Patient, family and professional recommendations for surgical backlog recovery during the COVID-19 pandemic: a qualitative study

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Funding: This study was supported by the Research Innovation Council of the St Michael's Hospital Foundation (David Gomez). This study was supported by ICES, which is funded by an annual grant from the Ontario Ministry of Health (MOH) and the Ministry of Long-Term Care (MLTC).

Competing interests: None declared

ABSTRACT

Background: We aimed to understand informational needs and generate recommendations on management of the surgical backlog in the context of the ongoing COVID-19 pandemic through focus groups with key stakeholders.

Methods: We held focus groups in Ontario, Canada with 11 patients/family members who underwent or were awaiting surgery during the pandemic, and 20 healthcare leaders (7 nursing surgical directors, 10 surgeons, 3 administrators) to elicit information on how communication about the surgical backlog may be improved, and to generate and prioritize recommendations to address the backlog. Data were mapped onto two complementary frameworks which categorize wait time reduction approaches and strategies to improve healthcare delivery.

Results: Participants reported receiving conflicting information about the surgical backlog. Patients/family desired unified messaging from a single source. Professionals desired the opportunity to shape an overall recovery plan. Both groups prioritized the following recommendations for surgical recovery: (1) Increase supply through focusing on system efficiencies and maintaining/increasing healthcare personnel; (2) Incorporate patient-centred outcomes into triage definitions; and (3) Refine performance management strategies to understand and measure inequities between surgeons/centres and consider the impact of funding incentives on “non-priority” procedures.

Interpretation: The recommendations generated in this study are priority strategies identified by patients/family and healthcare leaders that may be used to inform policy and systems efficiencies in the Canadian setting and worldwide.

INTRODUCTION

The COVID-19 pandemic caused a global disruption to essential care, with profound impacts on wait times for elective (non-emergency) surgery. In Ontario, all non-emergency surgery was temporarily stopped on March 15, 2020[1], and additional government-mandated surgical slowdowns have continued throughout the course of the pandemic, compounded by critical health care provider shortages. The true scale of the backlog remains unknown; the Canadian Institutes for Health Information reported 560,000 fewer surgeries performed across Canada (excluding Quebec) from March 2020 to June 2021,[2] and Science Advisory and modelling consensus tables estimated a backlog of 257,536 cases as of April 2021 in Ontario alone.[3] Importantly, available estimates do not encompass upstream effects of diagnostic delay[4] and access to care, nor do they consider the number of Canadians on surgical wait lists prior to the pandemic.[5, 6] Historic initiatives to reduce surgical wait times have included funding incentives, service expansion and outsourcing, performance management and wait times monitoring for priority procedures.[7] Increased governmental funding has been instituted as a means to address the pandemic-related surgical backlog and ensure provision of care for specific cases (e.g., cancer surgery). However, these incentives may negatively impact patients awaiting a "non-priority" procedure, while they may be experiencing the same level of pain/disability; for example, incentives exist for hip and knee surgery, but not ankle surgery.[8]

Strategies to address the surgical backlog must therefore consider inequities that have been inadvertently built into the current system[9, 10] and further exacerbated by the pandemic. Recommendations to guide equitable surgical recovery in Canada are urgently needed. Engagement of key stakeholders to plan and improve health services, as well as those most

affected by surgical cancellation and delays – patients and families[11-14] – is imperative to guide an equitable recovery strategy. Given the need to address the pandemic-induced surgical backlog[8], lack of insight on how to do so[7, 15-17], and benefits of engaging stakeholders in health system planning[11-14], the aim of this study was to generate recommendations on how to optimize management of the surgical backlog in the context of the ongoing COVID-19 pandemic. Our objective was to conduct focus groups with surgical leaders and patients/families to inform communication about and recommendations on strategies to address the surgical backlog. This knowledge can be used to inform a recovery strategy in Canada and worldwide.

METHODS

Approach

We employed a qualitative approach to thoroughly explore stakeholder views on managing the surgical backlog.[18] Specifically, we used basic qualitative description, which is not based on, and does not generate theory.[19, 20] This approach is widely used in health services research to gather explicit accounts of lived experience and insight on preferred solutions to problems.[21] We conducted focus groups, which can generate richer conversation than one-on-one interviews via interactive, synergistic discussion about complex issues.[22] To optimize rigour we complied with the Consolidated Criteria for Reporting Qualitative Research[23] (Supplementary Table 1). This study was approved by the University of Toronto Research Ethics Board (#41329).

Sampling and recruitment

We used convenience sampling to recruit participants. Eligible patients/family were adults aged 18+ who had or were waiting for surgery during the pandemic. Eligible healthcare leaders were nurses, surgeons, and administrators (i.e., chief executive officers) with experience overseeing the organization and delivery of surgical services. We recruited patients/family advisors through ICES, where the lead authors (DG, AS) are appointed. The coordinator at ICES circulated an email to advisors, instructing them to contact the study coordinator if they were interested in participating. We recruited healthcare leaders from the authors' professional networks and through snowball sampling to achieve a diverse range of geographic and specialty (among surgeons) perspectives. We aimed to involve a minimum of 30 participants with 6-8 per focus group.[22] We determined sample size based on informational saturation, assessed by the research team through discussion of themes. Patients/family received a $70 gift card.

Data collection

We developed a semi-structured focus group guide (Supplementary Table 2) via research team discussion, iterative review, and additional refinements after the first two focus groups. Questions/prompts were derived from study objectives and two complementary frameworks. Wennberg developed three broad categories of procedure wait time reduction approaches: supply, demand, and performance management.[7] Powell developed a 68-item framework of strategies to improve healthcare service delivery organized in six categories (planning, education, finance, restructuring, quality management, policy); this framework further elaborates on performance management options, a key goal of this study.[24]

Due to pandemic restrictions, we conducted virtual focus groups (2 patient/family, 5 healthcare leader) between September 29 and November 30, 2021. During focus groups, lead authors (DG, AS) delivered a brief presentation of the historical/political context. A third-party professional facilitator posed broad questions, invoking additional prompts as needed: How has COVID-19 affected surgery; What key messages are you getting about the surgical backlog; What information should be communicated about the backlog; and What strategies do you recommend to increase supply, decrease demand, and optimize performance management? Focus group duration ranged from 62-102 minutes; they were audio-recorded and transcribed via Zoom, then reviewed by a research assistant for accuracy.

Data analysis

JR (MSc-trained Research Associate) and ARG (PhD-trained senior author with 16 years of qualitative research experience) derived themes inductively by thematic analysis of transcripts, using Excel to organize data.[25, 26] They independently analyzed one patient/family and one healthcare leader transcript to identify and code all themes, then compared and discussed themes to create a codebook of themes and exemplar quotes (level one coding).[27] JR analyzed remaining transcripts according to the codebook. ARG reviewed all data and expanded or merged themes as needed to refine the codebook (level two coding). DG and AS independently reviewed all data to verify themes. ARG summarized data in tables, and mapped themes to the Wennberg[7] and Powell[24] frameworks. The entire research team reviewed all data.

RESULTS

Participants

Eleven patients/family members and 20 healthcare leaders participated in focus groups. The healthcare leaders included 7 nurses in surgical program leadership roles; 10 clinicians/surgeons (otolaryngology, gynaecology, vascular, thoracic, and general surgery); and 3 non-clinician administrators (Supplementary Table 3).

Impact of communication about wait times (Supplementary Table 4)

Patients/family described waiting for months with no information about when their procedure might take place and inability to get answers by telephone, email or on hospital websites. This led to frustration, inability to make life or family plans, anxiety and depression as a result of disabling conditions, and concern about disease progression and survival. They experienced anxiety when told that their surgery could be cancelled at any time given the uncertainty and related concern of being forgotten if they were bumped, something that did happen to some participants. Patients/family received messaging that COVID-19 disease was prioritized over other conditions, and as a result, experienced guilt if they did get treatment, confusion when they learned that some patients were treated, and frustration at being considered less important than patients with COVID-19.

Healthcare leaders said that the lack of information from government or hospital leadership gave them little time to prepare for ramp-up or shut-down of services, confusion when information was conflicting, a lack of insight on strategies or funding to support government

directives, and an inability on their part to provide patients with guidance or assurances. Healthcare leaders were told that procedures rates were back to normal, when in fact they were still struggling to work through the backlog of surgeries and uncertain about how to prioritize them. Some healthcare leaders noted that the government was promoting a single or unified approach to managing the backlog, but did not view this as feasible given the unique needs and resources of different hospitals/regions.

Recommendations for communication about wait times (Supplementary Table 5)

Patients/family said that the public should be provided with educational information about the cause of surgical delays so that they could better understand the situation, and that management of expectations and information could improve performance from a patient's perspective. They said that individual patients should be privy to regular updates of their position on the wait list. Patients/family said that any communication mechanism to report wait times would be useful including email, telephone applications, internet patient portals to medical records, other websites or verbal communication from a healthcare professional. Several patients/family said that information should be conveyed from a single, dedicated system-level group with skill in patient communication. They emphasized that sharing of information must be done in a way to reach vulnerable groups. Patients/family highlighted the need for two-way communication, and for resources they could consult to acquire additional information.

Healthcare leaders suggested educating the public to explain why there is a backlog and that clearing it might take years due to the complexity of the problem, and publish wait times, all with the aim of setting realistic expectations. Some healthcare leaders disagreed, suggesting that doing so would cause panic and result in overloading emergency services. Most healthcare leaders emphasized the need to refrain from using the word 'elective', a term that minimizes the urgency of some procedures. Most healthcare leaders highlighted the need to engage surgeons in system-level decision-making, something they did not feel had happened to date, as this may lead to more feasible solutions.

Recommendations for managing wait times (Supplementary Tables 6 and 7)

Participants were clear that funding initiatives alone would not address the backlog; one participant stated: "You cannot pay your way out of this" [Healthcare leader group 1]. Within the Wennberg[7] framework (Figure 1), most participants felt that the following strategies should be key considerations: first, directing the focus on improving systems efficiencies, such as outsourcing surgeries to ambulatory surgery centers and same-day discharge, were seen as a high priority. Maintaining healthcare personnel and forward-thinking to increase future system capacity was seen as a key priority; this included incentivizing entry into the nursing profession and increasing the number of operating room technicians and anaesthesia assistants within hospitals. Second, incorporating patient-centred outcomes into triage definitions was highlighted to improve equity. Aspects such as time sensitivity and patient suffering were emphasized, rather than simplistic categorizations of "cancer" and "non-cancer"; one surgeon pointed out that some types of thyroid cancers may safely be delayed without an impact on

patient outcome. Third, the current performance management strategies such as wait times reporting and performance targets for priority procedures were found to be lacking. Inequities in the current system were highlighted and will be further exacerbated if wait times for priority procedures alone are reported.

DISCUSSION

We conducted focus groups with healthcare leaders and patients/families to understand informational needs related to the pandemic-induced surgical backlog and generate recommendations for an equitable recovery strategy. Participants expressed frustration with the lack of communication related to surgical slow-downs and ramp-ups and information related to an overall recovery plan. Patients/family felt that information was being withheld, while healthcare leaders related that they often received information at the same time as the public. During ramp-ups, healthcare leaders received messages that procedure rates were "back to normal" but felt that they were still struggling with a substantial backlog. All stakeholders offered suggestions for strategies to improve communication about and mitigate the backlog. Of all these strategies, the majority of participants considered the following to be the most important to pursue: (1) Increase supply through focusing on system efficiencies and maintaining/increasing healthcare personnel; (2) Incorporate patient-centred outcomes into triage definitions; and (3) Refine performance management strategies to understand and measure inequities between surgeons/centres.

Wennberg categorized initiatives that have successfully been implemented in the Canadian setting through increased supply, decreased demand, and performance management.[7] When "increase supply" initiatives were discussed with the participants, it was acknowledged that the surgical backlog could not be addressed in a silo. Upstream effects, such as provision/increasing supply of healthcare workers and support for primary care screening, and downstream effects, such as support for increased surgical volume (e.g., post-operative nursing care, programs to support same-day discharge) were discussed. A successfully implemented "increase supply" strategy prior to the pandemic was moving low-risk procedures out of urban centres to community-based clinics/rural hospitals.[7] Since the burden of COVID-19 disease was greater in urban centres, a strategy such as this would free capacity for high-risk procedures in tertiary care centres.[28]

Strategies that patients/family were least accepting of were those related to decreasing demand.[7] They felt that non-emergency surgery and prevention strategies had been triaged behind COVID-19 disease throughout the pandemic, and the necessity of surgical care was being discounted. Performance management, which encompasses wait times monitoring and performance targets, is an important aspect of recovery, but participants expressed concern over how this information was made available and how it impacted other cases (e.g., while targets for priority procedures may be met, "non-priority" procedures continued to wait). Healthcare leaders discussed that the current provincial monitoring of wait times did not adequately reflect their experience and were not adequately disseminated; for example, individual surgeons' wait times should be available to their hospital/division leads to

understand inequities within departments that may be mitigated to lessen the impact on patients.

Policy strategies must consider local contextual factors and the disproportionate impact of the pandemic on some regions and hospitals. Therefore, future directions of this research will include a larger number of stakeholders from across Canada. Involvement of patients/family in this study raised several important issues that may also be considered to support those affected by the backlog; for example, patients understood that prolonged waits cannot be changed in many cases but suggested that provincially insured access to physiotherapy and other resources may be helpful for symptom management during the wait. We did not identify any prior studies that consulted patient/families regarding strategies to manage surgical wait times; our study offers a unique contribution to the literature regarding their perspectives. While all the systems complexities of surgical wait times may not be apparent to the public, it was apparent to them that the system is not equitable; transparent processes and communication was a key concern expressed by patient/family.

We used rigorous qualitative methods and complied with qualitative reporting criteria. Our findings are strengthened by the good congruence between patients/family and healthcare leaders interviewed. However, our study is limited by the population interviewed, specifically individuals in healthcare leadership positions and patients/family who had or were awaiting surgery in Ontario. Our sampling strategy aimed to recruit a diverse sample of individuals who could speak to strategies to manage the backlog; however, not all regions and hospitals were

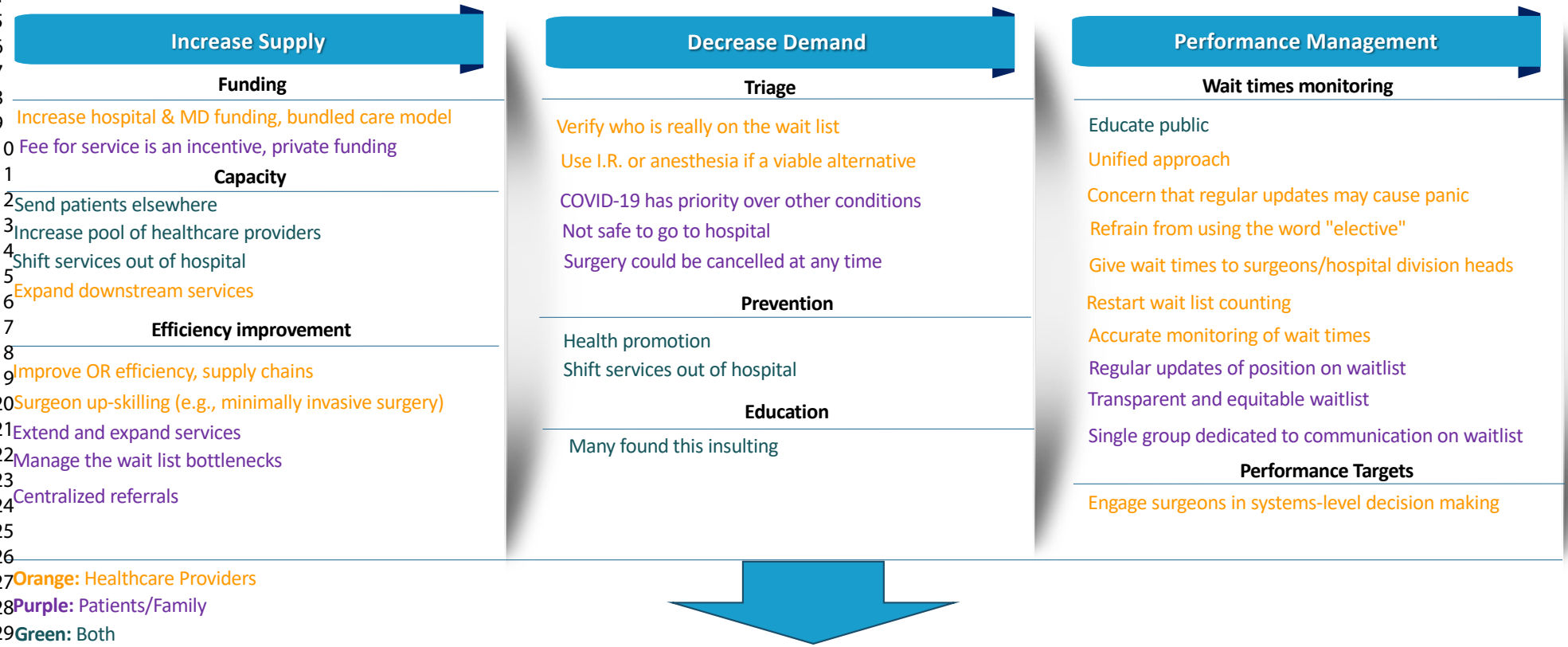
equally affected by the pandemic and therefore there are other perspectives that were not captured. In future research, we will aim to involve more stakeholders in ranking the most important recovery strategies. Finally, the recommendations represent the perspectives of patients/family and healthcare leaders but may not reflect the perspectives of other key stakeholders (e.g., policy makers); other effective organizational strategies may not have been discussed.

We identified priority strategies for improving communication and management of the surgical backlog through focus groups with key stakeholders. Improving equity through incorporating patient-centred outcomes into case prioritization definitions, maintaining health care personnel, and improving system efficiencies and monitoring with publicly available local data were identified as priority areas. These strategies are applicable globally in managing the pandemic-induced surgical backlog.

REFERENCES

1. Angus H, D. Williams, and M. Anderson, Memorandum to Ontario Health and hospitals. Ramping down elective surgeries and other non-emergent activities. 2020, Ministry of Health.
2. Canadian Institute for Health Information. Impact of COVID-19 on Canada's Health Care Systems. Accessed January 26, 2022 at: https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/hospital-services
3. Science Table COVID-19 Advisory for Ontario. Update on COVID-19 Projections. Accessed January 26, 2022 at: https://covid19-sciencetable.ca/wp-content/uploads/2021/04/Update-on-COVID-19-Projections_2021.04.29_English.pdf
4. Eskander A, Li Q, Yu J, et al. Incident Cancer Detection During the COVID-19 Pandemic. *J Natl Compr Canc Netw*. Feb 1 2022:1-9. doi:10.6004/jnccn.2021.7114
5. Health Quality Ontario. Experiencing Integrated Care: Ontarians' views of health care coordiantion and communication. Accessed January 26, 2022 at: www.hqontario.ca/Portals/0/documents/pr/report-experiencing-integrated-care-1504-en.pdf
6. The Commonwealth Fund. Mirror, Mirror 2021: Reflecting Poorly. Accessed February 22, 2022 at: https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly
7. Wennberg EAB, Takata JL, Urbach DR. Elective surgery wait time reduction in Canada: A synthesis of provincial initiatives. *Healthc Manage Forum*. May 2020;33(3):111-119. doi:10.1177/0840470419900646
8. Canadian Institute for Health Information. Wait Times for Priority Procedures in Canada, 2021. Accessed January 27, 2022 at: https://www.cihi.ca/sites/default/files/document/wait-times-chartbook-priority-procedures-in-canada-2016-2020-en.pdf
9. Urbach DR, Martin D. Confronting the COVID-19 surgery crisis: time for transformational change. *CMAJ* May 25 2020;192(21):E585-E586. doi:10.1503/cmaj.200791
10. Urbach DR. Improving access to health services in Canada. *Healthc Manage Forum*. Nov 2018;31(6):256-260. doi:10.1177/0840470418776995
11. Liang L, Cako A, Urquhart R, et al. Patient engagement in hospital health service planning and improvement: a scoping review. *BMJ Open*. Jan 30 2018;8(1):e018263. doi:10.1136/bmjopen-2017-018263
12. Bombard Y, Baker GR, Orlando E, et al. Engaging patients to improve quality of care: a systematic review. *Implement Sci*. Jul 26 2018;13(1):98. doi:10.1186/s13012-018-0784-z
13. van C, McInerney P, Cooke R. Patients' involvement in improvement initiatives: a qualitative systematic review. *JBI Database System Rev Implement Rep*. Oct 2015;13(10):232-90. doi:10.11124/jbisrir-2015-1452
14. Anderson NN, Baker GR, Moody L, et al. Approaches to optimize patient and family engagement in hospital planning and improvement: Qualitative interviews. *Health Expect*. Jun 2021;24(3):967-977. doi:10.1111/hex.13239
15. Bachelet VC, Goyenechea M, Carrasco VA. Policy strategies to reduce waiting times for elective surgery: A scoping review and evidence synthesis. *Int J Health Plann Manage*. Apr 2019;34(2):e995-e1015. doi:10.1002/hpm.2751
16. Kreindler SA. Policy strategies to reduce waits for elective care: a synthesis of international evidence. *Br Med Bull*. 2010;95:7-32. doi:10.1093/bmb/ldq014
17. Ballini L, Negro A, Maltoni S, et al. Interventions to reduce waiting times for elective procedures. *The Cochrane database of systematic reviews*. Feb 23 2015;(2):CD005610. doi:10.1002/14651858.CD005610.pub2

18. Sofaer S. Qualitative methods: what are they and why use them? *Health Serv Res*. Dec 1999;34(5 Pt 2):1101-18.
19. Thorne S, Kirkham SR, MacDonald-Emes J. Interpretive description: a noncategorical qualitative alternative for developing nursing knowledge. *Res Nurs Health*. Apr 1997;20(2):169-77.
20. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. Aug 2000;23(4):334-40.
21. Neergaard MA, Olesen F, Andersen RS, Sondergaard J. Qualitative description - the poor cousin of health research? *BMC Med Res Methodol*. Jul 16 2009;9:52. doi:10.1186/1471-2288-9-52
22. Leung FH, Savithiri R. Spotlight on focus groups. *Can Fam Physician*. Feb 2009;55(2):218-9.
23. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. Dec 2007;19(6):349-57. doi:10.1093/intqhc/mzm042
24. Powell BJ, McMillen JC, Proctor EK, et al. A compilation of strategies for implementing clinical innovations in health and mental health. *Med Care Res Rev*. Apr 2012;69(2):123-57. doi:10.1177/1077558711430690
25. Boeije H. A Purposeful Approach to the Constant Comparative Method in the Analysis of Qualitative Interviews. *Quality and Quantity*. 2002/11/01 2002;36(4):391-409. doi:10.1023/A:1020909529486
26. Braun V, Clarke. Using thematic analysis in psychology *Qualitative Research in Psychology*. 2006;3:77-101.
27. Barbour RS. Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *Bmj*. May 5 2001;322(7294):1115-7. doi:10.1136/bmj.322.7294.1115
28. Ontario Medical Association. Integrated Ambulatory Centres: A Three-Stage Approach to Addressing Ontario's Critical Surgical and Procedural Wait Times. Accessed from: https://www.oma.org/uploadedfiles/oma/media/public/addressing-wait-times-proposal.pdf on February 22, 2022.



SUMMARY OF RECOMMENDED STRATEGIES	
Plan strategies	Learn from other countries/past pandemics; local needs assessments; involve surgeons and public; unified recovery approach
Educate strategies	Effective communication; consider vulnerable groups; engage surgeons/public; two-way communication
Finance strategies	Incentives for physicians, nurses, hospitals; reduce consumer fees (e.g., provide support to patients awaiting surgery); consider upstream (primary care funding); bundled funding
Restructure strategies	Change service sites (outsourcing); facilitate relay of data to providers; create new professional teams
Quality management strategies	Develop quality monitoring systems that account for non-priority procedures; don't use word "elective"; audit and feedback; advisory boards and working groups to engage surgeons and public; capture and share local knowledge; use local data
Attend to policy context strategies	Change credentialling/licensure standards for foreign grads; ensure surgeons are utilizing MIS approaches; Same day surgery where appropriate

COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	5
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	5
Occupation	3	What was their occupation at the time of the study?	5
Gender	4	Was the researcher male or female?	5
Experience and training	5	What experience or training did the researcher have?	5
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	4
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	4
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	5
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	3
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	4
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	4
Sample size	12	How many participants were in the study?	6
Non-participation	13	How many people refused to participate or dropped out? Reasons?	6
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	5
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	5
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	5, 6
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	5
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	5
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	5
Field notes	20	Were field notes made during and/or after the inter view or focus group?	5
Duration	21	What was the duration of the inter views or focus group?	5
Data saturation	22	Was data saturation discussed?	4, 5
Transcripts returned	23	Were transcripts returned to participants for comment and/or	5

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	5
Description of the coding tree	25	Did authors provide a description of the coding tree?	5
Derivation of themes	26	Were themes identified in advance or derived from the data?	5
Software	27	What software, if applicable, was used to manage the data?	5
Participant checking	28	Did participants provide feedback on the findings?	5
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Tables
Data and findings consistent	30	Was there consistency between the data presented and the findings?	S. Table 7
Clarity of major themes	31	Were major themes clearly presented in the findings?	6-9
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	6-9

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

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Supplementary Table 2 Focus Group Question Guide

Question Category	Participants		Additional Prompts
	Patients/Family	Healthcare Leaders	
Impact of surgical backlogs	How has COVID-19 affected you or your family's experience of surgery or waiting for surgery?	How has COVID-19 impacted surgical services that you manage?	---
Recommendations: communication about the surgical backlog	What key messages did you get or are you getting about the surgical back and from what source? For patients/families waiting for surgery, what information should be communicated to you about the surgical backlog, and how?	What key messages did you get or are you getting about the surgical back and from what source? As someone in a leadership role, what information should be communicated to you about the surgical backlog, and how?	Formal versus informal channels, other sources, via what delivery mechanism, about what actions or processes?
Recommendations: strategies to manage the surgical backlog	During the presentation, we discussed some policy actions that may be used to manage the backlog. What strategies do you recommend to increase supply? What strategies do you recommend to decrease demand?	During the presentation, we discussed some policy actions that may be used to manage the backlog. What strategies do you recommend to increase supply? What strategies do you recommend to decrease demand?	Apart from those suggested in the opening presentation, what other strategies would improve our health system and reduce the surgical backlog? What challenges may be encountered in applying these strategies?

Before we close, are there any additional ideas that you'd like to share with us?

Many thanks for taking the time to speak with us today.

Supplementary Table 3. Demographic characteristics of focus group participants (n=31)

	Patients/Family Members (n=11)	**Healthcare Leaders**	
		Surgeons/ Non-clinician Administrators (n=13)	Nursing Surgical Directors (n=7)
Sex			
Male	6	7	0
Female	5	6	7
Geographic Location			
Central East	4	6	4
Central West	3	0	2
Eastern	2	3	0
Northern	0	0	0
Western	0	3	1
Other/not disclosed	2	1	0

Supplementary Table 4. Impact of wait times communication themes and quotes

Communication received	Impact (theme / exemplar quote)
PATIENTS/FAMILY	
Little or no information	<u>Lengthy wait with no answers</u> I was expected to have my [colostomy] reversal surgery in May or June of 2020, and I never heard anything. And so I received a letter finally from the hospital saying we're doing the procedure in July. So then I heard from my surgeon saying we'll probably do your reversal surgery in November. And then I never heard, never heard, and then finally I received a letter saying I was having it in January so it was just waiting and not knowing and not receiving any information. [Patient group 1] There was no possibility of getting in touch with anyone, which was very anxiety producing, when you're left out in the unknown. [Patient group 2] <u>Inability to plan for life or family</u> The more informed the public is, they can make plans and decisions for their family, you know, just in case something happens [Patient group 2] <u>Anxiety, depression</u> because this incident caused me to have to abandon a lot of activity that I was doing, it created a lot of anxiety for me and a depressive state, because I had to change the way I was going about my life. [Patient group 2] <u>Concern about disease progression and survival</u> But for someone who's just been diagnosed with stage four cancer, time is of the essence and I just felt like a ticking time bomb. [Patient group 2]
COVID-19 has priority over other conditions	<u>Felt guilty for receiving care despite COVID-19 priority</u> And I felt bad because I even though the incident was unexpected for me, I went to emerg that day [Patient group 2]

	Confusion about who was getting treatment I would hear of people who had surgeries, and I was like okay, somebody did have a knee surgery, so I guess some people are getting in, but it wasn't clear to me how that was all being decided. [Patient group 1] Frustration with being considered unimportant I felt like it didn't matter that I was dying of cancer. I felt like I would only matter if I had COVID. Clearly not what anybody would say. But all these beds were being reserved for COVID patients in my case. Not even necessarily being used, they were sort of set aside for a potential case, when I'm sitting there with a definite need for it, and still being placed on the sidelines to wait. [Patient group 2]
Not safe to go to hospital	Concern about risk of untreated condition versus contracting COVID What you're going through is life-threatening. There's a chance you could contract COVID, but there's 100% chance you could have a fatal condition that needs immediate attention. [Patient group 2] Patients avoid seeking care or turn to private sector It may it may make people hesitate to go in. The other drawback is they're going to do healthcare tourism if they can afford it. It's making a good case unfortunately for the private sector for those who can afford it. [Patient group 2]
Surgery could be cancelled at any time	Anxiety about being bumped and forgotten I got bumped twice and then forgotten. If I hadn't called in September, I would not have gotten my procedure in October [Patient group 2]
HEALTHCARE LEADERS	
Little or no information	Little notice/time to prepare for ramp-up or shut-down One of the most significant challenges is the starting and stopping. There's a lack of appreciation of all of the lead time that is required in order to get things done [Healthcare leader group 5] Lack of information to convey to patients Up until a few months ago, we were just telling patients you're just going to wait and we can't tell you exactly when we're going to get going again [Healthcare leader group 2]

	<u>Confused by conflicting information</u> Where it started to get complicated was where we were hearing ramp up, ramp up, but don't ramp up. But you still have to staff ICU, and you don't have staff, but still ramp up and we'll give you money, but there's no staff. [Healthcare leader group 4] <u>No direction or support from health system</u> I know there was $300 million the government has announced. I don't know if all the hospitals got something or not. I hear informally, not a lot. And then there was a $35 million fund that I don't think anyone got. We applied, we haven't heard anything. [Healthcare leader group 2]
Situation is back to normal	<u>Still struggling with backlogs and how to prioritize patients</u> The, the messaging, we're getting recently though is that they're looking at our numbers and saying, oh you know you're pretty close to pre COVID numbers in terms of what you're accomplishing so I think you guys are good. We're totally not good, it's not addressing the backlog at all because it's actually just kind of meeting even [Healthcare leader group 2]
Concern for staff well-being	<u>Healthcare staff are getting no relief</u> A lot of mixed messages come from different leadership, either local senior leadership teams and or government. Things like, everybody take care of themselves, try and get time off, yet the expectation is that you never have time off, and that you're always at the end of your phone and managing. [Healthcare leader group 5]
Single or unified approach	<u>Each hospital or region has unique needs</u> It feels like we're trying to act as a singular entity, yet the infrastructure doesn't exist to support that. We all have local collective agreements, local nuances to all of our staffing, local nuances to the type of work we do and don't do, because some of us are specialty hospitals and others are community teaching hospitals like mine. [Healthcare leader group 5]
Lack of OR time	<u>Oncology procedures are prioritized over others</u> When we looked at the stats, the oncology patients are actually getting in on time so it seems like there's a disconnect between what's being said and what's actually happening. So at the level of non-oncology cases, we're really working hard to try and advocate for that, but it's been challenging. [Healthcare leader group 3]

Supplementary Table 5. Recommendations for communication about wait times themes and exemplar quotes

Communication aspect	Recommendations (theme / exemplar quote)
PATIENTS/FAMILY	
Content	<u>Educate patients and the public – explain why there is a backlog</u> Even though time estimates may not be possible, just giving any qualitative information explaining what's going on, what the bottlenecks are, what's being attempted, what's making things more difficult. Definitely makes you more sympathetic, understanding, and happier with the situation. [Patient group 1] <u>Regular updates of position on wait list</u> Is it possible to see where your name falls on a waitlist? Without giving away other people's personal information. 'You are number 126 on a list of 341 hip replacements for 2021' and you can see your name, move up or down the list on a weekly or daily basis and you can track it so you can sort of have some sense of when it's going to happen. [Patient group 2]
Mechanism	<u>Digital (email, phone app, web site, patient portal)</u> I'm an email person. I would like to have had something that I could look back on to refresh my mind about why things were happening [Patient group 2] Having an electronic patient record I can access and where I can see updates on my wait times would also be helpful [Patient group 2] <u>Any means of communication is useful</u> It doesn't really matter. As a young person who's pretty tech savvy, I don't really care. I just need the information, whether it's through a portal, or my family doctor, or the surgeon's office or through the Ministry. [Patient group 1] <u>Two-way communication/opportunity to ask questions</u> The people who are in charge of booking procedures are not necessarily empowered to take the time to explain things to you. They go through things very quickly. When you're stressed or anxious, it's hard to retain the information, and

	English is not my first language. Even if I'm a high-functioning person, and they want to be very efficient and book, book, book it's like, I need you to tell me all this, and then send it to me an email so I can review. And if I have questions, I can go and ask you or someone. Give me a resource that I can talk to. Because everything I was told was rapid fire 'you need to do this, you need to do that,' I was confused. And then they sent me a requisition and I didn't know what to do with them. So it was very difficult for me to have all of that thrown at me all at once, and no invitation to ask any questions. [Patient group 2] <u>Ensure equitable access to information among vulnerable or hard-to-reach groups that may lack technology (e.g. cell phones, Internet)</u> I think you need to find some equity in terms of how some of this information will be shared. One of the things to think about is how to reach patients of color, Indigenous people, those who have don't have access to, electronics, or cell phones or emails. I think that should be said, definitely be at the forefront, as we think about communication strategies. [Patient group 1]
Source	<u>Single group dedicated to communication</u> Having dedicated communication units solely devoted to communicating with patients and they're experts in that, they have the time to do it, it's their job. [Patient group 2]
HEALTHCARE LEADERS	
Content	<u>Educate the public – publish wait times and explain why there is a backlog</u> What we need from the Ministry is clear communication and that this is a very complex issue and is going to take somewhere between two and four years to even reasonably address what the backlog currently is, let alone what the waitlist was prior to the pandemic that many of us were struggling with. [Healthcare leader group 5] <u>Disagreement: Cause fear, overload emergency services</u> It's going to cause fear and we're going to end up seeing patients coming through to emerg to try to get in, there is a risk for that. Our emerg is already backlogged and cases are coming in. I think there will be panic and fear. [Healthcare leader group 5] <u>Communicate degree of uncertainty to mitigate expectations</u>

	More messaging around the fact that there is going to be a massive amount of uncertainty around this. And just because you have a snapshot of data that you think really represents the reality on the ground, when we know that there are many reasons why that data doesn't actually reflect what our day-to-day reality is. It may be easier said than done. [Healthcare leader group 3] Disagreement: Feasibility not likely Messaging to the public about expecting uncertainty in your healthcare is probably accurate. Although I must say I just don't see government actually doing that because they're all about certainty and providing the assurance, and the government would never come out and say 'Sorry folks, we don't know what's going to happen. We'll do the best we can,' although that's probably the reality. [Healthcare leader group 3] Refrain from using the word 'elective' If I could have any wish in the world right now it's to remove the word 'elective' from everyone's lexicon and change it to a word that has a better impact on the public. [Healthcare leader group 3] We all had to come up with our own definitions of urgent or semi urgent. [Healthcare leader group 4]
Mechanism	Engage surgeons in system-level decision-making I think it's important that government keep the key stakeholders informed of what's going to be happening or and seek some advice from people in the surgical communities, because I find that some of the provincial tables are a little distanced from actual practice. [Healthcare leader group 1]

Supplementary Table 6. Recommendations for strategies to manage wait times themes and exemplar quotes

Strategy	Recommendations (theme / exemplar quote)
PATIENTS/FAMILY	
Prevent illness	<u>Health promotion</u> Can we get more funding for physical activity in the general public so that people have access to gyms and training programs or whatever, and for health experts outside of the system who are not covered by OHIP like massage therapists, physiotherapists, kinesiologists so that it doesn't cost as much to individuals [Patient group 2]
Shift services out of the hospital	<u>Provide support to patients while waiting</u> I wondered if there were ways to support people. Social work support, psychological support for people while they're waiting. Because the anxiety of waiting is horrible. And maybe that can be a possible way to help. [Patient group 1] If there's some arrangement that can be made that would satisfy them. And it wouldn't be dangerous. Such as providing payment for physiotherapy or transportation or homecare or all these things to say, you know, if we can delay you two months, we could provide some support for you. [Patient group 1] <u>Provide treatment in community or at home</u> Looking at what needs to be done on site versus what can be done in the community. And trying to think outside of the building and finding those solutions so that we're not always relying on the hospitals for that kind of care. [Patient group 2] <u>Provide support at home after early discharge</u> If you're looking at a surgical procedure that normally would keep someone after the procedure for two days, what are the resources in that person's area that can help them feel safe to go home after one day, and they have the phone number, name and email of the care provider that is going to check in on them. [Patient group 2]

	<u>Use private services</u> Use public-private partnerships or private hospitals, coverage to expand capacity. We need different models to perform different types of surgeries [Patient group 1]
Send patients elsewhere	<u>Send patients out of province or country</u> Could we do a big push, just to catch up, of out-of-province care for all the people who have waited for more than, let's say, 10 months for something that really affects your life. And you're going to be flown out to another province or another country to get the care so that we can catch up to pre-pandemic levels. [Patient group 2]
Increase pool of healthcare professionals	<u>Incentivize people to enter health professions</u> There's a shortage right now in the market so I'm not sure if there is a way to maybe fund education for the health sciences to get more of these people into the funnel. [Patient group 2] <u>Redistribute Canadian healthcare professionals</u> COVID is not gonna last forever, hopefully, and ideas like reallocating doctors, redistributing within the country…might be viable [Patient group 1] <u>Modify professional scope of practice</u> Train up staff that may not be as in demand as others for one reason or another, and have them redeployed into areas where they can cut through the backlog and other procedures. [Patient group 1] <u>Expedite licensing foreign-trained clinicians</u> Streamlining the process for already-qualified physicians and surgeons from other countries, who are here to become certified to be practicing medicine here. [Patient group 2]
Improve and expand services	<u>Optimize efficiency and coordination</u> Schedule a surgery before scan comes back instead of waiting for the scans come back, you know that might save some time for sort of a placeholder appointment. [Patient group 1]

	Is there a way for us to optimize surgeons' time? I don't know what exactly happens at the day of life of a surgeon, but so that surgeons time is used in surgery as opposed to in administrative tasks. [Patient group 2] <u>Extend and expand services</u> All the areas like CT scans and MRIs have to be open 24 hours a day. [Patient group 1] There's a huge need in the eye care side of things. My mother-in-law got her cataracts done at a private clinic a few years ago and she didn't wait. So can we expand that to reduce the backlog in hospitals and put more people through? [Patient group 2]
Manage the wait list	<u>Use data to assess waits and bottlenecks</u> They may want to track and find the bottlenecks, start to finish, in the process of getting a surgery. It also would determine times…this typically takes six weeks, this takes six months [Patient group 1] Predictive analytics. Leveraging that to model and manage the ORs and the access and expected wait times [Patient group 2] <u>Re-assess how procedures are prioritized</u> Patients and families like ourselves get confused with the words unnecessary, elective, scheduled. A heart surgery may not be considered necessary, but might be more urgent and may not be elective. So defining unnecessary based on patient family perspective will be very important. [Patient group 1] <u>Centralized referral</u> If we say that person has 20 people on the waitlist and you only have seven, is there any way that we divvy it up so that it can be a little bit more even to reduce the overall wait time? [Patient group 1]
Funding	<u>Physician fee for service</u> Pay per cut, if you will. The ones who are paid on salary, they'll do what they can within the time that they're there. Whereas the ones that are per surgery…incentivize them somehow to do more. [Patient group 2]

	<u>Solicit private funding/donors</u> We need to be innovative by working with private sectors to improve clinical workflow, because the money is there. One organization got $25 million to build a new building. [Patient group 1]
Learn from other countries and past pandemics	For some reason, they threw out anything they learned from SARS or H1N1, all those mini pandemics, and went with some new model that really didn't help anybody. [Patient group 1] Different countries have faced similar problems or continue to face similar problems. Are we hooked in to these global initiatives, seeking out best practices? [Patient group 2]
HEALTHCARE LEADERS	
Prevent illness	<u>Health promotion</u> The pandemic brought us back 10 years with all of the prevention campaigns that we had with regards to colonoscopy, colposcopy, a lot of those pieces. if the Ministry, government, whoever, somebody could help us get this word out and start to do some of that advertising on media, social media on TV. That sort of stuff would definitely help because prevention is going to definitely be the key to managing and predicting what our volumes are going to be like. [Healthcare leader group 4]
Shift services out of the hospital	<u>Provide treatment in ambulatory/community settings</u> There are surgeries that absolutely need to be done in acute centres, one hundred percent, and there are other procedures that don't. The alternate health facility model allows for those procedures that don't need to be done in hospitals and take up valuable OR capacity, and have them done in the community, things like colonoscopies and cataracts. [Healthcare leader group 2] <u>Provide support at home after early discharge</u> We have a virtual ward of nurses that call and follow up. So there's a possibility there's other pathways of patients that we could theoretically move through the hospital experience faster if we have the proper supports, which would require community support, but also this remote care monitoring piece as well. [Healthcare leader group 4]

	Move COVID-19 screening to primary care/community I had the COVID assessment centre under me and I just transitioned it to an external provider so we could recapture our staff. [Healthcare leader group 5] Use private services There's already lots of private facilities that are probably being underutilized with staffing and rooms, etc. And we have done that in our province before, where we've used private facilities, but they're funded by the government to do certain cases. [Healthcare leader group 3]
Send patients elsewhere	Send patients out of country Funding them to go out of country [Healthcare leader group 3]
Increase pool of healthcare professionals	Need more staff of all specialties/staffing prediction models We often talk about OR nurses, they're critical for sure, but you can't do anything without recovery room, you can't do anything without day surgery nurses. You can do some things without increasing in-patient beds like your same day optimization of joints and gyne patients and things like that. You need more diagnostic imaging techs. It's not just one particular professional that you need. And I think there's a lack of understanding of that. [Healthcare leader group 5] Employ alternative roles / expand scope of practice Whether it's physician assistants, whether it's nurse practitioners with the anesthesia training, RNs that can administer anesthesia with the supervision of anesthesia, and really looking at new models of care that don't rely on one particular health profession but a coordinated team to increase the throughput through the ORs. [Healthcare leader group 2] Scrub techs was what I was used to working with, and they're incredibly good. We did address this briefly, sort of mid-pandemic, and it's a land mine. I didn't realize it was going to be, I just thought it was a normal thing to discuss. It's unions and this and that. It has to come from top down because when we try to address it from within, all it did was create more conflict and low morale, and it actually took an unstable system and made it a little bit worse briefly, so we kind of abandoned it. [Healthcare leader group 2] Provide on-the-job training programs

	We've put an in-house training program where their tuition costs are covered, they don't take an income hit and it's expedited so they're ready to work in less than six months. [Healthcare leader group 2] <u>Increase rate/volume of health professions training</u> We're going to need to train more nurses, we're going to have to gear up the schools that are training them. [Healthcare leader group 1] <u>Incentives/support to retain nurses</u> How can we retain nurses? We've done stuff here that we never wanted to do before. If you look at the new research literature of leadership in crises, you need to increase your flexibility. We have no flexibility in healthcare because do more for less has always been one of our things: be efficient, pick up another unit, what's the big deal. And I think nurses are tired. [Healthcare leader group 5] <u>Expedite licensing foreign-trained clinicians</u> Try to get internationally graduated nurses, try to adapt them to the Canadian system with some timely consideration to eventually help the system. [Healthcare leader group 1]
Improve and expand services	<u>Extend and expand services</u> We're talking about surgery, but we should also take into consideration all the diagnostics and support services that go along with the surgical backlog which is imaging, the CT scans, the MRI, labs. And so if we really want to increase the surgical flow we also have to look at those support services that enable those procedures to get done. [Healthcare leader group 2] <u>Increase bed capacity</u> We have areas in the hospital that could be used that were patient care areas. So focus on being able to expand hospital beds because there are patients who just can't get home. Expanding that even temporarily until we get through the backlog so that we can get through the patient cases. [Healthcare leader group 2] Patients who need to go home, they go home, or they get charged every day. Because we spend half our day arguing with patients and their families about why

	they don't want to go home. Now I know it sounds a little out there, but that's where we're at right now. [Healthcare leader group 5] People don't know where to go, there's nowhere in the system to go to. So a navigator coordinates all this and it has decreased the ED admissions. But if every big diagnosis like CHF or renal had a navigator to work with the physicians and the patients and the community services, the system would function better. [Healthcare leader group 5] <u>Find alternate sources for equipment/supplies</u> One of the things that concerns me about the push to just increase volumes is a huge supply chain issue that we are actually starting to experience now. There's a huge backlog of casting, materials, crutches, surgical gloves. So unless there's alternatives for sourcing strategies, we will probably not be able to operate. [Healthcare leader group 4] <u>Optimize efficiency and coordination</u> Improve the efficiency in the OR. They [surgeons] spend almost as much time waiting for the OR to be turned over and ready for the next patient as doing the procedure. And that's a very inefficient use of resources. [Healthcare leader group 1] The right case with the right surgeon in the right location. Not all cases need to be the tertiary care centre and yet people are traveling. There should be better systems to establish what the needs and demands are in certain regions and what's available there and prevent all that traveling to tertiary care centers. [Healthcare leader group 3] <u>Monitor surgeon up-skilling, compliance with standards</u> Hysterectomy has been a procedure that's basically routinely done laparoscopically now, that change happened in the last 10 years, 15 years, but there's still some surgeons that just didn't bother to train to do it and are still doing it abdominally requiring more resources, more postoperative time. [Healthcare leader group 3]
Manage the wait list	<u>Re-assess how procedures are prioritized and funded</u> And the other issue that we see is that the government is for the last at least 10 years has grasped onto knees, hips and cataracts as the only surgeries that need to

	be prioritized, and all of us recognize that those are not the only surgeries that are performed in [province]. [Healthcare leader group 1] <u>Verify who is really on the wait list</u> We've actually embarked on a process to verify the actual number of patients on the waitlist. We're more than halfway through that systematic process and it turns out we may have somewhere between 30 to 40% of names on our waitlist who are listed as backlogged patients who actually are no longer in that pipeline. [Healthcare leader group 2] <u>Analyze wait time data accurately</u> When we're looking at data, really look at apples to apples comparison of data. Wait 2's look very short, it almost doesn't seem like there's a concern, but we're not looking at all indicators and all pieces of the puzzle. So really having a comprehensive scorecard per hospital that takes into account the wait times but also other procedures. [Healthcare leader group 4] <u>Provide surgeons with data on their wait times</u> We used to have dashboards that went out to individual surgeons about their activity. I think that has diminished since then. They were very effective because they told individual surgeons what was in their queue and what their wait times are. That information to individual surgeons, plus to the surgical leads, the surgeons-in-chiefs would be very valuable to help individual hospitals deal with their issues. [Healthcare leader group 2] <u>Triage those on wait list to other services for management</u> Interventional radiology can offer some procedures that avoid surgery. I think in the chronic pain world that's also you know there are some procedures that interventional radiologists or anesthesiologists can offer, but often the connections aren't there so patients will be in a surgical waitlist but they can't access those other people. So if there was a more streamlined pathway and kind of guidelines about you know what you do first and what you can access that would certainly relieve surgical lists. [Healthcare leader group 3] <u>Restart wait list counting</u>

	Stop counting, start from scratch. I remember sitting in a radiology presentation, they were talking about the backlog of mammography, and they were showing a slide that said by 2035, we will have caught up to less than 10,000 mammograms and I thought to myself how incompletely clinically significant that was. [Healthcare leader group 3] <u>Centralized referral</u> I know that there was a centralized list for cardiac surgery that worked well. What we do, for example, is to say, 'you can wait six months with Dr. X or you can have Dr. Y in a month. Your choice.' [Healthcare leader group 5]
Funding	<u>More funding for hospitals</u> Hospitals have been running on a 25th percentile year after year after year after year. So what is available to most departments these days is a fraction of what was available 25 years ago. This pandemic has just brought this to the rest of the public. They weren't affected previously now they are. The answer is to start looking at better funding for hospital facilities. [Healthcare leader group 1] Government needs to strategically fund a package program tailored to individual organizations for surgical recovery and that might look different site to site. [Healthcare leader group 4] <u>Bundled care model</u> Bundled care works for certain procedures and specialties and it doesn't for others. So, pre-op, the procedure, post-op, which includes home care, and include primary care because I know primary care is not included in the current bundles. So that there is a price set for the entire journey of care and all the partners involved in that care. So the partners are jointly incented to get that patient with the best health outcomes, close to home. [Healthcare leader group 2] <u>Physician funding models</u> We have excellent people but they all work in their own silos, we are not integrated as a system. It becomes a turf war and a matter of losing business and revenue because we work fee per service. If we could take this step forward so that physicians work on an alternate payment plan and get rid of these petty concerns, maybe we can work towards really programmatic work rather than having our individual turfs [Healthcare leader group 2]

	Salaried. I believe in that for a whole number of reasons, being a female in surgery. So salaried for all surgeons would be great from my point of view, you can leave the female part out. [Healthcare leader group 3]
Learn from past pandemics	After SARS, I sat down just like we did now with people with the [organization] that the government asked with the same issues, 'what can we do, what can you learn from it.' And I think we learned a lot, but it all got forgotten after 17 years. [Healthcare leader group 5]

Supplementary Table 7. Comparison of wait time management recommendations between patients/family and healthcare leaders

Strategy	Theme	Patients and family	Healthcare leaders	Concerns or caveats
Prevent illness	Health Promotion	X	X	---
Shift services out of hospital	Provide support to patients while waiting	X	---	---
	Provide treatment in community and move COVID-19 screening to community	X (or home)	X	• Concern about quality of care leading to overuse of ED and increased complication rates • Culture shift for specialist surgeons
	Provide support at home after early discharge	X	X	• Patients may not be suitable • Patients may not be prepared for early discharge • Patients may receive conflicting information about suitability for discharge from different staff • Increased risk of readmission
	Use private services	X	X	Our publicly-funded health system affords some degree of equity
Send patients elsewhere	Out of province of country	X	X	---
Increase pool of healthcare professionals	Incentivize people to enter the health professions	X		---
	Redistribute Canadian healthcare professionals	X		---
	Expand scope of practice	X	X (and employ alternative roles)	---
	Expedite licensing foreign-trained clinicians	X	X	If licensing requirements differ from those in Canada, could compromise quality/safety
	Developing staffing prediction models	---	X	---
	Increase rate/volume of health professions training	---	X	---
	Provide on-the-job training	---	X	---

	Incentives/support to retain nurses	---	X	---
Improve services	Extend and expand services	X	X	• Staff are already burnt out and cannot continue working extended hours • Doing so could risk patient safety • Hard to find staff to fill extended hours
	Optimize efficiency and coordination	X	X	Due to annual budget cuts, hospitals have had to improve efficiency – there is no more slack
	Increase bed capacity	---	X	---
	Find alternate sources for equipment and supplies	---	X	---
	Monitor surgeon up-skilling and compliance with standards	---	X	---
Manage the wait list	Use data to assess waits and bottlenecks	X	X (and do so accurately)	---
	Reassess how procedures are prioritized	X	X (and funded)	• Unintended consequences (gaming, equity) • Alienates specialists and patients not prioritized • Leaves out many patients who are suffering, debilitated • Pause quality-based procedure funding for pandemic duration
	Centralize referral	X	X	• Patients must travel • Patients may not want care from an unfamiliar clinician Lose patient trust • Increase medico-legal complications • Diminishing patient autonomy is an ethical concern • Lessens physician autonomy to shift their referral base • Limits access/creates inequitable access to tertiary care surgeons with complex case experience • Depending on who adjudicates referrals, risk of bias
	Verify who is on the wait list	---	X	---

	Provide surgeons with data on their wait times	---	X	---
	Triage those on wait list to other services for management	---	X	---
	Restart wait list counting	---	X	---
Funding	Physician Fee-for-service	X	---	---
	Solicit private funding/donors	X	---	---
	More funding for hospitals	---	X	• Reactive rather than proactive (health promotion, pursue efficiencies) • Not useful if human resources are not available • How do we know if more dollars are improving wait times? • Politics influences where the money goes • Blanket solution won't work; each institution must decide how to best apply the funding
	Bundled care models	---	X	
	Alternate payment plans	---	X	Relinquishing autonomy can influence capacity to hire new staff, cover maternity leaves, etc.
Learning	Gather knowledge/insight from other countries and past pandemics	X	X	---

Supplementary Table 8. Themes and quotes

Impact of key messages

Patients/Family	Healthcare Leaders
LITTLE/NO INFORMATION PROVIDED <u>Lengthy wait with no answers</u> I waited for a year and a half from January 2020 until July 2021 to have my neurosurgery. The hardest part was getting a referral. The doctor said they referred me but I never heard back from the endocrinologist. And I couldn't get an answer for that, like supposed to be within two weeks you hear the referral went through, and it was at over four months. And I didn't hear. [Patient group 1] What I think everybody has alluded to is communication and missed opportunities and cracks in the system. We forgot. We don't have a better way of knowing what your surgery times are. We don't know what's happening. The surgeon is not in the office right now. I'm sorry I cannot get back to yet because I don't know his or her schedule. Those are very unacceptable comments to share with a patient. Technology exists. The healthcare system hasn't capitalized on those, namely to do with clinical processes and budget. [Patient group 1] I was expected to have my reversal surgery in May or June of 2020, and I never heard anything. And so I received a letter finally from the hospital saying we're doing the procedure in July. So then I heard from my surgeon saying we'll probably do your reversal surgery in November. And then I never heard, never heard, and then finally I received a letter saying I was having it in January so it was just waiting and not knowing and not receiving any information. [Patient group 1] I was supposed to have my surgery the week of the lockdown. I called my surgeon four months after things locked down when things were sort of getting back to starting up again. And the message that I got was, This is so and so's office. Thank you for calling. But if you're calling about your surgery, we don't know what the circumstances are, and we will call you when we're able to put you back on the list or when the list is up. But there was no information as to what else am I supposed to do. So I think that was a bit confusing. I just spoke to the surgeon's office this morning actually and they said, Oh yeah, we sort of forgot call you. And so now I'm back on the list, but I think there was a huge backlog. [Patient group 1] So a lot of uncertainty, a lot of non-communication from the hospital. Understanding that they are in crisis mode, but there was no possibility of getting in touch with anyone, which was very anxiety producing, when you're left out in the unknown. [Patient group 2]	LI**TTLE/NO INFORMATION PROVIDED** <u>Little notice/time to prepare for ramp-up or shut-down</u> One of the things that we've seen, especially in the surgical network, is a lack of communication from government. For instance, when the extra funding and the extended hours for surgery were announced by the government we got one day's notice that we needed to have a meeting with the members of the Ministry of Health. So we at least had some upfront information before it went public, and we really took them to task for that because there was not enough lead time [Healthcare leader group 1] One of the most significant challenges is the starting and stopping. There's a lack of appreciation of all of the lead time that is required in order to get things done so the funding methodology is actually creating chaos in all of the operations [Healthcare leader group 5] <u>Lack of information to convey to patients</u> We obviously get the edict on how things are going to restart but the informal messaging was, for elective general surgery that isn't high on the priority access target list, you're going to wait. And we can't really tell you when you're going to get those cases done. Nobody ever says that overtly, they just tell you what we're going to do. Up until a few months ago, we were just telling patients you're just going to wait and we can't tell you exactly when we're going to get going again [Healthcare leader group 2] <u>No direction or support from health system</u> I know there was $300 million the government has announced. I don't know if all the hospitals got something or not. I hear informally, not a lot. And then there was a $35 million fund that I don't think anyone got. We applied, we haven't heard anything. So is the government really serious about addressing this, and the messaging is no message, really. [Healthcare leader group 2] The backlog was a very hot topic in the summertime, where there was almost a daily article coming out about how about bad the backlog

I had the feeling that the surgeon's office and his office administrators…weren't sharing information that they should have been sharing with me. [Patient group 2]

As a patient, you're going 'what's going to happen to me'. And then, if you are trying to get information yourself with the hospital, you can't get people on the phone and you don't have emails and there is not much on the website right so it's all these things that myself I would try to go through. Even my family doctor was difficult to get a hold of because she, I only had phone consults with her throughout COVID. She wasn't really equipped to do video conference, she doesn't use apps, you know, she just started doing email. So, she also had to turn around so I felt a little bit like a communications desert, when it came to my own sense of being taken care of. And I'm downtown [city], like I'm not even in the healthcare desert, like there's lots around me, but there was no communication. So the message was crickets really. [Patient group 2]

<u>Inability to plan for life or family</u>
It just helps with planning and everything else with life. [Patient group 1]

The more informed the public is, they can make plans and decisions for their family, you know, just in case something happens. They can plan ahead, like estate planning, all those things [Patient group 2]

Patients are your number one priority in healthcare, but we're also the ones with the lowest amount of institutional knowledge. Knowing a little bit of what is ahead of us or why things are not moving, is helping us manage this anxiety. Having a person that can say in a note or phone call, 'Hey, we know you've been waiting for this, we haven't forgotten you.' [Patient group 2]

<u>Anxiety, depression</u>
The message from the departments that I was getting treatment from was very ambiguous. I also have the services of a nurse practitioner, and when I asked her, she was able to give me a date that was almost precisely accurate. It gave me the impression that the information existed. It was just being withheld from me specifically, and that was really upsetting [Patient group 1]

I had an incident in February 2020 so it was just before the first lockdown of the pandemic. I was seen in Emergency, stayed a couple days and went home and waited until three weeks ago [Fall 2021] to get the procedure. And because this incident caused me to have to abandon a lot of activity that I was doing, it created a lot of anxiety for me and a depressive state, because I had to change the way I was going about my life. [Patient group 2]

<u>Concern about disease progression/survival</u>

has been. And then that seems to have quieted down recently. It's a catastrophic problem for patient care, but yet the issue does not seem to be on the public's radar, from my perspective. Even the [provincial planning organization] doesn't seem to be really talking about this with any degree of frequency or consistency. Does agree or not but that's my take on it. [Healthcare leader group 3]

<u>Confused by conflicting information</u>
Where it started to get complicated was where we were hearing ramp up, ramp up, but don't ramp up. But you still have to staff ICU, and you don't have staff, but still ramp up and we'll give you money, but there's no staff. So that's where things were getting a little bit confusing to be honest. And then you know the pre-op guidance that would come out was actually very confusing as well. Because at one point it's like, test everybody. The next piece is, well you're spending too much money on testing and screening, so claw it all back. And so it was really up and down, up and down every day trying to ramp up. [Healthcare leader group 4]

SITUATION IS BACK TO NORMAL

<u>Still struggling with backlogs and how to prioritize patients</u>
The, the messaging, we're getting recently though is that they're looking at our numbers and saying, oh you know you're pretty close to pre COVID numbers in terms of what you're accomplishing so I think you guys are good. We're totally not good, it's not addressing the backlog at all because it's actually just kind of meeting even [Healthcare leader group 2]

And yet if you look at the difference between urgent versus elective our numbers are much, much higher in urgent. So, it's not being addressed head on. [Healthcare leader group 2]

Much of it is related to the fact that our human resources are really sparse, so we don't have even close to what we had in a regular year and we're trying to do more. [Healthcare leader group 2]

Wait2, which is the time to surgery, you only get counted as a Wait2 once you finish the case. So, if you're not doing cases actually, that the numbers don't actually go up all that much in fact they paradoxically go down a little bit and you know even, even now, in

So, in October of last year I had an emergency hysterectomy for a suspected ovarian cancer. And that turned out to be stage four appendix cancer. So, it had metastasized all over my abdominal organs and, at which point I was immediately They were referred me to [hospital], and once I was seen, the only treatment that was available to me was a very aggressive operation that's only available at [hospital]. Nobody would even talk to me about a date because of the COVID pandemic. So, the way it was explained to us is at any moment our ICU could be full of patients and we can't offer you surgery. All said and done, I didn't end up waiting as long as I had thought. I only ended up waiting about four months. But for someone who's just been diagnosed with stage four cancer, time is of the essence and I just felt like a ticking time bomb. [Patient group 2]

COVID HAS PRIORITY OVER OTHER CONDITIONS

Felt guilty for receiving care despite COVID priority

It was really prioritizing COVID patients, that's what I heard. And I felt bad because I even though the incident was, you know, unexpected for me and it was, you know, not a condition that I had before I, I went to emerg that day, I still knew what I had but if I'd been waiting for a diagnosis or confirmation or treatment after a confirmation of a diagnosis. I think that would have been, you know, even more difficult to kind of live with that, knowing that there was something that could be done. To me it was, it was very much a lifestyle change and waiting to better understand why I had had this incident. And that's why we did the procedure. [Patient group 2]

Confusion about who was getting treatment

I would hear of people who had surgeries, and I was like okay, somebody did have a knee surgery or whatever, so I guess some people are getting in, but it wasn't clear to me how that was all being decided. But the people in the early stage, the diagnostic stage, were the ones that were getting pushed aside [Patient group 1]

I always feel like you hear stories about well so and so got this done before that got done, and was that just luck or somebody being forceful? You kind of wonder about the fairness of it all and the equity of the access [Patient group 1]

Living in living in [urban area], I have access to more stuff than my cousin who lives in [rural area]. That's just something we've been struggling with in the province and anything that we do to improve the system needs to take that into account. and ensure that it's there. [Patient group 1]

Frustrated with being considered unimportant

The key message or the key takeaway I took was that COVID was the priority. I felt like it didn't matter that I was dying of cancer. I felt like I would only matter if I had COVID. Clearly general surgery, if you look at the Wait2s for general surgeons, they actually are within the target, and they're within the target because the cases, you know the cases that were waiting a long time, aren't usually the ones that are getting done for some reason I think that falls in the you know the comments that people had before about, you know, 30% of the cases kind of falling, falling off the list [Healthcare leader group 2]

CONCERN FOR STAFF WELL-BEING

Healthcare staff are getting no relief

A lot of mixed messages come from different leadership, either local senior leadership teams and or government. Things like, everybody take care of themselves, try and get time off, yet the expectation is that you never have time off, and that you're always at the end of your phone and managing. [Healthcare leader group 5]

SINGLE OR UNIFIED APPROACH

Each hospital or region has unique needs

It feels like we're trying to act as a singular entity, yet the infrastructure doesn't exist to support that. We all have local collective agreements, local nuances to all of our staffing, local nuances to the type of work we do and don't do, because some of us are specialty hospitals and others are community teaching hospitals like mine. But the mixed messages continue. [Healthcare leader group 5]

The Chief Medical Officer of health makes a directive so that is a legal directive and everything has to shut down. Okay. But he makes that at a provincial level, and then that has to be then carried out by a myriad of healthcare organizations, whether it's community hospitals, teaching hospitals. And that's where I think that the message gets reinterpreted or interpreted differently in one hospital to another. Multiple levels of cascade that come down to a practical implementation of whatever the directive is [Healthcare leader group 2]

LACK OF OR TIME

Oncology procedures are prioritized over others

not what anybody would say. But all these beds were being reserved for COVID patients in my case. Not even necessarily being used, they were sort of set aside for a potential case, when I'm sitting there with a definite need for it, and still being placed on the sidelines to wait. [Patient group 2] So it wasn't until I, when I approached my doctor on two occasions for two different instances and his was always, you know, starting with the lowest common denominator of physio and that kind of thing so surgery, even though I felt. The surgery was the option that was I wasn't encouraged to go that route. [Patient group 1] To me, it was all very confusing. The message I was getting is, don't even bother, there nothing, nobody's available. We're putting 100% of resources into COVID patients, and that if you have an issue, try and deal with it your best way you can. [Patient group 1] **NOT SAFE TO GO TO HOSPITAL** <u>Concern about risk of untreated condition versus contracting COVID</u> What I wanted to say is that they basically make you feel as if, with your condition, you're actually safer not going into hospital and getting surgery, because there's a higher risk of contracting COVID. [Patient group 2] They make you feel like your condition is not important or valuable. What you're going through is life-threatening. There's a chance you could contract COVID, but there's 100% chance you could have a fatal condition that needs immediate attention. So I think they shouldn't be patronizing, but they should be like 'okay, we're going to work with you to get you your treatment as soon as possible and not delay things.' [Patient group 2] <u>Patients avoid seeking care or turn to private sector</u> It may it may make people hesitate to go in. It may make people feel like it's not worth it, or the other drawback is they're going to do like healthcare tourism if they can afford it. They're gonna try and go get care in the US, or in the Caribbean or whatever, right. Like, it's making a good case unfortunately for the private sector for those who can afford it. [Patient group 2] I have a lot of medical issues so it's like, thank God, I don't have something major going on, so try to avoid the hospitals at all costs [Patient group 1] **SURGERY COULD BE CANCELLED AT ANY TIME** <u>Anxiety about being bumped and forgotten</u>	Well there's been lots of meetings with our hospital administrators, the hospital leads to try and advocate for long waiters and they keep saying 'yes we're working hard, there's just not enough OR time for any of us, everyone's fighting for a piece of the pie,' but when we looked at the stats, the oncology patients are actually getting in on time so it seems like there's a disconnect between what's being said and what's actually happening. So at the level of non-oncology cases, we're really working hard to try and advocate for that, but it's been challenging. [Healthcare leader group 3] My practice is almost exclusively oncology, and if it's a non-oncology label, all of a sudden it's a non-entity in terms of a priority. This is very anecdotal, but I had overheard a hallway conversation about a patient with chronic orthopedic pain and significant mental health who was waiting surgery and actually committed suicide on the waitlist because of his chronic pain. [Healthcare leader group 3]

Yeah, absolutely. And I was also a message I received was prepared to have your surgery canceled right up until the last second. So even when I had been given a date. It was very precarious in my mind, because I could be bumped at any moment. [Patient group 2] Yeah, true that happened to me as well. I got bumped twice and then forgotten. if I hadn't called in September, I would not have gotten my procedure in October [Patient group 2]	
SOURCE <u>Multiple sources, but all insufficient</u> Information from the media was very minimal. From the government, surgeries are on, surgeries are off, elective-wise, it was helpful but very simplistic in terms of the message. From medical professionals from the hospital and from the departments that I was getting treatment from, it was very ambiguous. I was given a very vague timeline going forward in terms of when my surgery was going to be happening. So more information. [Patient group 1]	**SOURCE** <u>Top-down cascade</u> We have a lot of messaging regularly from government authorities and it trickles down through the hospital authority so it seems to be coming very much top down. [Healthcare leader group 3] We were getting our messages from the [government] table, and because we had this meeting every day, our Chief of Surgery would start with those announcements. [Healthcare leader group 4] <u>Informal channels from colleagues</u> Mostly from my colleagues that are working in different areas across the province. [Healthcare leader group 1] We all checked with each other, there was a lot of people reaching out to people, it was this constant little vortex of hospitals calling hospitals. Government was silent in wave one. Messages were coming from our own network of talking to each other. [Healthcare leader group 4]

Recommendations for communication about wait times

Patients/Family	Healthcare Leaders
CONTENT Educate patients and the public – explain why there is a backlog Even though time estimates may not be possible, just giving any qualitative information explaining what's going on, what the bottlenecks are, what's being attempted, what's making things more difficult. Definitely makes you more sympathetic, understanding, and happier with the situation. [Patient group 1] Even if the absolute time can't be improved past a certain point, it can certainly feel like there's been less delays if things have been communicated better. [Patient group 1] An understanding, just in general, of how surgeries are being booked. And why there's this backlog and things were being moved into what should have been my spot. Not having that information, really gave me the sense that my case was not important, even though all the medical information that I had said it was urgent. [Patient group 2] Managing expectations. Information can improve performance from a patient's perspective, even if the absolute time can't be improved past a certain point, it can certainly feel like there's been less delays if things have been communicated better. [Patient group 1] Regular updates of position on wait list Is it possible to see where your name falls on a waitlist? Without giving away other people's personal information. 'You are number 126 on a list of 341 hip replacements for 2021' and you can see your name, move up or down the list on a weekly or daily basis and you can track it so you can sort of have some sense of when it's going to happen. [Patient group 2] **MECHANISM** Digital (email, phone app, web site, patient portal): refer to later, openly available I'm an email person. I would like to have had something that I could look back on to refresh my mind about why things were happening [Patient group 2] I'm very digital first, so if it was an email that would help me, or if it was through an app on my phone from the Ministry, like, I'm fine with that but I know it's not	**CONTENT** Educate the public – publish wait times and explain why there is a backlog From a public point of view, transparency is an excellent point. The government needs to set a realistic expectation for the physicians because right now this is getting put on us. We're the people that are face-to-face with the patients and we're going to be the ones that have to explain this, but we're not feeling backed up by the government because they're smoke and mirrors, everything's fine. And it's not. [Healthcare leader group 3] The community and the general public don't understand what's included or what's not included in an acute care and what's paid for and what's covered and what's not. So there needs to be broad sweeping consistent messaging. [Healthcare leader group 5] [note: in reference to comments about patients/families arguing against discharge] The public needs more education, because it's all about 'oh, we're back to normal, let's go.' The government, I wish that they would be more realistic, because the people coming in are not realistic in their expectations for the wait times. [Healthcare leader group 5] I'm not sure that the public truly understand the wait, what impact [COVID] has had. There's not enough data out there to fully articulate what the outcomes for our patients have been over the past 18 months and delaying their surgery, etc. [Healthcare leader group 5] What we need from the Ministry is clear communication and that this is a very complex issue and is going to take somewhere between two and four years to even reasonably address what the backlog currently is, let alone what the waitlist was prior to the pandemic that many of us were struggling with. [Healthcare leader group 5] I think the government needs to say this is a page of all the wait times in the province. They need, people need to understand the wait times on every area. [Some procedures] are getting more attention because it's money making and everybody gets slashed and burned. Hernias are waiting up to almost a year and a half. And so the public doesn't understand all this. [Healthcare leader group 5] DISAGREEMENT: cause fear, overload emergency services

everybody so it could also be on the website, saying 'At [hospital] our current delays for knee surgery are six months or 18 months,', Put it out there because everybody has it. They were all putting their cases of COVID on the website so why not put the wait times up there too. [Patient group 2]

Having an electronic patient record i can access and where I can see updates on my wait times would also be helpful [Patient group 2]

Any means of communication is useful

It doesn't really matter. As a young person who's pretty tech savvy, I don't really care. I just need the information, whether it's through a portal, or my family doctor, or the surgeon's office or through the Ministry. [Patient group 1]

It could be on the list or it could be communicated to you by your doctor, it doesn't matter. I think it can be private or public. But as long as the patient knows it. That's the communication that's lacking all the time. [Patient group 2]

Two-way communication/opportunity to ask questions

Where the there's an opportunity for the patient or the caregiver to ask follow up questions. So instead of having one-way communication, there needs to be some form of having two-way communication, to say 'okay, I don't have access to those questions, but maybe I can have the surgeon or someone call you with those answers.' [Patient group 1]

The people who are in charge of booking procedures are not necessarily empowered to take the time to explain things to you. They go through things very quickly. When you're stressed or anxious, it's hard to retain the information, and English is not my first language. Even if I'm a high-functioning person, and they want to be very efficient and book, book, book it's like, I need you to tell me all this, and then send it to me an email so I can review. And if I have questions, I can go and ask you or someone. Give me a resource that I can talk to. Because everything I was told was rapid fire 'you need to do this, you need to do that,' I was confused. And then they sent me a requisition and I didn't know what to do with them. So it was very difficult for me to have all of that thrown at me all at once, and no invitation to ask any questions. [Patient group 2]

Regarding communicating and not being able to retain everything, that was something that was especially difficult during COVID, because we weren't allowed to bring significant others to appointments. And we were receiving huge amounts of very scary information. And you're trying to put your emotional reaction aside so you can hear what the doctor is trying to tell you that you need to do. And

It's going to cause fear and we're going to end up seeing patients coming through to emerg to try to get in, there is a risk for that. Our emerg is already backlogged and cases are coming in. I think there will be panic and fear. [Healthcare leader group 5]

It's so extremely complicated to explain in a very generic public way. I'm not sure how effective that would be. I think the focus should really be on what are the root causes, so that it's clear that it's around staffing and funding. Those are the problems. [Healthcare leader group 5]

Communicate degree of uncertainty to mitigate expectations

More messaging around the fact that there is going to be a massive amount of uncertainty around this. And just because you have a snapshot of data that you think really represents the reality on the ground, when we know that there are many reasons why that data doesn't actually reflect what our day-to-day reality is. It may be easier said than done. [Healthcare leader group 3]

DISAGREEMENT: Feasibility not likely

Messaging to the public about expecting uncertainty in your healthcare is probably accurate. Although I must say I just don't see government actually doing that because they're all about certainty and providing the assurance, and the government would never come out and say 'Sorry folks, we don't know what's going to happen. We'll do the best we can,' although that's probably the reality. [Healthcare leader group 3]

Refrain from using the word 'elective'; shift focus to degree of suffering

If I could have any wish in the world right now it's to remove the word 'elective' from everyone's lexicon and change it to a word that has a better impact on the public. [Healthcare leader group 3]

I echo the conversation around the word 'elective'. In the public's eye, they don't perceive that word in the way we perceive that word. I feel physicians right now or are not anyone's favorites and we're getting gas-lighted a little bit, and I think the terminology and the communication out there is what's causing that. [Healthcare leader group 3]

The word 'elective' has such a misguided connotation for the public. You know there are other better words like scheduled operations that might make more sense. 'Elective' sounds like it's expendable. When I hear about elective surgeries

nobody really accounts for any of that. I remember coming out of the ICU and I'm getting all these instructions and I don't know what they said an hour later. [Patient group 2]

It's important for the assistants to communicate better because the doctors often don't have the time, but an assistant could at least answer the phone, you always have to leave a message and no one calls you back and you leave another message and it said to only leave one message. And I found it very, very frustrating. So the people who support the doctors, their assistants, maybe they need more of them if it's too much work for them. But I think they just have to do a better job. [Patient group 1]

Ensure equitable access to information among vulnerable or hard-to-reach groups that may lack technology (e.g. cell phones, Internet)
I think you need to find some equity in terms of how some of this information will be shared. One of the things to think about is how to reach patients of color, Indigenous people, those who have don't have access to, electronics, or cell phones or emails. I think that should be said, definitely be at the forefront, as we think about communication strategies. [Patient group 1]

SOURCE

Single group dedicated to communication
Have a single body that communicates to all patients that are in the system that talks about here's our priorities, here's our policies for how we make decisions. [Patient group 1]

Have a dedicated group to take care of communication of all kinds. I don't have the sense there is a communications group. If there were, and their job was a hundred percent to try to provide the kinds of information people were needing, that's what they do. I don't know if that exists. I don't think it exists at the hospital level. And so I'm not sure about the government. [Patient group 2]

Having dedicated communication units solely devoted to communicating with patients and they're experts in that, they have the time to do it, it's their job. [Patient group 2]

being delayed it always gets my back up because nothing about this is elective. [Healthcare leader group 4]

Communication was underplayed, because they kept calling it elective surgeries and that suggests things like facelifts and wart removal. We have people waiting for hysterectomies because of low grade cancer, we had disabled people in wheelchairs who couldn't get arthroplasty surgery, we had people with coronary vascular disease who were 72% left main occluded with chest pains, they had to wait. We had aortic valve surgery put on hold. [Healthcare leader group 4]

We all had to come up with our own definitions of urgent or semi urgent. [Healthcare leader group 4]

Oncology cancers, for example, my world of thyroid cancer, although it is a cancer, it is by no means a serious cancer, it can wait months and months and months without any risk to the patient. The way this has been perceived and told to the public has a long way to go in terms of appropriate communication about severity of even non-oncological problems. [Healthcare leader group 3]

Cancer always evokes a certain response of fear and rapidity in the public and so it should because of course oncology, in many cases is a highly critical, but the concepts of extreme suffering being experienced by those who have non-oncological problems but still critically important issues that require an operation is not at all being stressed. There's a sense that cancer must prioritize over everything. I'm not here to debate what's the more important specialty or treatment, that's not the point. The point is that it isn't reasonable to just have the government or funding agencies focusing specifically on oncology cases, when there is so much suffering out there from non-oncological [conditions] and so messaging must be about not just cancer therapy but alleviating suffering. Understanding the effects of a backlog on somebody's wellbeing, on society's functioning, on health economic outcomes. It's not just about oncology, and it's not about, as I said earlier, elective work. It's about those who are suffering, who need the operating room to alleviate their suffering. And there are better ways to convey that message of empathy. [Healthcare leader group 3]

MECHANISM

Engage surgeons in system-level decision-making
[The government] hey had zero input from anyone in the surgical community when they made their decisions. [Healthcare leader group 1]

	I think it's important that government keep the key stakeholders informed of what's going to be happening or and seek some advice from people in the surgical communities, because I find that some of the provincial tables are a little distanced from actual practice. [Healthcare leader group 1] We've had a couple of meetings with government where they send you an email 'there's $700 million going towards this' and you sign up for the meeting and then you're three slides in and the funding is gone, and it's more of a 'let's see how you do it and report back to us.' So I think in those two examples from our hospital were very frustrating. I think the expectation being surgeons are going to do it longer and work harder to fix this. And there was no conversation back to us about how we felt about that and asking that of us. So I think as a surgeon, that's one of the things that I find stressful. [Healthcare leader group 3] As a surgeon, I would like someone to ask my opinion as to what can I do, and what am I available to do. [Healthcare leader group 3] Why can't we get a letter [from the Ministry of Health] actually saying 'it is our understanding that the surgical backlog is this and that your organizational surgical backlog is reflected in our data as such, please validate,' that would have given us an opportunity to actually correct. [Healthcare leader group 4] There really wasn't any surgical representation at any of the provincial committees. There was emergency room representation, there was critical care representation. But to date, there hasn't really been a grassroots level surgical recovery group. When the numbers came out from the Ministry with regards to backlog, it pressurized institutions to actually start moving in a direction without resources. And compounding all of that is that the numbers they were using were previous surgical numbers. So they were actually number of procedures completed the year prior. So you need some focus on surgical recovery and you need the right players at the table helping shape and make some of those decisions, because what's happening right now is we're getting instructions and direction, but it's not aligned with what we're able to do and what the grassroots level priorities are. [Healthcare leader group 4] Maybe a core working group with some of surgical directors, some of the chiefs-of-surgery, because I know some of these meetings are happening separately. It might it might be a good time to pull everybody together with the Ministry at the table to start having those grassroots-level discussions so that we can actually move forward. [Healthcare leader group 4]

	Prompt patients to advocate to government The patient voice is so important. That's the only thing that moves the needle in the government side. When patients are calling our office and complaining, rightly so, that they are in so much pain and disabled and still waiting for surgery, we actually give them the patient care quality office number at the hospital, and it does get attention. That's one of the mechanisms to move the needle a bit [Healthcare leader group 3]

Recommendations for managing wait times

Patients/Family	Healthcare Leaders
PREVENT ILLNESS <u>Funding for health promotion</u> Can we get more funding for physical activity in the general public so that people have access to gyms and training programs or whatever, and for health experts outside of the system who are not covered by OHIP like massage therapists, physiotherapists, kinesiologists so that it doesn't cost as much to individuals [Patient group 2] Prevention, obviously. I don't know what it is, maybe 98% of funding goes to helping people who have [health] problems and zero might go to preventative medicine. I think that says a no brainer in terms of decreasing surgical demand. Prevention needs to be more of a priority for sure. [Patient group 2] The prevention idea goes beyond just diagnostic procedures, even into the schools. Perhaps this is already the case that our elementary and secondary schools are teaching lifestyle wisdom. [Patient group 2] <u>Workplace safety measures</u> Could we incentivize employers who have dangerous workplaces to have more safety measures so that workers don't fall as much they, they're more strapped in to whatever they're doing. [Patient group 2] **SHIFT SERVICES OUT OF HOSPITAL** <u>Provide support to patients while waiting</u> If there's some arrangement that can be made that would satisfy them. And it wouldn't be dangerous. Such as providing payment for physiotherapy or transportation or homecare or all these things to say, you know, if we can delay you two months, we could provide some support for you. Because I think when people think there's just a delay, it's the cost is on them. And if you took the cost off the patient and supported them. While this delay occurs. Maybe there's a way to reshuffle the demand and spread it out. [Patient group 1] Is there potentially an opportunity to incentivize patients to voluntarily accept delays? Obviously there's patient priorities in terms	**PREVENT ILLNESS** The pandemic brought us back 10 years with all of the prevention campaigns that we had with regards to colonoscopy, colposcopy, a lot of those pieces. And I know individually hospitals are trying their best like we're going to religious work, like religious groups etc, but not a lot of people are meeting in person. There's no access to the population anymore. So it's almost like the, if the Ministry, government, whoever, somebody could help us get this word out and start to do some of that advertising on media, social media on TV. That sort of stuff would definitely help because prevention is going to definitely be the key to managing and predicting what our volumes are going to be like. [Healthcare leader group 4] **SHIFT SERVICES OUT OF HOSPITAL** <u>Provide support at home after early discharge</u> Same day discharge is a good strategy but I don't know how much they can increase without risking standard of care of the patient. So, that needs to be well thought out for sure. If possible, would be a good idea. [Healthcare leader group 1] About the same day discharge. Through the pandemic in the later phases, when we were able to do more of our day surgery joint cases, we were able to optimize that by having remote care monitoring. We have a virtual ward of nurses that call and follow up. So there's a possibility there's other pathways of patients that we could theoretically move through the hospital experience faster if we have the proper supports, which would require community support, but also this remote care monitoring piece as well. [Healthcare leader group 4] And I think the other pieces and I alluded to it was converting the same day admits to one day cares, which we have done a significant amount of work in in our arthroplasty and joints, but there are other cases that have now moved to one day cares to try and keep people out of the hospital. [Healthcare leader group 5] <u>Move COVID screening to primary care/community</u> Primary care needs to open back up fully. That may decrease the urgency of surgery or recidivism to the ER but it'll decrease the demand for surgery. Because if you do a pap smear, you find a cancer, it may actually temporarily increase it, but it gives an earlier opportunity to intervene, which then potentially gives us more of a timeline without the urgency, that post pandemic phenomenon of people just busting down doors. [Healthcare leader group 4] One of the biggest problem in our system is access to care. The GPs have not fully reopened their offices and that's a system problem [Healthcare leader group 5]

of is it life threatening or is it going to lead to long-term disability if it's not treated well or is it going to inconvenience for a period of time. Perhaps there's a way for some patients that can to self-select themselves for delay, and to incentivize them somehow. I'm not 100% sure of the best way to incentivize or what resources might be available, but that might be a way to self-organize the list. [Patient group 1] There might be an opportunity for patients to help patients. And I guess what I mean by this is any sort of support groups or having people be able to opt in to connecting with each other. [Patient group 1] I wondered if there were ways to support people. Social work support, psychological support for people while they're waiting. Because the anxiety of waiting is horrible. And maybe that can be a possible way to help. [Patient group 1] <u>Provide treatment in community or at home</u> Provide more in-home services to people with mobility issues or elderly people or for those more minor surgeries. Can we not just go and perform that in the person's house, do we need the whole big OR? If we're going to have NP equivalents do smaller surgeries, if you cut yourself and it's bleeding, can we not send someone to do it at your house, rather than bringing you to emerg and taking a bed? Can we go to them and have more mobile units that can take care of people on the spot. [Patient group 2] I had a uterine biopsy that was delayed twice because of COVID and had to be done in an entire OR room. And I thought this is ridiculous, this little biopsy, this could be done in your office. So my diagnosis was delayed several months just waiting for that biopsy. [Patient group 2] Looking at what needs to be done on site versus what can be done in the community. And trying to think outside of the building and finding those solutions so that we're not always relying on the hospitals for that kind of care. [Patient group 2] Leveraging more community-based resources may help. Especially if we're looking at ageing populations that may be more at risk of falls	Why do we always have all these COVID assessment centres rather than the pharmacy. They should convert that to more clinics, getting people seen in a timely fashion and not having emergencies. [Healthcare leader group 5] I had the COVID assessment centre under me and I just transitioned it to an external provider so we could recapture our staff. [Healthcare leader group 5] <u>Provide treatment in ambulatory/community settings</u> The model would also work okay with outpatient gyne surgeries, things like hysteroscopies in particular, because they're already outpatient procedures. There's well defined information available to the patients as far as pre-op and post-op. And I think that would be looked on favorably by the gynecologic surgeons. [Healthcare leader group 1] Another interesting point to highlight is maybe the solution around this pandemic is also a bit of an opportunity for us to reflect on what we do that does not need to be done, and this concept of de-escalation, as we have to make some tough, tough decisions moving forward. [Healthcare leader group 3] Expand on the use of ambulatory care centers. But it is a different model and it takes a whole system transformation and cultural transformation with physicians, which is not easy. There has to be a lot of buy-in to be able to be successful in transitioning that work. [Healthcare leader group 5] There are surgeries that absolutely need to be done in acute centres, one hundred percent, and there are other procedures that don't. The alternate health facility model allows for those procedures that don't need to be done in hospitals and take up valuable OR capacity, and have them done in the community, things like colonoscopies and cataracts. There's a myth that elective surgeries and ambulatory-type surgeries cannot be done safely in the community, and that's a falsehood, and there is existing OR capacity in the community that is not taken advantage of. [Healthcare leader group 2] I agree that there's unused capacity in the out-of-hospital premises, but we don't because of the way it's set up. There's not an ability to fund. The previous government had planned to introduce legislation to pull it all under an umbrella framework so we'd have the independent health facilities, out-of-hospital premises, the public hospitals, all under this so that we could fund cases there. That was never implemented, so we're left with a situation where we can't fund the cases. [Healthcare leader group 2] We actually reviewed all of our activity in our operating room by the weight that's allocated to each case. We took the smaller-weighted cases and moved them out to the clinic setting,

or things like that that. having access to care closer to their homes rather than having to go to hospital. [Patient group 2]

Provide home services after early discharge
If you're looking at a surgical procedure that normally would keep someone after the procedure for two days, what are the resources in that person's area that can help them feel safe to go home after one day, and they have the phone number, name and email of the care provider that is going to check in on them. [Patient group 2]

I would try the same day discharge and it's a matter of leveraging additional resources outside of the hospital. [Patient group 2]

Use private hospitals
Use public-private partnerships or private hospitals, coverage to expand capacity. We need different models to perform different types of surgeries [Patient group 1]

DEVELOP THERAPIES TO REPLACE SURGERY

Maybe a move towards therapeutics like medications versus having to go under the knife. if you can treat, let's say a cancer, with a new medication in pill form, liquid form. [Patient group 2]

> DISAGREEMENT: may only delay surgery
> Will that mean that the, the surgical is still needed but at a later date? Maybe it's just delaying the problem instead of dealing with it. If you tried something non-surgical and it's not as effective, is this good for you or for your health? [Patient group 2]

INCREASE POOL OF HEALTHCARE PROFESSIONALS

Incentivize people to enter health professions
Are there ways to provide incentives for more people to go into nursing and become surgeons and any other health care? Incentives to universities and colleges that provide programs for that. [Patient group 1]

like carpal tunnels, like hysteroscopy. We've saved five operating room days doing that. [Healthcare leader group 4]

If I could get funding for a minor procedure clinic with anesthesia mild sedation support, nursing, a little recovery area, then I could take about 10% of the procedures out of the OR that just have nowhere else to go. So they end up coming to the OR. [Healthcare leader group 4]

Doing a lot of work outside of the hospital is a very good idea, it could help things almost immediately. Not everything has to be in a major hospital to be done. [Healthcare leader group 3]

Use private services
I think the idea of private surgical centers, is an interesting one. It comes down to efficiency in a way, you know, get rid of the unions, incentivize the nurses to get more cases. Efficiency is very variable depending on the hospital and depending on the [procedures] you're doing. If you have focused factories like the [private surgical centre] that are focusing on one thing, they can generally do it well. [Healthcare leader group 1]

That's a really good example. In endoscopy, in our hospital, we book 15 cases a day for colonoscopy, and in the private clinics, they book 20. [Healthcare leader group 1]

There's already lots of private facilities that are probably being underutilized with staffing and rooms, etc. And we have done that in our province before, where we've used private facilities, but they're funded by the government to do certain cases. [Healthcare leader group 3]

We are looking at outside places that might do day surgeries. The little day surgery could be done there. It's not just about money, it's about the space. [Healthcare leader group 5]

SEND PATIENTS ELSEWHERE

Send patients out of country
Funding them to go out of country [Healthcare leader group 3]

MANAGE THE WAIT LIST

Re-assess how procedures are prioritized and funded
The government needs to get off this focus of only having hips, knees and cataracts done.

There's a shortage right now in the market so I'm not sure if there is a way to maybe fund education for the health sciences to get more of these people into the funnel. [Patient group 2]

Getting more people trained to become doctors and surgeons. We're fixing a problem for the long term, as opposed to these small solutions. [Patient group 2]

Redistribute Canadian healthcare professionals

I think it's worth distinguishing between long term solutions and temporary solutions. And while it seems we're naturally focused towards ongoing long-term solutions, we should be considering temporary solutions as well. COVID is not gonna last forever, hopefully, and ideas like reallocating doctors, redistributing within the country and from other countries, sort of importing resources on temporary basis. Might be viable, if it's flagged right from the start as being temporary. We have an immediate demand and the need is now. So, maybe just recognizing that there are some temporary short term solutions. That could be very helpful getting us through this next crunch. [Patient group 1]

Modify professional scope of practice

I see a podiatrist and he told me that he is qualified to do foot surgery but the government doesn't recognize it and forces people with certain foot issues to go to orthopedic surgeons. He said, 'if we were recognized for the skills we actually are trained for to do surgery we could take a big load of the orthopedic surgery that needs to be done.' So I wonder if there's ways of looking at some of the lower risk surgeries and pushing them out of the hospital system. [Patient group 1]

When they closed down originally where everything stopped, only [doctors] who are connected to the hospital were working in COVID, but the rest of the clinics, the doctors were not used, not assigned to do anything. They closed down fertility clinics. And the dentists, once they were closed down, they were just sitting at home. I thought it was a very poor decision the way the government set it up. [Patient group 1]

Incentivizing people that wanted to upscale or to add different skill sets or to train up to being able to do something else, to boost your

Most facilities that are able to maximize that are doing that. They have to look at other surgeries, general surgeries, gynecology surgeries, you know, a lot of these things, only the emergencies are being done, which essentially is driving people through the emergency department and they're not being investigated by the hospital when they could have been. [Healthcare leader group 1]

If it's a non-oncology label, it's a non-entity in terms of a priority. This is very anecdotal, but I overheard a hallway conversation about a patient with chronic orthopedic pain and significant mental health who was waiting surgery who actually committed suicide on the waitlist because of his chronic pain. [Healthcare leader group 3]

In my world of thyroid cancer, although it is a cancer, it is by no means a serious cancer, it can wait months and months and months without any risk to the patient. [Healthcare leader group 3]

There's a sense that cancer must prioritize over everything. It isn't reasonable to have the government or funding agencies focusing specifically on oncology cases when there is so much suffering out there from non-oncological [conditions] [Healthcare leader group 3]

And the other issue that we see is that the government is for the last at least 10 years has grasped onto knees, hips and cataracts as the only surgeries that need to be prioritized, and all of us recognize that those are not the only surgeries that are performed in [province]. [Healthcare leader group 1]

I do agree with increased hospital budgets, perhaps even incentivized quality based procedure volume, like last year they did 20% incentive on everything we've done over 50% of your targeted volumes. But I actually think they need to continue those two things, and, and also fund structured plans for each individual organization's surgical recovery. [Healthcare leader group 4]

Don't tell us six months prior to that you're going to incentivize quality-based procedures (QBPs) and then tell us six months later in a webinar that you're not going to allow us to net QBPs. For example, tonsillectomies have really gone down. And we would typically net the dollars from there to try and do more hips and knees to try to offset the volume, to serve a different population and try to address that backlog. But the word that we're hearing is that we're not allowed to do that anymore. They should identify maybe two or three years as surgical recovery for the backlog and incentivize and fund at all hospitals that can do volumes as opposed to threatening with claw-backs. If the QBPs are not allowed to net, that puts us two steps backwards based on the funding strategy. [Healthcare leader group 4]

As difficult as this would be as a conversation, is to really start talking to the public as an

career forward. Taking people that are within striking distance of being qualified and ready to do something, and helping bridge the gap and get them ready so they can. [Patient group 1]

If a nurse, for example, wants to be an ICU nurse, it's not easy to do that. You need support, you need money, you need time to go through those education course. If you want to address the shortage of staffing, it's allowing the nurses and physicians to be trained in a timely manner and not making some ridiculous reasons that 'sorry you worked only 5000 hours, we needed 9000 hours for you to work as a nurse.' [Patient group 1]

This is kind of wild but, we have different levels of nurses, three-year trained nurse, registered nurses, and then we have practical nurses who can prescribe medications. Could we have a new role related to surgery where we don't have to have full-fledged surgeons, taking on a role between a doctor and a nurse practitioner. Like surgical-trained nurses that can do smaller procedures, just like the nurse practitioners can prescribe [Patient group 2]

Train up staff that may not be as in demand as others for one reason or another, and have them redeployed into areas where they can cut through the backlog and other procedures. [Patient group 1]

Maybe you've got somebody who's got an ingrown toe nail, not to minimize the seriousness of that for people have had it, but maybe you don't need a specialized surgeon to deal with certain surgeries that are maybe simpler to do. [Patient group 2]

<u>Expedite licensing foreign-trained clinicians</u>
There are quite a number of international physicians who are trained so I think that may be an untapped. [Patient group 1]

Streamlining the process for already-qualified physicians and surgeons from other countries, who are here to become certified to be practicing medicine here. [Patient group 2]

Bringing in other medical personnel from other provinces, other countries on temporary basis. [Patient group 1]

There's a population of international physicians who often have a

adult and saying what is actually medically necessary to do and should be funded. And what are some things that unfortunately nowadays we just can't be doing this for everybody under health insurance. And so we're just not going to be using OR time for things that are just not medically necessary to do anymore. [Healthcare leader group 3]

<u>Verify who is really on the wait list</u>
We've actually embarked on a process to verify the actual number of patients on the waitlist. I think it was done in [province]and they found that when you made systematic phone calls to everyone who's on your waitlist. It turns out that up to 30% of them actually are not waiting for surgery anymore. Some don't need surgery, they've sought other means to fix their problem, some have died, some have moved other jurisdictions etc., etc. We're more than halfway through that systematic process and it turns out we may have somewhere between 30 to 40% of names on our waitlist who are listed as backlogged patients who actually are no longer in that pipeline so I think understanding the accuracy of this, this is a challenge and it's really important. [Healthcare leader group 2]

So, one is to really quantify backlog. How do you know something is on backlog? We have some information in [province][province], things like waitlists and stuff, wait times. But that doesn't really reflect the true backlog as you heard just now. There's people who have not really gone to primary care. So there's an element there that we're missing. [Healthcare leader group 2]

So we have these priority access targets in general surgery for non-cancer, there's this wait time 4, something you have to get done within 180 days, but I think that if you ask surgeons, there are a lot of people on that wait time 4 list who are minimally symptomatic, it doesn't impact on their well-being or their work, and they probably don't need to be on the list so I think that is something we need to look at again. [Healthcare leader group 2]

<u>Analyze wait time data accurately</u>
Understanding the data and understanding what the true numbers are with the true wait time for each category of patient. And that's when we really had some power and some sense of control and really be able to advocate is when we looked at the actual data. And so getting to that data seems to be difficult sometimes. But I think, I think it should be a big part of the communication piece. [Healthcare leader group 3]

Now the priority is urgents and long waiters, but the reality of what happens at the hospital level is urgents are getting in and long waiters are not. And we dug into it to find out why by looking at the systems that they're using to allocate OR time – they're using lighthouse data [system that flags if patients are outside accepted surgical wait benchmarks]. If urgent is a day over benchmark, they immediately get put in, whereas a non-urgent – not elective but scheduled for 12 weeks – they could be three times their benchmark and they don't [get

hard time getting resident spaces because they're competing with our medical students who are fresh out of medical school. [Patient group 1]

SEND PATIENTS ELSEWHERE

Send patients out of province or country

Is there an opportunity in the short term to create some partnerships with some institutions in the US to manage some patient care? Maybe you have to give people the option for that, obviously you don't want to force anybody to go out of country for care, but maybe there's some options to expand capacity temporarily through these partnerships. The most obvious thing would be inter-provincial right but I'm assuming that's already been explored. [Patient group 1]

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With the surgery that I had, I think about 15 years ago, it was not readily available in [province] and they were flying patients to the US to have the operation done. And OHIP was covering it. So if you have to wait an outlandish amount of time in [province], why can't they send you to out of province or even out of country. [Patient group 2]

Could we do a big push, just to catch up, of out-of-province care for all the people who have waited for more than, let's say, 10 months for something that really affects your life. And you're going to be flown out to another province or another country to get the care so that we can catch up to pre-pandemic levels. [Patient group 2]

IMPROVE AND EXPAND SERVICES

prioritized]…more waiting. So we've kind of realized that there's a big problem there and we're trying to advocate for the long waiters but it's [done] at the system level through the benchmarks [Healthcare leader group 3]

When we're looking at data, really look at apples to apples comparison of data. There was a legislation change, where the surgeons now have to do the history and physical for the patients. So when you look at Wait 2's, most of those Wait 2's look very short, it almost doesn't seem like there's a concern, but we're not looking at all indicators and all pieces of the puzzle. So really having a comprehensive scorecard per hospital that takes into account the wait times but also other procedures. [Healthcare leader group 4]

Provide surgeons with data on their wait times

I'm the provincial lead for the wait times for benign general surgery, so non-cancer. We actually collect information on all the cases and know what the wait times are. We used to have dashboards that went out to individual surgeons about their activity. I think that has diminished since then. They were very effective because they told individual surgeons what was in their queue and what their wait times are. That information to individual surgeons, plus to the surgical leads, the surgeons-in-chiefs would be very valuable to help individual hospitals deal with their issues. [Healthcare leader group 2]

Triage those on wait list to other services for management

Interventional radiology can offer some procedures that avoid surgery. I think in the chronic pain world that's also you know there are some procedures that interventional radiologists or anesthesiologists can offer, but often the connections aren't there so patients will be in a surgical waitlist but they can't access those other people. So if there was a more streamlined pathway and kind of guidelines about you know what you do first and what you can access that would certainly relieve surgical lists. [Healthcare leader group 3]

Restart wait list counting

Stop counting, start from scratch. I remember sitting in a radiology presentation, they were talking about the backlog of mammography, and they were showing a slide that said by 2035, we will have caught up to less than 10,000 mammograms and I thought to myself how incompletely clinically significant that was. [Healthcare leader group 3]

I like the idea of starting from scratch. How do we know what these numbers mean? I'm not I'm not minimizing the problem at all, but I'm not sure that we can look at these numbers and react appropriately. To give you a bit more concrete example of that, you're all familiar with the P1 to P4 priority categorization for access, right? We can all distinguish between what's a P1 versus P4 on the oncology list, but we can sit in a room and I can argue for you that this is a P3 and you can argue with me that it's a P4. So there's a problem I have with these numbers. There's a massive conflict of interest as well, that we work in a fee for service

Improve efficiency and coordination Is there a way for us to optimize surgeons' time? I don't know what exactly happens at the day of life of a surgeon, but so that surgeons time is used in surgery as opposed to in administrative tasks. So, optimizing their availability. And if we can minimize that so that we can maximize OR time, especially just during this period where we're so backlogged. [Patient group 2] Schedule a surgery before scan comes back instead of waiting for the scans come back, you know that might save some time for sort of a placeholder appointment. [Patient group 1] **E**xtend services All the areas like CT scans and MRIs have to be open 24 hours a day. They might be in some hospitals, but I was up at [hospital] at one point and I had to wait overnight because the CT didn't start until seven or eight in the morning. [Patient group 1] There needs to be more resources, because I was supposed to have an MRI in two weeks. And now, because it's only available at that specific hospital and it's booked, they have to postpone it now to January. [Patient group 2] There's a huge need in the eye care side of things, and they're reducing and reducing the number of services that are covered by OHIP. So could we reverse that trend? My mother-in-law got her cataracts done at a private clinic a few years ago and she didn't wait, she paid 800 bucks and boom, boom, done, no problem. So can we expand that to reduce the backlog in hospitals and put more people through? [Patient group 2] **FUNDING** Fee for service Pay per cut, if you will. The ones who are paid on salary, they'll do what they can within the time that they're there. Whereas the ones that are per surgery…incentivize them somehow to do more. [Patient group 2]	model. If the only thing [surgeons] can access is P3's, then their cases are going to start becoming P3's, appropriately, because they're going to look after patients and they also need to be employed. [Healthcare leader group 3] Centralized referral One alternative would be each institution publish, by specialty, their waiting time for the benign surgeries, for cancer surgeries, etc. That helps practitioners to send patients to certain institutions and help with the backlog. So to have central information about that. It may help in sending patient to a centre that has less cases, less waiting time than the others. Not always is going to work because some of the patients are gonna need the high complexity hospital, but may help a little bit. [Healthcare leader group 1] I'm not sure if there is an organization already to gather this information about waiting time. It would be interesting for any practitioner to go there and see these are the waiting times and we may change next month or periodically as we feed them. [Healthcare leader group 1] One suggestion is to collect information about the waiting time for the most common surgeries performed by specialty through a time benchmark. As example, in general surgery, a benchmark for hernias would be 6 months, the number is matter to debate, just example. Hospital would report to a central organization how is their waiting time in regard the benchmark: below or above. Who would store this info? Possibly someone that would provide public and physician access. Therefore, the GP would know which hospitals would be in adequate benchmark for their patients and give preference to send those ones. [Healthcare leader group 1] We need regional coordination, some sort of wait times strategy that would look at coordinating these things in a regional level. [Healthcare leader group 2] I know that there was a centralized list for cardiac surgery that worked well. What we do, for example, is to say, 'you can wait six months with Dr. X or you can have Dr. Y in a month. Your choice.' [Healthcare leader group 5] Having some digital mechanism to facilitate referral, and I think that's a great way to streamline, a single entry point for patients, making it really easy for patients and also emphasizing patient choice if they want to get the procedure done sooner, they will switch surgeons to the next available surgeon, or if they want to remain with their surgeon that they did the pre-surgical consult with, they have that choice. [Healthcare leader group 2] Our centre is a larger regional center and then we've got four smaller hospitals in the community, and they don't have the wait times, they're getting all their patients done, they don't have a backlog. So senior leadership has floated the idea of a regional referral program

Solicit private funding/donors
We need to be innovative by working with private sectors to improve clinical workflow, because the money is there. One organization got $25 million to build a new building. [Patient group 1]

LEARN FROM PAST PANDEMICS, OTHER COUNTRIES (to better manage future pandemics)

Pandemic management, whether it's COVID or one in the future, they certainly need to reevaluate how they manage that. For some reason, they threw out anything they learned from SARS or H1N1, all those mini pandemics, and went with some new model that really didn't help anybody. [Patient group 1]

Learning about what other systems are doing will be really important. What other similar countries are doing. [Patient group 1]

Different countries have faced similar problems or continue to face similar problems. Are we hooked in to these global initiatives, seeking out best practices? [Patient group 2]

MANAGE THE WAIT LIST

Use data to identify bottlenecks
They may want to track and find the bottlenecks, start to finish, in the process of getting a surgery. It also would determine times… this typically takes six weeks, this takes six months [Patient group 1]

There's the 1% that uses 30% of healthcare services so they are highly complex patients like myself who need specialized care. It needs to be separated between what's causing the bottleneck and what's causing the backlog. Is it just lots of people who need elbow surgery or is there some specific areas of specialty surgery that's needed, whether it's cardiology, oncology and endo or otherwise? Separate those out from, you know, the regular person who tears a tendon, which can happen to anyone at any time. [Patient group 1]

A lot of scientists are doing great work in analyzing health data, and looking at trends and patterns. At [hospital], they're even able to predict when the emergency room will be busy by the hour. So, how

for things like ortho. [Healthcare leader group 3]

I actually have no concern at all about patient worry around autonomy and the single entry models. I can tell you from 17 years of experience of doing relatively major abdominal surgery with associated mortality that patients, in general, if it's done well and expectations are set appropriately right from the beginning, that most patients are okay with that. They don't want to be surprised and last minute find out that they don't know who's operating on them, but the solution to all of this is going to be team-based care and part of it is, how do you build the most like high performing teams right. [Healthcare leader group 3]

I was just going to add for the primary care piece. You know, we started a motion A referral, with our all of our primary care physicians during the pandemic. And that allows for them to access the wait times and the first available surgeon. So that, across the system, would be very beneficial for the primary care physician to understand who has the shortest wait times. [Healthcare leader group 4]

You've alluded to this idea of regional integration, moving cases out of the mothership, so to speak, and it's a really interesting exercise to get everyone to come to the table for the benefit of the patients. They still have their own senior management teams, their own boards, their own financial structures and so it has been a really difficult exercise to get people to really pull together and recognize that everyone can play a part. [Healthcare leader group 2]

We're trying to look at a province-wide wait list system to look at if I can get my [procedure] done in [city] because it's a shorter waitlist. [Healthcare leader group 5]

INCREASE POOL OF HEALTHCARE PROFESSIONALS

Need more staff of all specialties/staffing prediction models
We often talk about OR nurses, they're critical for sure, but you can't do anything without recovery room, you can't do anything without day surgery nurses. You can do some things without increasing in-patient beds like your same day optimization of joints and gyne patients and things like that. You need more diagnostic imaging techs. It's not just one particular professional that you need. And I think there's a lack of understanding of that. [Healthcare leader group 5]

There doesn't seem to be good coordination of forecasting of health human resources, between the Ministry of Health and Long Term Care and the Ministry of Education. What I'm hearing is that people can't get into, for instance, the nursing programs when we have a real

can they apply that kind of thinking and analysis to the ORs, based on if they increase the capacity, put more ORs, and then come back to the patients and say 'hey, there's a backlog but based on what we know today, we think we can fit you in around that week, or that month.' So you kind of have an idea, and as you get close to that date, they will update you on 'yeah we thought we would be that week but it's going to be delayed an extra two weeks' or whatever. [Patient group 2] Predictive analytics. Leveraging that to model and manage the ORs and the access and expected wait times [Patient group 2] <u>Re-assess how procedures are prioritized</u> Patients and families like ourselves get confused with the words unnecessary, elective, scheduled. A heart surgery may not be considered necessary but might be more urgent and may not be elective. Someone who might be active in sports might say I don't want to wait one year, I want surgery now so my daily living is improved and I can go back to sports. Similarly, somebody who is senior might say the same, but they may be prioritized differently. So defining unnecessary based on patient family perspective will be very important. [Patient group 1] <u>Centralized referral</u> I like the single entry. It should be anonymous and based on either your health history with a certain hospital or your location, if you're far from a hospital, what's the closest, or where there's a specialist for your specific condition. But not playing like a dating game of choose your own surgeon, because that could be risky as well and then you end up with the same thing, the popular ones, all the people choose them. [Patient group 2] Usually in hospitals there's many different doctors within the department that does the same type of surgery. If we say that person has 20 people on the waitlist and you only have seven, is there any way that we divvy it up so that it can be a little bit more even to reduce the overall wait time? [Patient group 1]	and present current danger nursing shortages. [Healthcare leader group 5] There's no proactive methodology, about what the real number of staff you need. Because all of those staff that are hired have vacation, they have predictable average sick days per year, extended medical leave days, education days, annual competency days. Plus, your projected mat leaves, also projected retirement. Where's the larger overarching methodology in order to predict future needs. And the reason why that is so critical is because it takes so long for these personnel to be trained to complete the course, complete the lab work, complete the clinical placement, and then do their orientation and when they're brand new to the operating room, it's you know four months of orientation. So, in order to grow a new operating room nurse, it's basically a year, at least between sort of posting and getting them through all of those pieces. So there needs to be much more proactive methodology, and then permanent funding, in order to maintain services. [Healthcare leader group 5] <u>Employ alternative roles / expand scope of practice</u> Whether it's physician assistants, whether it's nurse practitioners with the anesthesia training, RNs that can administer anesthesia with the supervision of anesthesia, and really looking at new models of care that don't rely on one particular health profession but a coordinated team to increase the throughput through the ORs. [Healthcare leader group 2] One of the things we need to have is the courage right now, and this is going to require leadership at many levels, to start looking at alternate patterns of staffing ORs. In our operating rooms, we have a heavily unionized environment. The OR nurses are either RN or RPNs. I spent probably the first 10 years of my career in the United States working with scrub techs. So these were not necessarily nurses. Many of them were post-military people. Outstanding people in the operating rooms, very skilled at what they did. Not terribly versatile, they might be cardiovascular, they might be orthopedics, very specialty specific. This would require taking on unions and so on and so forth but I think the circumstances require that we consider this really seriously. (Healthcare leader group 2) Scrub techs was what I was used to working with, and they're incredibly good. We did address this briefly, sort of mid-pandemic, and it's a land mine. I didn't realize it was going to be, I just thought it was a normal thing to discuss. It's unions and this and that. It has to come from top down because when we try to address it from within, all it did was create more conflict and low morale, and it actually took an unstable system and made it a little bit worse briefly, so we kind of abandoned it. [Healthcare leader group 2] The biggest limitation, other than surgeons, is allied staff, nursing, PAR nurses, people to sterilize the equipment and all that stuff. If you don't have them, you can't increase your supply, but unfortunately it's not a short term solution. [Healthcare leader group 3]

	In terms of increasing surgical supply, there is a shortage of anesthetists as well so perhaps looking at innovative staffing models and reinventing the operating room staffing model. [Healthcare leader group 4] I agree with the reinventing operating room staffing models. We need to get really innovative about reintroducing a couple of things like anesthesia assistant roles. The province used to fund AA programs, whereby they pay for a third if you paid for two thirds. They stopped that years ago, so we have to quit looking at sole practitioners that take four years minimum to make, eight if you're talking about an anesthetist, right, even without a fellowship. So we need to start looking at augmented programs like NPs and AAs and potentially even technical assistance to do scrub roles. [Healthcare leader group 4] I agree, we have to look beyond the traditional RN, RPN roles within the OR. [Healthcare leader group 4] I think down-skilling is a charged word. I see it as rather skill matching to the appropriate level of care required. So, if you're going to recover ASA 1s and 2s, you don't need a critical care PACU nurse to do that. But you do for ASA 3s and 4s, so I think it's a valid fear people have like, if it required 4 years of education before, why all of a sudden are we going to take somebody out of high school and send them to three months of TA school and then that's good enough. I understand where the fear of quote unquote down-skilling is, but I think if we could look at it as everybody working to their full scope of practice and skill matching to the acuity of the patient, which has to do with some surgical streaming, then it's no longer down-skilling. If I'm having a minor procedure, I don't need a critical care PACU nurse, that is a waste of resource. But in big organizations and in big health systems, we tend to go to the highest watermark because we think it's the safest, we don't stream because that's just too much work and too much chaos. Even changing the vernacular would help people understand that we're not down-skilling. We're working everyone to full scope of practice, which is professionally fulfilling for them as well as safe for the patient. [Healthcare leader group 4] That's the main message here. You can't want NPs on your wards, so your residents don't have to go up and write orders every 10 minutes, and then try to say that we're down-skilling somewhere else when we're matching. So like you can't suck and blow. I just want that in red in, that document. [Healthcare leader group 4] <u>Provide on-the-job training programs</u> Traditionally, nurses interested in doing [further education] would take an unpaid leave from their work, they take a course at college or go to an OR training course, and then they come into the hospital and do a preceptorship, and it would take maybe nine months or more before they're fully approved and functional. So we've put an in-house training program

	where their tuition costs are covered, they don't take an income hit and it's expedited so they're ready to work in less than six months. [Healthcare leader group 2] The big issue we facing I'm hearing anyways is the human resource issues. So, the in-house training of nursing staff, I know through the surgical innovation fund. There's a lot of desire now to use some of that money to train staff. So I think that has to be number one. [Healthcare leader group 2] <u>Increase rate/volume of health professions training</u> We're going to need to train more nurses, we're going to have to gear up the schools that are training them. But that's not a quick and easy thing. [Healthcare leader group 1] Human resources is the biggest issue for us right now that we're battling across all the hospitals. We've started to do innovative things with having courses between multiple hospitals. But I hear stories that we just do not have enough nursing spots in the universities. So, we need to look at that as well because the shortage was predicted and just exacerbated by the pandemic, but we're not going to get ourselves out of this for quite a long time. [Healthcare leader group 4] Absolutely first and foremost we need more RN and RPN spots in colleges, and that should have started when the pandemic started, but instead we're still talking about it now when the pandemic is winding down. But it takes four years to make an RN, two and a half years to make an RPN. They need to integrate specialized coursework into base degree curriculum. Because if you need to go to an ICU or if you need to go to an OR you need another three months to eight months of training after an RN degree or RPN diploma to get that specialized training. So if even some of the elective coursework could be streamed in the colleges or universities, it would at least have them out at the end of their base program ready to work in a specialty area, and they could replace some of their electives without cutting down on their core nursing curriculum. [Healthcare leader group 4] This year, there's so many nursing students that couldn't graduate from different schools. We took almost 800 nursing students at [hospital] and tried to give them a placement of some form. Just don't allow that, don't allow schools to not graduate students because they couldn't find placements. Make it work. If anybody came to any of the surgical directors, I'm sure we would have put our heads together to come up with a plan of how we could support these nurses to have a clinical experience that was meaningful and graduate. Because the less number of people that graduated last year has created an even bigger issue. So it's almost like yes we can work on all of these things operationally, but it is so important to pull the educational system into this as well. Because we'll never go ahead. [Healthcare leader group 4]

	Incentives/support to retain nurses We're trying to support each other so that we don't see teams leaving. We've lost a lot of leaders in our building just from the workload and the stressors. We've seen leaders leaving for a different career path, working from home, having a little bit more flexibility. [Healthcare leader group 5] And the human resource component of it, and our inability to acknowledge our leaders through compensation or even acknowledgement, is very difficult to keep people within the organization. I have never seen so many people leave. Our work force now is so junior, and the patients are so sick. We have to do our work differently. [Healthcare leader group 5] How can we retain nurses? We've done stuff here that we never wanted to do before. If you look at the new research literature of leadership in crises, you need to increase your flexibility. We have no flexibility in healthcare because do more for less has always been one of our things: be efficient, pick up another unit, what's the big deal. And I think nurses are tired. [Healthcare leader group 5] There needs to be some permanent funding. The difficulty, when you get temporary funding, is that is only annualized, you cannot as an operations director attract staff into temporary positions. [Healthcare leader group 5] You need permanent funding. With contracts, people look for permanent positions and so you lose them. You get them trained and then we lose them. And any downtown hospital looks great on a resume. They can go anywhere from that point on, especially as a new OR nurse or as a new pre-op nurse. [Healthcare leader group 5] They say money is not everything, well I think money is a big part of it. We need to value our people and pay more. I mean, we can pay basketball players $20 million. What is healthcare worth to people? [Healthcare leader group 5] I have never seen so many complaints and people leaving because they're being yelled at all day by patients, families, what they didn't do right, that has to stop too. I know people are frustrated, you go to a store you get hit almost by people. There has to be an awareness, everybody chill out, we're starting fresh, the rules apply again, and you're not allowed to do these things. So I think the people are leaving because they can't take it anymore. [Healthcare leader group 5] Working in a downtown hospital, there is a premium that should be paid. It doesn't matter where you work in [province], your hourly rate is the same. But commuting into [city] or living in [city], there's a price differential. And we can't attract people because they can get a community job, short commute, cheaper, it may be free parking, or a lot less than it is to

	come downtown. You're not going to be able to attract them anymore. [Healthcare leader group 5] It's Bill 124. Even though we're not unionized, now we can't do anything, you can't even give them a meal voucher because of Bill 124. Bill 124 is going to kill it us. [Healthcare leader group 5] [Bill 124] is a policy stating that if you are a provincial funded position, there's zero flexibility to provide any increase in pay other than a 1% increase. So you can't pay people 5% or 10% above, it's illegal. You can't give them a meal voucher or parking pass, it would have to be out of donated funds. [Healthcare leader group 5] I think it'd be really interesting to understand all of the incentives that were provided to intensivists and other physicians who were working during the pandemic and what sort of incentives were provided to other leadership during this time. [Healthcare leader group 5] I remember anesthesia being paid or anybody being paid to work in ICU. And then when my NP went to long term care, I don't think there was an incentive. And I even had to fight to pay her mileage. [Healthcare leader group 5] We're struggling with our resources, nursing in particular, but I feel like we're stymied in terms of incentivizing when we have a lot of new people coming. I think we need actually probably double what we need. We really need better incentives to hire people, and to retain them. [Healthcare leader group 2] Is optimal to increase not just the human resources but the morale of the people who are there and the retention because that was the issue that preceded COVID, we were already pretty precarious in many hospitals on our human resources and morale for retention even before COVID and I think that's where it really broke down during COVID. [Healthcare leader group 2] There's a competing phenomenon where nurses are looking for balance. They've said 'we've served for 18 months, I've got to find something that's a little bit easier, maybe closer to home, I can get out on time.' Nurses that have been here 10, 15 years have decided to leave the OR. It's too hard to work, the days are too long, they've done their tour of duty being redeployed. And 85% of the nursing workforce is still female, their families are in distress, and now they've got to figure out a new life balance. So we don't have enough staffed beds, and therefore we have closed beds. Or we can't staff the full complement on any given shift of beds, and that causes us to temporarily not fill those beds, which causes surgeries to be canceled. Even if they're not canceled, we do a lot of shuffling here, it puts the OR on hold and then the OR times out, because again, the OR nurses need to leave on time. [Healthcare

	leader group 4] We're pretty stretched thin at this point. Any more stretching is going to break the nurses. And then the big piece about burnout, because no one's really talking about it and there's no real strategies coming out to address the burnout. We've taken procedural nurses and put them in ICU. We've taken nurses who were used to seeing well patients and put them in ICU with COVID patients and some of them do have very real PTSD. And some of those mental health pieces, there's no resources to manage them given the backlog with mental health as well. [Healthcare leader group 4] We need a provincial strategy for PTSD in healthcare workers. It's showing itself right now in movement in our system and staffing. But that's just the surface, that's the reason people are leaving and moving and choosing different careers, retiring, trying to find a better quality of life at another hospital, even in similar jobs. But the underlying problem is burnout, and to some degree, that the gravity of burnout with the far end of that spectrum is PTSD and mental health issues and what will be healthcare staff for years to come, and I don't think it's shown itself yet. [Healthcare leader group 4] When COVID hit and there was a need to expand ICUs, the only way to expand the ICUs was to take nurses with critical care training. And so they were pulled out of the recovery rooms of ORs and ORs had to close. And then what subsequently happened is a good number of nurses have left the profession. So what's happened in [hospital] is any nurse within three years of retirement has either retired or gone part time. And then there's others who were younger who have just left the profession. [Healthcare leader group 1] One of the things we might look at is an incentive for nurses to come back. If in [province] they offered a bonus for nurses to come back into the profession, you know maybe people would be willing to come back. [Healthcare leader group 1] <u>Expedite licensing foreign-trained clinicians</u> Try to get internationally graduated nurses, try to adapt them to the Canadian system with some timely consideration to eventually help the system. [Healthcare leader group 1] There's an untapped resource in international medical graduates. [Healthcare leader group 2] **IMPROVE AND EXPAND SERVICES** <u>Extend and expand services</u> We almost always operate on weekends because of how many patients we have in the hospital. [Healthcare leader group 2]

	We're doing weekend surgery, so it's expanding from five days a week to six or seven days a week model. [Healthcare leader group 5] We learned that the opportunity to increase flow was to actually have the operating rooms run seven days a week, but to get the seven days a week was a challenge. [Healthcare leader group 2] We need regional coordination, some sort of wait times strategy that would look at coordinating these things in a regional level. [Healthcare leader group 2] We're talking about surgery, but we should also take into consideration all the diagnostics and support services that go along with the surgical backlog which is imaging, the CT scans, the MRI, labs. And so if we really want to increase the surgical flow we also have to look at those support services that enable those procedures to get done. [Healthcare leader group 2] The wait times for all the diagnostics are backlogged as well. So we do need to look at that around you know their hours of operation, their staffing models, because, you know, we need to have the MRIs, the CTS to to get our patients diagnosed and back into surgery if required. [Healthcare leader group 4] <u>Increase bed capacity</u> We have areas in the hospital that could be used that were patient care areas. So focus on being able to expand hospital beds because there are patients who just can't get home. Expanding that even temporarily until we get through the backlog so that we can get through the patient cases. [Healthcare leader group 2] We need to make sure that there's capacity and we don't fill up with the emerg bed because medicine can never get their patients out. [Healthcare leader group 5] Patients who need to go home, they go home, or they get charged every day. Because we spend half our day arguing with patients and their families about why they don't want to go home. Now I know it sounds a little out there, but that's where we're at right now. [Healthcare leader group 5] There needs to be some consequences for patients arrive late or no shows or we have NPO [instructions to have no food or liquids prior to procedures] violations from patients coming in. All of a sudden you have unused time that you can't fill on the day. [Healthcare leader group 5] People don't know where to go, there's nowhere in the system to go to. So a navigator

	coordinates all this and it has decreased the ED admissions. But if every big diagnosis like CHF or renal had a navigator to work with the physicians and the patients and the community services, the system would function better. [Healthcare leader group 5] I still don't understand the Ontario Health Teams. They're all doing wonderful things but nobody's doing anything for me and I'm the one who's providing all the resources. So I have to understand how the OHT can work for me. Or eliminate that and give me navigators, that would be even better. [Healthcare leader group 5] <u>Find alternate sources for equipment/supplies</u> One of the things that concerns me about the push to just increase volumes is a huge supply chain issue that we are actually starting to experience now. There's a huge backlog of casting, materials, crutches, surgical gloves. So unless there's alternatives for sourcing strategies, we will probably not be able to operate. So the supply chain piece definitely needs to be addressed. It's very unsteady and very worrisome. [Healthcare leader group 4] We are hearing about global supply chain disruption. And that's fine if you're talking about paper towels at Walmart, but it's not okay if you're talking about core supplies that affect every service surgical service like gauze, gloves, drapes. Already hearing about sutures and chest tubes. Every day, something new. [Healthcare leader group 4] <u>Improve efficiency and coordination</u> If we're talking about efficiencies and throughput, looking at standard practice around surgical packs, limiting the instrumentation, limiting choice, but customizing it to the surgeon will help with throughput in the ORs. [Healthcare leader group 2] Improve the efficiency in the OR. They [surgeons] spend almost as much time waiting for the OR to be turned over and ready for the next patient as doing the procedure. And that's a very inefficient use of resources. [Healthcare leader group 1] The one perennial problem we have in our place is OR efficiency. It just drives you crazy when you look at long OR turnover times, when you look at the amount of time it takes to get ready to actually start doing surgery on a patient. The problem is you only have anesthesia, nursing and surgery who are all reporting to different hierarchies, they're paid through different pots of money, through different mechanisms, incentivized in very different ways, and it is really, really difficult to get everyone to pull together to focus on the issue of maximizing OR throughput. These are not new challenges, but, you know, how do we overcome this now in the interest of getting a huge backlog of patients taken care of. [Healthcare leader group 2] The truth of the matter is, fundamentally, we do not have a health system. What we have is a

publicly funded health insurance for most physician services, for hospital care and some drugs for some people. One of the things that we've tried to do is put out funding for innovation in models of care. The solutions were brilliant, but they were based in a single clinic or a single hospital. The challenge is scaling it up, getting it beyond the individual hospital or clinic. That's where we need to try and incent these changes. I don't think it's the whole answer but it would help move forward. [Healthcare leader group 2]

The right case with the right surgeon in the right location. Not all cases need to be the tertiary care centre and yet people are traveling. There should be better systems to establish what the needs and demands are in certain regions and what's available there and prevent all that traveling to tertiary care centers. [Healthcare leader group 3]

We talked about the regionalization model in our hospital a while back, and it's thought to be a very good idea in theory, but in [province], this will have a significant impact on hospital budget because it would give the appearance of, perhaps correctly, that smaller hospitals are cherry picking the easier cases to do, while the tertiary care hospitals do the big expensive cases. And that can directly impact on hospital budgets. It's a very good idea and could be operationalized in a relatively short time, but there is an impact from a hospital perspective. [Healthcare leader group 3]

<u>Monitor surgeon up-skilling, compliance with standards</u>

Up-training surgeons. For example hysterectomy has been a procedure that's basically routinely done laparoscopically now, that change happened in the last 10 years, 15 years, but there's still some surgeons that just didn't bother to train to do it and are still doing it abdominally requiring more resources, more postoperative time. That requires fairly more stringent oversight, and I don't know if in other specialties and surgeries that still happens, but there's probably still some holdouts that haven't really gone the MIS route. [Healthcare leader group 3]

FUNDING

<u>More funding for hospitals</u>

Hospitals have been running on a 25th percentile year after year after year after year. So what is available to most departments these days is a fraction of what was available 25 years ago. This pandemic has just brought this to the rest of the public. They weren't affected previously now they are. The answer is to start looking at better funding for hospital facilities so that there is the ability to, first of all, hire more nursing staff, and there is also not enough operating time for surgeons in this province in any specialty. The government needs to start looking at how they are dividing their funding. [Healthcare leader group 1]

There is no cushion in the Canadian healthcare system, everything was running at 100% prior

	to COVID. The lesson in this is we've run the system on no slack for the last 50 years and getting worse year by year. That's what we will all have to decide in Canada, do we want to pay more taxes to have more slack in the system? [Healthcare leader group 1] Provide funding for additional operating room time, either extended hours, weekends evenings, etc. That was talked about quite a bit a few months ago, and then seems to have died down significantly and I asked our CEO recently, and to his knowledge, there is at this point in time no additional funding coming for extra surgical time. [Healthcare leader group 3] Government needs to strategically fund a package program tailored to individual organizations for surgical recovery and that might look different site to site. [Healthcare leader group 4] We haven't formally been afforded a surgical recovery budget over and above global. My understanding is that there is no accountability agreement. Like, the ICU beds came and we would get a letter saying that the Ministry of Health was funding 14 more ICU beds. Well, hold on. There's pre op, there's post op, there's PACU, there's regional room that needs to block the patient, and, and, and there's beds, which now are filled with COVID patients and nurses redeployed. We have yet to receive that for surgical recovery. I'm running a $15 million deficit in the surgical program with no funding source. And yet everybody's talking about surgical recovery. [Healthcare leader group 4] The other thing I'm deeply worried about is the money spent in COVID, I'm worried there's going to be a financial hangover, and they're actually going to start to carve considerable amounts of money back out of healthcare. I'm already hearing words like service planning in our organization, which is cuts. I'm really worried they're going to tell us to do surgical recovery but ask us to save $5 million out of the portfolio. [Healthcare leader group 4] <u>Bundled care model</u> Bundled care works for certain procedures and specialties and it doesn't for others. So, pre-op, the procedure, post-op, which includes home care, and include primary care because I know primary care is not included in the current bundles. So that there is a price set for the entire journey of care and all the partners involved in that care. So the partners are jointly incented to get that patient with the best health outcomes, close to home. I thought the Ontario Health Team would work in that kind of lens. We have to look beyond surgery and surgical backlog in terms of the journey of care. The model of care for me is not just the surgical model of care, . It's the entire model of care. And we have to pay for that. [Healthcare leader group 2] It's a mind blowing concept, idealistic, but this is where the current negotiations around

	physician reimbursement - I like the idea of alternate payment plans - but there's gotta be some sort of give around the idea to put all the money into the pot for this procedure or procedures and see how it plays out. So not the traditional bundled care programs that are in place today, it goes beyond that. I fully recognize the evaluation of bundled care is inconclusive, whether it's truly cost efficient or not, and whether it's actually best for the patient or not, but I'm just putting it way out there. [Healthcare leader group 2] <u>Physician funding models</u> We have excellent people but they all work in their own silos, we are not integrated as a system. It becomes a turf war and a matter of losing business and revenue because we work fee per service. If we could take this step forward so that physicians work on an alternate payment plan and get rid of these petty concerns, maybe we can work towards really programmatic work rather than having our individual turfs [Healthcare leader group 2] Surgeons to be able to bill for some of the diagnostic procedural work. For example, our surgeons can't do FIT tests. So the patients get diverted to endoscopy without a FIT. That's just an example of something that if you change the billing codes, that could allow for more preventative work to happen, or at least a way to catch a lot of these things when the patients come to the surgeon. [Healthcare leader group 4] How do you eliminate this competition between different surgical services? There's couple of ways. You put everybody on a salary with expectation of call commitments, vacation, etc., just like a government employee. And the other one is that you have a scoring system for all non-elective, sorry, not urgent but scheduled surgeries. that factors in quality of life, mortality, and you basically score patients, and then based on that, they get access. If you really want to get to the truth in terms of what's urgent in terms of priority from, we talked about suffering, oncology versus non-oncology, maybe if you took that off the table then you'd have a system that would more appropriately represent patients needs. Because we're not gonna be able to look after everybody. And so there's gonna be some tough decisions to make and maybe our funding models don't help us with that. [Healthcare leader group 3] Salaried. I believe in that for a whole number of reasons, being a female in surgery. So salaried for all surgeons would be great from my point of view, you can leave the female part out. [Healthcare leader group 3]

Concerns with recommendations discussed

Themes	Patients/Family	Healthcare Leaders
RE Same-day discharge	[related theme: conflicting messaging] I was told by an anesthesiologist that I should be absolutely staying overnight because of a heart condition that I had before my procedure. The day of the procedure I was given information about having somebody come by to pick me up. I was told by a nurse as soon as I woke up that I was supposed to leave the hospital immediately. When I told her this was problematic, and that it had been going directly against the orders the anesthesiologist, she came back to me and just said no, you're out, you're not staying overnight. Gave me no argument no explanation. It was just clearly trying to fit some sort of a rule or target. And she was trying to send me out of the hospital with nobody there to pick me up, or help me get home which was a very bad experience. It soured the good work of a lot of different people. [Patient group 1] I think that a risk for same day discharges is a higher risk of returning to hospital. Right, because if you go out too early, you may not, if you don't have the proper support when you leave, you may have to go back. [Patient group 2]	I think is a good strategy but I don't know how much they can increase without risking standard of care of the patient. (Healthcare leader group 1) For somebody who is at a disadvantage or marginalized, a lot of these same day discharge, it is burdensome for them, and they just can't do it and I think that there needs to be some mechanism to provide health, education, physical help to accommodate individuals who actually can't get to facilities or can't manage their surgical procedures on the same day basis. (Healthcare leader group 2) [related theme: conflicting messaging] I found has been really difficult culturally because if people do the same thing for a million years, I'll just give you an anecdote which was yesterday I did a surgery on a nine-year old, and I actually like to send them home the same day because I find that they get less confusion and so on. We did him under local anesthesia there's no reason he couldn't go home. I prepared the family for that they were ready to take him home. But when the pre admin area called them beforehand. The week before surgery just to go over their meds and everything. They told them Oh no, you'll stay overnight, because that's how culturally we always do it even though it's written all over the chart with it's the same day. So messaging is so important. I can tell the patients all I want and I can tell the other locations that interact with them, but unless culturally everyone is thinking about these things. They'll just fall back on keeping the patient because that's easier, honestly [Healthcare leader group 2]
RE: Centralized referral model	I think one of the concerns people have is being forced to go to maybe a surgeon they're unfamiliar with or facility they're unfamiliar with. I think right now we generally have control over that. I think it would be worrying to people if they had to travel or be with somebody unfamiliar so equity issues and then also just patient comfort. [Patient group 1]	I'm not sure if I would like to favor a patient to go to a surgeon that I've never seen. I know that there is a personal level in the matching and surgical treatment, so I'm not sure if the patient is going to like it. …One of my colleagues said something that I thought was very timely for this. He said, family physicians love single entry model unless it's with their own family. [Healthcare leader group 1] Say you're talking about a single entry model, where patients wouldn't necessarily meet the surgeon they're going to be operated on until the day of surgery. I think a lot of surgeons would have a problem with that. [Healthcare leader group 1] Yeah, a provincial single entry or a city single entry for certain I'm not sure if I would like if I were a patient to go to a surgeon that I've never seen I know that there is a personal level in the matching and surgical treatment, so I'm not sure if the patient is going to like it. [Healthcare leader group 1]

		When you start to look at divvying up surgeries among a group of surgeons versus the one contact model you actually not only lose trust but increase medicolegal complications. [Healthcare leader group 1] By doing that, you remove autonomy for patient decisions of where they want to have care with who they want to have care. And so I have a little bit of a concern about that as a concept. Yes, it makes sense to increase rapidity of procedure, but there's an ethical concern I'm not saying that it should or should not happen. just bringing it up for discussion sake. [Healthcare leader group 3] I think the regionalization, you could...the surgeon is losing their autonomy with that, and it's a shift in their referral base, depending on what they're used to. [Healthcare leader group 3] It also might negate access for certain more complex cases to, you know, the surgeons that have more experience. That goes along with the divvying up amongst surgeon single entry. I think, in all our specialties there's probably some level of cases that require that surgeon that has maybe more tertiary care experience with it and if it becomes a little bit more difficult to triage and make sure that the right patient gets to them and they're not blocked at the regional level because that surgery is named a surgery that should be done in the region. I think there's there's a danger of that. [Healthcare leader group 3] The other one I would have is the [Nonprofit organization] idea. Again I completely agree with that from a medical perspective. My only concern is the question of who's going to be doing the adjudicating. It's one thing if physicians individually are asked 'please use [Non-profit organization], use your specialties criteria to make sortable decisions', totally on board with that. If you start having hospital committees and administrators of the government, talking about that to us, I would have a very serious concern because of losing more autonomy for physicians' work lives and I would have to juggle this point. [Healthcare leader group 3] NOTE: org that helps reduce unnecessary tests, procedures etc.
RE: Extended hours	You also don't want burn out, you don't want the surgeons to burn out. So like further to her point like, you know, don't preoccupy his time with anything. You know, like extended work hours, like, you know, they shouldn't work more than like 12 hours. Like I heard like some surgeons that worked for like 36 hours straight. They don't sleep. Um, so that kind of affects the level of care they, they provide. [Patient group 2]	We increased the days for operations in the past and now for Saturday as well. The problem is that nursing staff is extremely hard to find to provide the weekends. We try to hire and there is no one available. So, we are close to our limit on what we can offer such as weekend, and even thinking if it's gonna be a viable or continuous solution that you can provide in the next month. But we have a limit on how much we can increase because people are tired of overworking. And we have a limited number of staff as well. [Healthcare leader group 1)

	Incentivising the quantity is concerning in that I would be worried about quality. I don't want my surgeon rushing through my knee replacement. Take your time. [Patient group 2]	[HCP2] I would have to echo the nursing shortage. A lot of the nurses have been seconded to other areas in the hospital. And a lot of the ICUs across the province have been expanded into OR space or recovery room space. So we have kind of dual situation where there's not enough nurses to actually expand the hours, and there's not enough space to expand it into if you happen to be in an area where there is a higher incidence of COVID and more utilization of ICU time [Healthcare leader group 1] When we ramped up last summer after the first wave subsided, we did elective surgery weekday evenings and on weekends, and the impact that it had across our perioperative program is that a number of OR nurses did not get summer vacation. And basically, you know, I think we contributed to the already you know suffering level of exhaustion and burnout that was going on. And we have a severe problem with, with just having enough perioperative staff to do what we need to do. [Healthcare leader group 2] There was lots of talk about extra time and running late. We had a lot of kickback from our surgeons saying that everyone is very tired and burnout and the ability for the physicians to kind of make themselves available or have the energy to actually do this and do this safely people are concerned about that. And we're also, our hospital just launched an electronic medical record system in the middle of all of this, which had been planned before the pandemic started. So my past months, there's been no talk of kind of anything, that way we actually slow down to incorporate this and we're just trying to make sure the surgeons don't jump off the top of the building. So it's been, everyone's pretty tired is kind of the feeling I'm getting from my surgeons that if I said to them, like I can give you a 7 pm room because we would run 12 hour rooms, they would decline it because they didn't want it. [Healthcare leader group 3] I mean I would say that's definitely an issue they come out with this plan to catch up and you know we hear they're going to run ORs at night and evenings and weekends and then everyone in the system goes, 'who's going to staff those ORs, we can barely staff for day ORs with nurses, we don't have enough nurses, we've had to close a bunch of ORs because the nurses, we have a crisis in our nursing situation. And then some hospitals did and it's by Health Authority and the same thing when they open the weekend ORs they had a hard time with the weekend ORs they had a hard time getting surgeons to come in on the weekend. [Healthcare leader group 3] Advocating for extended hours in the operating room when you can't even staff the ORs for existing nursing resources. It's just not going to happen. That's not a viable solution from a burnout perspective, from a wellness perspective or from an HHR perspective. [Healthcare leader group 3]

		Interesting, I just was going to make one comment, so our wellness is obviously a major issue, has been for years, long before the pandemic. Our hospital does this wellness survey every quarter. In the one that came out maybe in January this year, they teased out the responses from physicians who work in periop so that would be surgeons and anesthesiologists, and it was really, really poor. And when we teased out the responses from those people, it turns out that they felt like they were dangling at the bottom of a chain with no information coming to them. [Healthcare leader group 2]
RE: expediting licensing of foreign-trained clinicians	There's a reason that requirements there. I wouldn't be comfortable with knowing, for example, if a surgeon didn't have seven year training but instead they have five. That has to do with the education of the individual but also the quality of every provider in terms of safety and effectiveness. [Patient group 1]	---
RE: More funding	You can say in the funding box I would say will that mean that other areas of health care have to be cut or will my taxes go up. And will other areas of healthcare be cut, because hospital funding goes up, because it's more like illness care right now than healthcare right. Like it's more on the reactive side than on the proactive side that we have our care. So, if we continue to feed the beast of hospital funding, then what does that mean for prevention programs. [Patient group 2] How do we know whether the dollars are effectively affecting wait times, right. Like what's the marker of that. You know, along the lines of overall hospital budget and investing into like diagnostic imaging, as well as electronic referral processes, etc. are all amazing ways to do that, but we have like hospitals have tried that. And unfortunately, it still hasn't been successful. Well, why not? I think one of the reasons why it hasn't been successful is because there's politics involved, like you know where does the money go. I think people don't know we're spending about $40 billion dollars a year on health care. It's the biggest budget item that the [provincial] government has. And I think that it's better to look for efficiencies than just	**For hospitals** And I think that, you know, we're getting Innovation Funds or remote patient monitoring, all kinds of funding. But I don't think people are going to the root cause of the problem, and which we've alluded to before like the resource issues. [Healthcare leader group 5] They can give us all the money but if you don't have the bodies to do the work, then it's not going to happen. [Healthcare leader group 5] I think where we are right now is really defined by a nursing crisis. At this point in time like our hospital wants us to overperform the issue is not money. The issue is not that they won't open the ORs in the evenings and all that. We don't have the staff. And you know when you don't hear that up. You know even if you give hospitals money to hire staff, we're all competing for the same pool, there are not enough people in the pool. There is no quick and easy solution to this. You cannot pay your way out of this. [Healthcare leader group 1] Increased funding doesn't solve the staffing problem for the next bucket. Like I think the whole province needs to be extraordinarily worried about the grave state, the crisis of healthcare staffing. That is the next pandemic that all of us will face. All the money in the world can't make a nurse overnight. I'm not hearing enough concern in the news or government. I really is crisis, staffing. I think most of us have horror stories to tell and it's mounting and it's getting worse not better. And so, it's a phenomenon related to the pandemic that that needs to be more on the minds of decision makers. [Healthcare leader group 4]

	adding money. I know the local health units I attended some of their board meetings and all they wanted was more money, more money. And I think they didn't look at the fact that there's ways to be efficient. We have to put the effort into efficiencies, rather than just throwing money at it, [Patient group 1]	If they're going to throw money at the problem, they need to let each institution decide what's the best way and how they can handle that. We've already come to the conclusion that extra hours don't work, so are there other ways to use the money to create efficiencies in the system and you know, kind of, let the people that are stakeholders come up with the solutions, not to come up a blanket solution for the whole system right. [Healthcare leader group 3] **Alternative payment plan** I have lots of colleagues in [province] and I talked to them a lot about it and some of them are surgeons, some are not. But there is a caveat, once you relinquish your autonomy to governmental structure of salary, you also lose capacity to, for example, hire new people, get maternity leaves in, so they're working way harder. [Healthcare leader group 3]
Reassess how procedures are prioritized	The Ministry of Health has a 15% premium on certain cases. Once you pass any 75% you then get a premium 15% more. So, there's an impression that these cases are being prioritized by the finance people in the organization. So these cases get dealt with first, everything else a second. And that's where you need to have a careful discussion of what are we really trying to do? Having the premium is really to ensure that these surgeries are done on weekends, on over time and so forth but I don't know if that's really being done. I think there's unintended consequences when you start to use these funding methods and applying things like premiums that has to be addressed. [Healthcare leader group 2]	If we take the focus off of hips and knees, ortho will get their knickers in a knot, and the cataracts can be done outside of hospital, so I don't think that there's going to be a huge difference (Healthcare leader group 1) For me I would also like to have the government relook at the Quality Based Procedures (QBP)s. And the reason is, is that, I think it's already been stated that they, you know, the non QBP cases are disincentivized, they don't get prioritized. And a lot of those clinical handbooks are old. They're not current and the, the link is really we get funded when we do the procedure, it's not related to outcomes or quality at all. The whole purpose of them was quality based procedures, and that's not how they're enacted. [Healthcare leader group 5] Yeah, ethically, you know we don't have QBPs but you know we do have targeted funded procedures and we've made the decision to not do those procedures and hence were disincentivized because we're not getting the revenue coming in. Because we need to do cases that are top of the priority list, but you know it's hard at the Board table to say hey we lost all of this revenue because we had to prioritize these cases, and they're not funded, but they need to get done. QBPs were there way before the pandemic. And I think they either need to be paused, or you know just put on hold until we can get caught up but they're not necessarily the priority procedures. [Healthcare leader group 5] I guess if you're going to start doing less of those then, certainly, people would be concerned. If you're going to maintain them at the same level but increasing the others then I think people will be fine with it. [Healthcare leader group 1] Just because hysterectomy is a quality based procedure, it does not mean that they are getting prioritized in any way shape or form, and the I think the number of

		hysterectomies in the province has gone way down with COVID [Healthcare leader group 1] The quality based procedure really makes for two standards of care. So, I can tell you that my administration is really concerned that we do more hips and knees, as an example. And we actually [HCP2] we do pay attention to hysterectomy here. So we are trying to facilitate that. But my issue is, what about gallbladder, they're not a quality based procedure but does that mean that that person is not suffering with biliary colic, or what about hernias? So it's a very, very bad system when you prioritize one area above another. [Healthcare leader group 1]
RE: optimizing efficiency and coordination	---	It's not about a system performance issue. I think we've been doing that for years. Like to say to wake up at the end COVID and say oh now we have to make this inefficient system work better. Hospitals on their own, because of annual budget cuts, have been working to improve the systems for a long, long time. [Healthcare leader group 1]
RE: Shift services out of hospital	I would want to throw a caveat in there that I would be opposed to any moves to shift the business to private hospitals. I think it's always a danger. I personally really value our health system, the equity that's built into it. So anyway that would just be caveat, or concern that's a bit of a worry that I think is important. [Patient group 2]	Out of hospital facilities, I worry about quality. Recidivism to ER, and surgical site infections or other complications, increased complication rate. [Healthcare leader group 4] It's a huge culture shift for a lot of our surgeons, and there's a lot of resistance, just speaking for myself, in endorsing outside facilities. Because when the wheels fall off in those facilities, they're not open to care for those patients after hours and it's our docs who end up caring for the patients when there's untoward you know results. [Healthcare leader group 5] It negates the whole Canadian health care plan. I know there's lots of private medicine going on in Canada and it's just as a principle you want people to have access-based not based on their financial situation right so. [Healthcare leader group 3] **LEARN FROM PAST PANDEMICS** After SARS, I sat down just like we did now with people with the [organization] that the government asked with the same issues, 'what can we do, what can you learn from it.' And I think we learned a lot, but it all got forgotten after 17 years. [Healthcare leader group 5]