCN website (www.coach4md.org) lists the biographies and areas of interest of our accredited coach members and is readily searchable by those interested in finding a coach. You may reach out to any number of coaches and explore whether there is a fit.

What's next for CPCN's coaching corner?

The format for upcoming submissions will focus on specific leadership issues a physician leader might explore with a coach. They will focus on what questions might be asked and insights clients might hope to gain in working with a leadership coach around a defined area.

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The Canadian Society of Physician Leaders
has developed a

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For more information contact:
Colleen Galasso at
colleen@physicianleaders.ca

CSPL Canadian Society of
Physician Leaders

SCLM Société canadienne
des leaders médicaux

HEALTH ECONOMICS

The occult of efficiency: frank, and Stein's, advice for physician leaders



Jeffrey S. Hoch, PhD, and Carolyn S. Dewa, MPH, PhD

In this first article in a series on health economics, we focus on efficiency, which is an important concept for leaders deciding how to spend scarce resources, such as time, effort, and money. Efficiency, or cost effectiveness, activities should consider that progress may be a function of multiple outcomes. Simply focusing on one outcome, such as length of stay because it is easy to measure, may produce overall inefficiency according to a more comprehensive set of objectives. Value achieved, a more difficult type of efficiency, involves "smart shopping," where both costs and outcomes of options vary. Often the new way of doing something is more expensive and more effective. In these situations, a leader must decide the extra cost for extra effect is worth it.

KEY WORDS: leadership, efficiency, health economics, cost-effectiveness

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Over 20 years ago, in *The Cult of Efficiency*, Professor Janice Stein¹ argued that physicians are expected to work efficiently. They are constantly enjoined to become efficient, to remain efficient, and to improve their efficiency in the safeguarding of the public trust.

Efficiency, or cost effectiveness, has become an end in itself, a value often more important than others. But elevating efficiency, turning it into an end, misuses language, and this has profound consequences. When we define efficiency as an end, divorced from its larger purpose, it becomes nothing less than a cult.

In this article, we describe various types of efficiency and offer insights for physician leaders considering (or reconsidering) their relationship with the cult of efficiency.

"If you don't know where you want to go, then it doesn't matter which path you take."

– Lewis Carroll, *Alice in Wonderland*

Background

There are two types of efficiency that we describe as no-brainer efficiency (NBE) and smart-shopping efficiency (SSE). NBE involves paying less for something or getting more of it for free. An example of paying less is buying something at a discounted price (e.g., using a coupon). If the good or service is the same regardless of whether you use the coupon, then using the coupon means paying less. Some people view generic versus name brand pharmaceuticals this way. NBE can also involve getting more for the same price. When you buy a standard airplane ticket at the economy price but are upgraded to first class, the upgrade is "more for free" NBE.

However, if the upgrade costs more, then there is a need to decide whether the extra perks (such as legroom and food) are worth the extra cost. Paying a little extra to get something worth much more in value is SSE. Context plays an important role in assessing SSE. A flight upgrade of \$50 for a 50-minute flight is different from getting the \$50 upgrade for a 15-hour flight. In thinking about efficiency, two key distinctions are: Will we need to spend additional resources to get more? and, if so, Will the "more" be worth it?

Satisfying NBE efficiency is predicated on the assumption of similar quality; additional baked goods might be slightly burned or stale, and the free upgrade to premium economy may be to a seat next to the lavatory or a crying baby, or to a seat without

leg room or the ability to recline. For SSE, the issue is whether the extra cost is worth it. SSE is not about saving money; it is about spending it wisely.

Consider how the two types of efficiencies manifest at work. Suppose you are hiring for a job with a pay range of \$50-60 thousand annually. It attracts two candidates, both of whom can do the job described in the ad. However, although Candidate A will do an adequate job, Candidate B would do a better job because of having additional experience and skills. The problem is that Candidate B wants a higher salary commensurate with their additional experience and skills.

Your human resources (HR) department's prohibitions about not paying more than \$50-60 thousand are consistent with NBE. Because of how the job classification is structured, both candidates appear able to "do the job"; so, the cheaper one is a more efficient choice. To HR, the protestations that Candidate B is better seem based on occult criteria. According to the job ad, both candidates meet the specified requirements; if more matters, then it must be specified. Because you can "see" the additional value of the more expensive Candidate B, that person seems like an optimal choice based on SSE. However, to HR this seems like occult efficiency (hence the title of this article), as both candidates "can do the job." Why spend more and gain nothing more (according to what is listed as important in the job specification)? An unclear objective invites trouble, even if the stated

experience?" 3. Effectiveness: "Is what you're providing going to satisfy my need or want?"

4. Costs: "What's the cost to me and my family and is it worth it?"

This shows how efficiency and what counts as progress toward the objective(s) may differ with perspective, such as that of physicians, health care administrators, and patients. Health care efficiency is not simply reducing costs. Rather, the challenge is understanding when to pay more to get higher value. In situations where the value of what you gain is greater than the additional cost, it makes sense to spend more to get a good deal or what some describe as "value for money."

Table 1 shows relative outcome in relation to relative cost. Decision-makers must decide what represents an acceptable level of cost in relation to an acceptable level of outcome. For some combinations, the answer is straightforward. For example, adopting a new way of doing something that produces the same outcome but costs more would be an "Easy no." In contrast, if a new option has a better outcome but with a decrease in costs, the answer is an "Easy yes."

In the top right and lower left cells of Table 1, we find SSE scenarios. In some cases, it may seem like a good deal to accept a poorer outcome for less cost; likewise, in some cases SSE may dictate not paying a lot more for only a little better. While we have framed this example in terms of paying with money, this concept can also be applied to other costs, such as time, energy, space, beds, labour, capital, or any other scarce resource.

Table 1: Efficiency matrix

	Worse outcome	Same outcome	Better outcome
More cost	Easy no	Easy no	Smart shopping
Same cost	Easy no	Other factors	Easy yes
Less cost	Smart shopping	Easy yes	Easy yes

objective is achieved in an efficient way. Think about the push for value in health care. Paul Keckly claims :

In most industries, "value" as defined by consumers is associated with four attributes:

1. Accessibility: "Can I get what I need or want from you?"
2. Service: "Is dealing with you a pleasant

Critique

As a way of thinking about efficiency, smart shopping has a variety of potential vulnerabilities that can have disastrous consequences for leaders. Its success depends on an accurate and comprehensive definition of outcome that is relevant for the decision-maker. Often, leaders assume that there is only one

outcome or effectiveness measure that matters (and is measurable). In *The Cult of Efficiency*, Professor Stein recalls the story of how her mother had to be released from a hospital by a certain day or the hospital's efficiency ratings would be driven down, explaining that the hospital unit, "had been given seven days to discharge a geriatric patient after a fractured femur. If the patient remained in the unit for eight or ten or thirteen days, the surgical unit became less efficient than the hospital and government demanded."¹ Using length of stay (LOS) as the sole efficiency metric, the surgical unit would look less efficient.

In the rush to increase efficiency and reduce LOS, it is important for leaders to ask whether other things matter. Does the patient return to the hospital soon, with complications? Are adequate homecare supports in place to ensure healing and recovery? Whether contemplating an individual's or an organization's efficiency, it is important to recognize that there may be multiple objectives that leaders want to optimize. Depending on the leader's experiences and advisors, some outcomes are obvious, but others are less so. To be useful in real-world decision-making, it is critical that leaders think of efficiency as meeting multi-dimensional objectives and ask themselves, "What key factors should be considered?" In addition to outcomes, other attributes may also contribute to achieving a leader's goal(s). Patient and caregiver experiences might be key to uncovering some of the most important dimensions.

Sometimes a leader may not be ready to divulge a strategic direction and, as a result, make decisions based on a rationale that is unclear. Some of the most important value components may be kept hidden by leaders, representing either a strategic decision not to share this information or a missed opportunity to communicate all that is of considerable value. This sends confusing signals about what the organization is trying to achieve in terms of efficiency.

A Forbes article, "The Soul-Sucking Side of Efficiency,"² considers that "it may seem inefficient to spend time asking your team about their weekend (and, by the way, actually caring about their response) rather than jumping into the project at hand." If the purpose is just to solve a particular problem, shorter meetings are more efficient. However, if we consider

multiple purposes for meetings (such as building team collaboration and strengthening work culture), the extra time spent socializing could produce additional value. This is an especially important consideration as workplaces decide how to optimize the hybrid workplace. It also has implications for how meetings are led. If people do not feel included⁴ or are included in a way that is uncomfortable for them,⁵ in-person meetings may not be considered efficient. Team members will be wondering, "Could this meeting have been an email."³

Take-home lessons

Health care leaders often seek to achieve multiple objectives. This means that progress is likely a function of multiple outcomes. Efficiency is related to the productivity of resources expended for these multi-faceted gains. Simply focusing on one outcome to monitor (such as LOS because it is easy to measure) may produce overall inefficiency according to a more comprehensive set of objectives. Hospitals discharging everyone with a hip replacement after a one-day stay may seem efficient, but only on an initial LOS scale.

Considering the concept of efficiency can help leaders reflect on the "why" of their organization. Critically thinking about a proposed measure of efficiency, can help detect deficiencies. For example, what if we had a 100% immediate fatality rate for every procedure at the hospital? Does this zero LOS produce the type of efficiency for which we want to be known?

Even when the metrics are worked out and data have been collected, incentives must be aligned so that there is some benefit to the organization and its leaders for being the right kind of efficient. When incentives are not aligned, leaders and their organizations head in directions that may be efficient for them but not optimal for the system. Once we have an outcome or a set of outcome measures, we can embrace "easy" efficiency by looking for ways to accomplish the same results with fewer scarce resources or ways to accomplish better results with the same set of resources.

A somewhat more difficult type of efficiency involves the concept of value achieved through

smart shopping. In this case, both the costs and the outcomes of different options vary. Often the new way of doing something is more expensive and more effective. Whether the new investment is economically attractive or represents good value for money depends on a health care leader's priorities, context, values, and more.

At the highest levels, there are often competing priorities that must be judged in a non-transparent manner. Sometimes small decisions that seem suboptimal on a small scale may create openings for bigger payoffs in the long run. It is not uncommon for public health care payers in Canada to decide to reimburse a drug after the review process that they designed recommends against funding it at the current price; while this process may not seem efficient, it may be efficient for meeting a variety of other priorities.⁷

Conclusion

One leader's "wasting resources" may be another leader's "investing resources." It is acceptable for leaders to emphasize inefficiency on a single metric as long as their organization's mission is advanced in other areas of strategic importance. Spending resources inefficiently (for no conceivable gain in value) is a dereliction in a leader's duty of stewardship of scarce resources (punishable by a course or two in economics). However, leaders cannot proceed all the time with their heads down. They must look around to ensure they are traveling in the proper direction at the proper pace, hopefully avoiding or reducing unwanted impact. Going is not the goal; getting to the goal is the goal.

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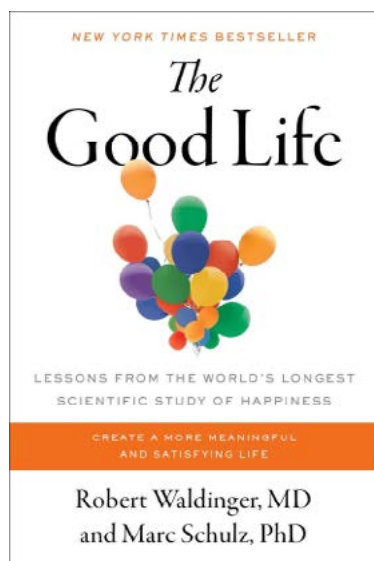
This article has been peer reviewed.

BOOK REVIEW

The Good Life: Lessons from the World's Longest Scientific Study of Happiness

Robert Waldinger, MD, and Marc Schulz, PhD
Simon & Schuster, 2023

Reviewed by Johny Van Aerde, MD, PhD



In 1938, what would be the longest longitudinal study on adult development and happiness started at Harvard University. Eight decades and three generations later, 1300 descendants of the original 724 participants remain engaged in the ongoing study. Interviews, surveys, blood samples, even brain images make

up the enormous database used for *The Good Life* by Robert Waldinger and Marc Schulz.

Both Harvard professors summarize the entire data set in one sentence at the beginning of their book: "Good relationships keep us healthier and happier. Period." That theme is explored deeply in ten chapters that cover relationships with family members, friends, co-workers, and even with people in general. Indeed, even casual positive interactions – like starting a conversation on a bus, being kind to a cashier or server, any interaction that affects our feeling of belonging – are energizing and can have immediate positive results. All contribute to happiness and, indirectly, to health.

The answer to what makes a good life is not as much external to us as we might think. It is not income or the size of our car or house that makes us happy. What does makes us happy is an internal experience gained through nurturing connections with others.

Where physicians often look at socioeconomic factors that favour disease, this study looks at what makes people thrive: quality relationships. Of course, life includes hard times, but challenges are opportunities for growth and lead to happiness in the long term if we are surrounded by people who care.

The authors offer a frame, WISER, which stands for watch, interpret, select, engage, reflect. The frame helps us look at both the internal and external experiences of relationships, using the skills of self-awareness, self-management, and communication. Once we start looking inward, we can shift from self-centred decision-making toward a more outward-looking, generous way of being. This shift toward a dynamic, amplifying, and two-way process will improve our relationships. Cultivating that outward focus is an essential part of creating and maintaining good relationships of belonging, supporting us throughout our lives. While changing the socioeconomic factors that cause disease takes time and money, adding the psychological and health benefits of kind and caring relationships is free and gives instant happiness.

Even though the 85 years of research can be summarized in one sentence, there are hundreds of analyses and examples in the book bringing that sentence alive: people with the most satisfying relationships at age 50 are the healthiest at age 80. Finding a sense of purpose and meaning in life is essential for happiness and well-being and results in better physical and mental health and less depression and anxiety. Practising forgiveness, gratitude, and generosity is needed to build and maintain strong relationships.

Although not invalidating the research findings, there is one limitation to this study: the homogeneity of the population. Because the study started almost a century ago in Boston, most original participants were white males. However, later generations were less homogeneous, and the findings remained consistent.

In summary, this is a great book. If you don't have time to read it in its entirety, remember this one sentence: "Good and kind relationships that create a feeling of belonging and caring keep us happier and healthier." It's a win-win for all, and it doesn't cost a thing.

Author

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