Article title: Delivery and Prioritization of Surgical Care in Canada During COVID-19: An Environmental Scan

Journal name: International Journal of Health Policy and Management (IJHPM)

Authors' information: Seremi Ibadin¹, Mary Brindle^{2,3}, Tracy Wasylak³, Jill Robert⁴, Stacey Litvinchuk³, Khara M. Sauro^{1,2,5}*

¹Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada.

²Department of Surgery, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada.

³Surgery Strategic Clinical Networks, Alberta Health Services, Calgary, AB, Canada.

⁴Surgery and Bone & Joint Health Strategic Clinical Networks, Alberta Health Services, Calgary, AB, Canada.

⁵Department of Oncology and Arnie Charbonneau Cancer Institute, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada.

*Correspondence to: Khara M. Sauro; Email: kmsauro@ucalgary.ca

Citation: Ibadin S, Brindle M, Wasylak T, Robert J, Litvinchuk S, Sauro KM. Delivery and prioritization of surgical care in Canada during COVID-19: an environmental scan. Int J Health Policy Manag. 2023;12:8007. doi:10.34172/ijhpm.2023.8007

Supplementary file 4

Table S3: List of Evidence Sources Containing IPAC and Safety Protocols, Guidance, Recommendations, and Information

| | Province/ | | Document | | | Document | |
|-----|-----------|----------------|--------------------|-------------------------|-----------|-----------|------------------------|
| S/N | Territory | Institution | Author | Document Title | Source | Date | Web Link |
| 1. | _ | | | | | | https://www.alberta |
| | | | | IPC Recommendations | | | healthservices.ca/as |
| | | | | for suspected or | | | sets/healthinfo/ipc/ |
| | | | | confirmed COVID-19 | Publicly | | <u>hi-ipc-suspect-</u> |
| | | Alberta Health | Alberta Health | Patients Requiring | available | | conf-emergency- |
| | AB | Services | Services | Surgery | webpage | 18-Apr-20 | urgent-surgery.pdf |
| 2. | | | | | | | https://www.alberta |
| | | | | | | | healthservices.ca/as |
| | | | | Point-of-care risk | Publicly | | sets/healthinfo/ipc/ |
| | | Alberta Health | Alberta Health | assessment for Surgery | available | | hi-ipc-covid-19-or- |
| | AB | Services | Services | during COVID-19 | webpage | 8-Dec-20 | algorithm.pdf |
| 3. | | | | | | | https://www.alberta |
| | | | | | | | healthservices.ca/as |
| | | | | | Publicly | | sets/healthinfo/ipc/ |
| | | Alberta Health | Alberta Health | IPC PPE table for | available | | hi-ipc-ppe-tbl-surg- |
| | AB | Services | Services | surgical suites | webpage | 17-Dec-20 | covid-19.pdf |
| 4. | | | | Guidance for surgery | | | |
| | | | | after COVID-19 | | | https://www.alberta |
| | | | | infection: Timing of | | | healthservices.ca/as |
| | | | Alberta Health | surgery following | | | sets/info/ppih/if- |
| | | | Services (Surgery | recovery from COVID- | Publicly | | ppih-covid-19- |
| | | Alberta Health | Strategic Clinical | 19 TO reduce risk of | available | | guidance-surgery- |
| | AB | Services | Network) | postoperative mortality | webpage | 20-Jan-22 | after-covid-19.pdf |

| 5. | | | | | | | http://www.bccdc.c |
|----|------|-----------------|-----------------|--------------------------|-----------|-----------|---------------------------|
| J. | | | | Options for Operating | | | a/Health- |
| | | | | Room Configuration and | | | Professionals- |
| | | | | Use When a Patient with | | | |
| | | | | | D 11' 1 | | Site/Documents/C |
| | | DCM: | DOMEST | Suspected or Confirmed | Publicly | | OVID19_ORConfi |
| | 200 | BC Ministry of | BC Ministry of | COVID-19 Requires | available | | gUseEmergentSurg |
| | BC | Health | Health | Emergent Surgery | webpage | 12-Jan-22 | ery.pdf |
| 6. | | | | | | | http://www.bccdc.c |
| | | | | | | | <u>a/Health-</u> |
| | | | | Infection Prevention and | | | <u>Professionals-</u> |
| | | | | Control (IPC) Protocol | | | Site/Documents/C |
| | | | | for Adult Surgical | Publicly | | OVID19_IPCProto |
| | | BC Ministry of | BC Ministry of | Procedures During the | available | 11-May- | <u>colSurgicalProcedu</u> |
| | BC | Health | Health | Covid-19 Pandemic | webpage | 22 | resAdult.pdf |
| 7. | | | | | | | http://www.bccdc.c |
| | | | | | | | a/Health- |
| | | | | Infection Prevention and | | | Professionals- |
| | | | | Control (IPC) Protocol | | | Site/Documents/C |
| | | | | for Paediatric Surgical | Publicly | | OVID19_IPCProto |
| | | BC Ministry of | BC Ministry of | Procedures During the | available | | colSurgicalProcedu |
| | BC | Health | Health | Covid-19 Pandemic | webpage | Undated | resPediatric.pdf |
| 8. | | | | 23.13.17.14.14.11.10 | sopuge | Chanca | http://www.bccdc.c |
| 0. | | | | | | | a/Health- |
| | | | | | | | Professionals- |
| | | | | | | | Site/Documents/C |
| | | | | | | | OVID- |
| | | | | COVID-19 and Adult | Dublich | | |
| | | DC Ministers of | DC Ministers of | | Publicly | | 19 Adult Surgical |
| | D.C. | BC Ministry of | BC Ministry of | Surgeries: How We Are | available | TT 1 4 1 | Patient_Handout.p |
| | BC | Health | Health | Keeping You Safe | webpage | Undated | <u>df</u> |

| 9. | | | | | | | http://www.bccdc.c |
|-----|----|----------------|----------------|--------------------------|-----------|-----------|----------------------|
| | | | | | | | a/Health- |
| | | | | | | | Professionals- |
| | | | | | | | Site/Documents/C |
| | | | | COVID-19 and | | | OVID- |
| | | | | Paediatric Procedure: | Publicly | | 19_Pediatric_Surgi |
| | | BC Ministry of | BC Ministry of | How We Are Keeping | available | | cal_Patient_Hando |
| | BC | Health | Health | Your Child Safe | webpage | Undated | ut.pdf |
| 10. | | | | | | | https://sharedhealth |
| | | | | | | | mb.ca/files/covid- |
| | | | | | | | <u>19-risk-</u> |
| | | | | COVID-19 Operating | Publicly | | stratification-for- |
| | | | | Room Risk Stratification | available | | surgical- |
| | MB | Shared Health | Shared Health | for Surgical Patients | webpage | 23-Feb-21 | patients.pdf |
| 11. | | | | Provincial Guidance for | | | |
| | | | | COVID-19: A Return to | | | |
| | | | | Symptomatic Testing | | | https://sharedhealth |
| | | | | Infection Prevention and | Publicly | | mb.ca/files/covid- |
| | | | | Control Risk and | available | | <u>19-admission-</u> |
| | MB | Shared Health | Shared Health | Response | webpage | 15-Jun-22 | preop-testing.pdf |
| 12. | | | | | | | https://www.rwjbh. |
| | | | | | | | org/rwj-university- |
| | | | | | | | <u>hospital-new-</u> |
| | | | | | | | brunswick/patients- |
| | | | | | | | visitors/temporary- |
| | | | | | | | <u>changes-to-</u> |
| | | Robert Wood | Robert Wood | Safe surgery during | | | services-and- |
| | | Johnson | Johnson | COVID-19 at RWJUH | Publicly | | visitation-pol/safe- |
| | | University | University | New Brunswick: | available | | surgery-during- |
| | NB | Hospital | Hospital | Keeping everyone safe | webpage | Undated | <u>covid-19/</u> |

| 13. | | | | | | | |
|-----|----|----------------|------------------|-----------------------|-----------|-----------|---------------------------|
| | | | | | | | https://www.vitalite |
| | | | | | Publicly | | nb.ca/en/covid- |
| | | | | Preparing for surgery | available | | 19/preparing-for- |
| | NB | Vitale Health | Vitale Health | (Orange level) | webpage | Undated | surgery |
| 14. | | | | | | | https://www.easter |
| | | | | | | | nhealth.ca/wp- |
| | | | | | | | content/uploads/20 |
| | | | | | Publicly | | <u>21/05/Eastern-</u> |
| | | | | Strategic Health Plan | available | | Health_Strategic- |
| | NL | Eastern Health | Eastern Health | 2020 - 2023 | webpage | Undated | Plan_2020-23.pdf |
| 15. | | | | | | | https://nshealth.ca/ |
| | | | | | | | news/surgical- |
| | | Nova Scotia | | Surgical services at | Publicly | | services-aberdeen- |
| | | Health | Nova Scotia | Aberdeen Hospital to | available | | hospital-reopen- |
| | NS | Authority | Health Authority | reopen April 11 | webpage | 9-Apr-20 | april-11 |
| 16. | | | | | | | https://www.nsheal |
| | | | | | | | th.ca/news/nsha- |
| | | | | | | | <u>addresses-</u> |
| | | | | | | | community- |
| | | | | | | | <u>clusters-document-</u> |
| | | | | | | | social-media - |
| | | | | | | | :~:text=NSHA |
| | | | | | | | <u>addresses</u> |
| | | | | | | | <u>"community</u> |
| | | | | | | | clusters" document |
| | | | | | | | on social media,- |
| | | | | | | | Wednesday, April |
| | | | | NSHA addresses | | | 29&text=We are |
| | | Nova Scotia | | "community clusters" | Publicly | | aware of Nova, or |
| | | Health | Nova Scotia | document on social | available | | spread of COVID- |
| | NS | Authority | Health Authority | media | webpage | 29-Apr-20 | <u>19.</u> |

| 17. | | | | | | | https://www.nsheal |
|-----|----|-----------------|--------------------|----------------------------|-----------|-----------|----------------------|
| | | | | | | | th.ca/news/covid- |
| | | | | | | | 19-requires-teams- |
| | | Nova Scotia | | COVID-19 requires | Publicly | | rethink-how-they- |
| | | Health | | teams to rethink how | available | | deliver-surgical- |
| | NS | Authority | Krista Woods | they deliver surgical care | webpage | 18-Dec-20 | care |
| 18. | | | | , , | 1 0 | | https://policy.nshea |
| | | | | | | | lth.ca/Site_Publishe |
| | | | | | | | d/covid19/documen |
| | | | | | | | t_render.aspx?docu |
| | | | | Decision and | | | mentRender.IdTyp |
| | | | | Management Protocol for | | | e=6&documentRen |
| | | Nova Scotia | | Surgical Procedures | Publicly | | der.GenericField= |
| | | Health | Nova Scotia | Requiring Anesthesia | available | 23-May- | &documentRender. |
| | NS | Authority | Health Authority | during COVID-19 | webpage | 22 | <u>Id=83387</u> |
| 19. | | | | | | | https://www.nthssa. |
| | | | | | | | ca/en/covid-testing |
| | | | | | | | -:~:text=Tests are |
| | | | | | | | available in your |
| | | | | | | | community%3A&t |
| | | Northwest | Northwest | | | | ext=COVID-19 |
| | | Territories | Territories Health | | | | testing to |
| | | Health and | and Social | | Publicly | | inform, ordered by a |
| | | Social Services | Services | | available | | <u>healthcare</u> |
| | NT | Authority | Authority | COVID Testing | webpage | Undated | provider. |
| 20. | | | | | | | https://www.ontari |
| | | | | | | | ohealth.ca/sites/ont |
| | | | | | | | ariohealth/files/202 |
| | | | | Infection Prevention and | | | <u>0-06/COVID-19</u> |
| | | | | Control (IPAC) for | | | <u>Infection</u> |
| | | | | scheduled surgeries and | Publicly | | Prevention and |
| | | | | procedures during the | available | | Control for |
| | ON | Ontario Health | Ontario Health | COVID-19 pandemic | webpage | 8-Jun-20 | Scheduled |

| | | | | | | | Cymanias and |
|-----|----|------------|------------------|--------------------------|------------|-----------|------------------------------------|
| | | | | | | | Surgeries and Procedures 8June2 |
| | | | | | | | |
| | | | | | | | <u>020.pdf</u> |
| | | | | | | | |
| 21. | | | | | | | https://www.gghor |
| | | | | | | | g.ca/uncategorized/ |
| | | | | | | | surgery/informatio |
| | | | | | | | n-for-patients- |
| | | | | Information for patients | | | undergoing-a- |
| | | Guelph | | undergoing a surgery or | Publicly | | surgery-or- |
| | | General | Guelph General | procedure during | available | | procedure-during- |
| | ON | Hospital | Hospital | COVID-19 | webpage | 1-Aug-22 | covid-19/ |
| 22. | | • | • | | | | https://sunnybrook. |
| | | Sunnybrook | | Information for patients | | | ca/content/?page=n |
| | | Health | Sunnybrook | undergoing surgery or | Publicly | | ovel-coronavirus- |
| | | Sciences | Health Sciences | procedures during | available | | covid-19-surgery- |
| | ON | Centre | Centre | COVID-19 | webpage | Undated | procedure |
| 23. | | | | | | | https://www.oakval |
| | | | | | | | leyhealth.ca/clinics |
| | | | | | | | _ |
| | | | | | Publicly | | departments/surger |
| | | Oak Valley | Oak Valley | Your surgical care | available | | <u>y/your-surgical-</u> |
| | ON | Health | Health | journey | webpage | Undated | <u>care-journey/</u> |
| 24. | | | | | | | |
| | | | | | | | |
| | | Queen | | | | | |
| | | Elizabeth | Provincial Chief | QEH OR Meeting | Relevant | | |
| | PE | Hospital | of Surgery | Highlights | department | 22-Jul-20 | NA |

| 25. | | | | | | | |
|-----|-----|-----------------|-------------------|---|------------|-----------|------|
| | | Queen | | COVID-19 crisis | | | |
| | DE | Elizabeth | Provincial Chief | preparation in the QEH | Relevant | 21 M 20 | NTA |
| 26 | PE | Hospital | of Surgery | OR Decision and | department | 31-Mar-20 | NA |
| 26. | | Nova Scotia | | management protocol for surgical procedures requiring general | | | |
| | | Health | Nova Scotia | anesthesia during | Relevant | 23-May- | |
| | PE | Authority | Health Authority | COVID-19 | department | 22 | NA |
| 27. | | | | | | | |
| | | Ministry of | Ministry of | | | | |
| | | Health and | Health and Social | Memo_20-MS-00496- | Relevant | | |
| | QC | Social Services | Services | 83_PDG_Bloc opératoire | department | 25-Mar-20 | NA |
| 28. | | | | Memo_20-MS-02502- | | | |
| | | | | 04_LET_PDG- | | | |
| | | Ministry of | Ministry of | DSP_Bloc | | | |
| | 0.0 | Health and | Health and Social | opératoire_Direct_COVI | Relevant | 1 4 20 | 27.4 |
| 20 | QC | Social Services | Services | D-19 | department | 1-Apr-20 | NA |
| 29. | | | | | | | |
| | | Ministry of | Ministry of | Memo_20-MS-02502- | | | |
| | | Health and | Health and Social | 52_LET_PDG_Bloc | Relevant | | |
| | QC | Social Services | Services | opératoire | department | 7-Apr-20 | NA |
| 30. | Ϋ́ | Social Scivices | DOI VICOS | Opinion of the | асрагинен | 7 11μ1-20 | 1117 |
|] | | | | Committee on | | | |
| | | National | Committee on | Nosocomial Infections of | | | |
| | | Institute of | Nosocomial | Quebec: Operation with | | | |
| | | Public Health | Infections of | suspected or confirmed | Relevant | | |
| | QC | of Quebec | Quebec | cases of COVID | department | Undated | NA |

| 31. | | | | | | | |
|------|-------|------------------------|-------------------|--|--------------|-------------|-------|
| | | | | Management of COVID- | | | |
| | | Universite de | Universite de | 19 patient in the | Relevant | | |
| | QC | Sherbrooke | Sherbrooke | operating room | department | Undated | NA |
| 32. | | | | Recommendations for | | | |
| | | | | intubation in the | | | |
| | | Ministry of | Ministry of | operating room of | | | |
| | | Health and | Health and Social | confirmed or suspected | Relevant | | |
| - 22 | QC | Social Services | Services | COVID-19 patients | department | Undated | NA |
| 33. | | | | | | | |
| | | Saskatchewan | | Unnamed_Flow Chart | | | |
| | | Health | Saskatchewan | for Surgery for COVID- | Relevant | | |
| | SK | Authority | Health Authority | 19 positive patients | department | 19-Mar-20 | NA |
| 34. | SIX . | rumorny | Treatm radiionty | Pre-operative guidelines | department | 19 11111 20 | 1111 |
| 3 | | | | for suspected or | | | |
| | | Saskatchewan | | confirmed COVID-19 | | | |
| | | Health | Saskatchewan | patients coming to the | Relevant | | |
| | SK | Authority | Health Authority | operating room | department | 19-Mar-20 | NA |
| 35. | | • | | Infection Prevention and | | | |
| | | | | Control (IPC) Protocol | | | |
| | | | | for Surgical Patients | | | |
| | | | | During the COVID-19 | | | |
| | | Saskatchewan | | Pandemic: Adults and | | | |
| | | Health | Saskatchewan | Older Adults and | Relevant | | |
| | SK | Authority | Health Authority | Obstetrics | department | 9-Apr-20 | NA |
| 36. | | | | Alamidhan for Organid | | | |
| | | Saskatchewan | | Algorithm for Operative | | | |
| | | Saskatchewan Health | Saskatchewan | Management of Adult Surgical Patients during | Relevant | | |
| | SK | Authority | Health Authority | COVID-19 Pandemic | department | 17-Apr-20 | N A |
| | DIZ | Aumonty | Treatur Aumonty | COVID-19 Fallucillic | departificit | 17-Apr-20 | 11/71 |

| 37. | | | | | | | |
|-----|----|--------------|------------------|------------------------|------------|-----------|----|
| | | | Director of | | | | |
| | | Saskatchewan | infection | | | | |
| | | Health | Prevention and | Temporary Negative | Relevant | | |
| | SK | Authority | Control | Pressure and Anterooms | department | 10-Jun-20 | NA |
| 38. | | | | Dismantling of | | | |
| | | | Provincial | temporary negative | | | |
| | | Saskatchewan | Infection | pressure rooms due to | | | |
| | | Health | Prevention and | lack of evidence | Relevant | | |
| | SK | Authority | Control | supporting neccesity | department | 15-Jun-20 | NA |
| 39. | | | | | | | |
| | | | | | | | |
| | | Saskatchewan | | Protocol for Operative | | | |
| | | Health | Saskatchewan | Management of Surgical | Relevant | | |
| | SK | Authority | Health Authority | Patients (ALL Ages) | department | 30-Nov-20 | NA |
| 40. | | | Lori Garchinski, | | | | |
| | | | Executive | | | | |
| | | | Director, | | | | |
| | | | Provincial | | | | |
| | | | Programs, and | | | | |
| | | | Petrina McGrath | Airway/protected CODE | | | |
| | | Saskatchewan | and Dr. Michael | BLUE response plan for | | | |
| | | Health | Kelly, EOC | patients during COVID- | Relevant | | |
| | SK | Authority | Safety Officers | 19 pandemic | department | 1-Dec-20 | NA |
| 41. | | | | | | | |
| | | | | Protocol for Operative | | | |
| | | Saskatchewan | | Management of Surgical | | | |
| | | Health | Saskatchewan | Patients (ALL | Relevant | | |
| | SK | Authority | Health Authority | Ages)_updated | department | 22-Dec-20 | NA |

| 42. | | | | | | | |
|-----|----|-------------------------------------|----------------------------------|--|------------------------|-----------|----|
| | SK | Saskatchewan Health Authority | Saskatchewan Health Authority | Surgical Response to the New Vaccine Framework | Relevant department | 16-Feb-21 | NA |
| 43. | SK | Saskatchewan Health Authority | Saskatchewan Health Authority | Recommendations for delaying elective surgery for patients recovering from COVID-19 | Relevant department | 3-Jun-21 | NA |
| 44. | | | | | | | |
| | SK | Saskatchewan Health Authority | Saskatchewan Health Authority | Frequently Asked Questions: COVID-19 Testing Before Surgery | Relevant department | 1-Jul-22 | NA |
| 45. | | · | | | • | | |
| | SK | Saskatchewan Health Authority | Saskatchewan Health Authority | COVID-19 Testing Prior to Surgery | Relevant department | Undated | NA |
| 46. | | | | COVID-19 Evidence | | | |
| | | University of Saskatchewan | | Support Team Rapid Review Report: What is | | | |
| | | and | University of | the evidence on timing | | | |
| | | Saskatchewan | Saskatchewan and | and outcomes of electove | | | |
| | | Health | Saskatchewan | surgery after a COVID | Relevant | | |
| | SK | Authority | Health Authority | infection? | department | Undated | NA |