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**Ontario SPOR SUPPORT Unit
Response to the Coronavirus (COVID-19) Pandemic**

September 2021

The impact of the COVID-19 pandemic on society is unprecedented in modern times and will likely pervade our lives for years to come. Never before has it been more essential to mobilize Canada's research excellence and innovation toward improving the efficiency of the health system and the health of Canadians. In response, OSSU's research centres have pivoted their focus to tackling critical issues and unmet needs regarding COVID-19 utilizing patient-oriented approaches to health and health services research. Their work will have impacts that span local, provincial and national borders.

The research centres listed below receiving funding from OSSU as well as from other funding agencies that contribute toward the collective impact of their work. OSSU's funding model allows centres to nimbly respond to time-sensitive critical issues facing the health care system. Below, you will find some of the critical work underway at OSSU research centres to combat the COVID-19 pandemic:

Applied Health Research Centre

The Applied Health Research Centre (AHRC) is an academic research organization at the Li Ka Shing Knowledge Institute of St. Michael's Hospital at Unity Health Toronto. The AHRC has expertise in clinical study design, pragmatic methodology, study operations and coordination, and biostatistics. The AHRC offers a comprehensive services package – a true one-stop-shop for patient-oriented clinical research.

Website: www.hubresearch.ca

AHRC is supporting 31 research projects ongoing or under development in critical questions regarding COVID-19 such as:

- the effectiveness of social distancing provisions and incentives;
- epidemiological studies of populations including children and families;
- mental health impacts of COVID on patients and hospital staff;
- therapeutics for the prophylaxis and management of COVID-19;
- a study evaluating the efficacy of oral lopinavir/ritonavir (LPV/r) as post-exposure prophylaxis against COVID-19, which has four (4) sites recruiting participants;
- a study to evaluate the efficacy of favipiravir chemoprophylaxis for control of outbreaks of COVID-19 in long-term care homes (LTCH), which has one (1) clinical site and three (3) LTCHs participating;
- a study to definitively determine if high dose heparin versus low dose heparin can improve outcomes in hospitalized COVID-19 patients with established abnormal blood clotting, which has 12 sites recruiting participants across seven (7) countries;



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- a study entitled “*Direct Income Support and Advice Negating Spread of Epidemic COVID-19: a randomized controlled trial*” - measuring the effects on COVID exposure and adherence to physical distancing guidance, which has completed enrollment and analysis; and
- a study to understand the effects of public health outbreak control policies and implementation on individuals and communities

Click [here](#) to learn more.

Centre for Rural and Northern Health Research

The Centre for Rural and Northern Health Research (CRaNHR) is an academic and applied health research centre at Laurentian University (Sudbury) with a mandate to conduct interdisciplinary research on rural health, with a growing focus on Indigenous and Francophone populations, particularly in rural and northern communities.

Website: www.cranhr.ca

CRaNHR’s work on the pandemic includes:

- providing data analysis and epidemiological and management support (around vaccination planning and reporting frameworks and products, and COVID-19 case contact management efforts) to the [Public Health Sudbury and Districts](#) on COVID-19 and related issues (renewed to April 2021);
- developing working models on health human capital planning for the [Ministry of Labour, Training and Skills Development](#). The Project is evolving to better incorporate community and patient perspectives, and is continuing to respond to challenges imposed by COVID-19 restrictions [Ontario Human Capital Research and Innovation Fund 2019-20];
- Reviewing programs to enhance emotional wellness for indigenous children in rural and remote communities as part of a CIHR COVID-19 Rapid Research Fund grant in mental health and substance abuse.
- Working with MLD Solutions Inc on understanding effective interactive digital content in support of mental health.
- Developing a collaborative, culturally-safe continuum of Indigenous mental health and addictions services during COVID-19 [CIHR- Operating Grant: COVID-19 Mental Health & Substance Use Service Needs and Delivery Opportunity]
- Development of communications plan to increase stakeholder engagement [to address health equity & outcomes initiatives for rural and northern populations]
- working with the Ontario Pharmacies Evidence Network (OPEN) to better understand vaccination capacity in Ontario. Data analysis completed and article at penultimate stage with the intention of submitting for publication this fall.;
- in collaboration with the Centre Francophone du Grand Toronto, CRaNHR will conduct a Francophone immigrant needs assessment in the Greater Toronto Area
- Rapid ad hoc health planning support for Ontario Health (north) and local Ontario Health Teams.



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- CRaNHR researchers provide intermittent ad hoc research support and advice on studies in support of NOSM's social accountability mandate—a mandate that explicitly recognizes the central role of community members.
- supporting 14 research teams develop applications to CIHR and other funding organizations such as the Ministry of Health, [Physician Services Inc. \(PSI\) Foundation](#) and the [Northern Ontario Academic Medicine Association \(NOAMA\)](#).
- Funded projects:
 - Valuing Indigenous emotional wellness: Reviewing programs to enhance support for children in rural and remote communities [CIHR]
 - Understanding effective interactive digital content in support of mental health [MITACS]
 - Geospatial analysis of OLIS COVID-19 tests to determine temporal and demographic correlates at the neighbourhood level. Data access granted through OHDP and IC/ES. Analysis underway.
 - Evaluating change in Seniors Housing needs using the Balance of Care Model for Ontario Health (North). Initial analyses completed. Paused pending Ontario Health (North) availability.
- Supporting the implementation of the InterRAI Pediatric measure in a northern Children's Treatment Centre.
- Supporting the Algoma Ontario Health Team: evaluating the implementation of the COVID-19 vaccination program.
- Supporting Ontario Health-Ontario Telemedicine Network: update of patient travel savings indicators.

Click [here](#) to learn more.

Clinical Trials Ontario

Clinical Trials Ontario (CTO) is improving the clinical trials environment in Ontario by streamlining research ethics review and other processes to conduct trials, developing resources for investigators and sponsors with respect to patient engagement with trials, and engaging patients and the public in recognizing the health and economic benefits of clinical trials.

Website: <https://www.ctontario.ca>

More than ever, the COVID-19 pandemic has underscored the critical roles of research and clinical trials in responding effectively to urgent health crises, advancing medicine, and improving care. Clinical Trials Ontario is committed to helping advance COVID-19 research and clinical trials as quickly and effectively as possible by connecting the clinical trials community, sharing relevant information, and supporting studies getting started efficiently.

Helping move COVID-19 studies forward quickly:



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- [CTO Stream](#) – There are more than 110 COVID-19 clinical trials and observational studies receiving a single and efficient research ethics review through CTO Stream, the province’s research ethics approval platform powered by Clinical Trials Ontario (CTO). Through CTO Stream, one Research Ethics Board can oversee the ethical conduct of research occurring at multiple sites in Ontario. Standardized study-wide processes and tools (including a study-wide consent form) help to streamline ethics review application process and reduce timelines.
- [Trial Site Network](#) – For studies seeking additional sites, the Trial Site Network has helped find new partners across the broader Ontario community by quickly communicating across over 300 academic hospitals, community hospitals, CROs, and private physician office networks.

Sharing best practices for clinical trials conduct during a pandemic:

- [Resource Guide for Decentralized Clinical Trial Approaches](#) – Since the onset of the COVID-19 pandemic, many clinical trial sites and sponsors have implemented digital, virtual and decentralized workflows in order to safely run clinical trials. Decentralized trials are a more participant-centric approach which reduces barriers and burdens to trial participation. CTO’s newly launched Resource Guide for Decentralized Clinical Trial Approaches provides best practices and key considerations for conducting decentralized clinical trials. This guide is intended for institutions, research departments, sponsors and CROs that may be looking to implement DCT approaches.
- [The CONSERVE 2021 Statement: Guidelines for Reporting Trial Protocols and Completed Trials Modified Due to the COVID-19 Pandemic and Other Extenuating Circumstances](#) – To assist researchers in the task of deciding what information to include in a trial protocol or a completed trial article after their study had to undergo modifications due to COVID-19, the CONSERVE Statement was developed. CTO worked with its network of health charities and patient organizations as well as the [College of Lived Experience](#) to bring patient, public and participant perspectives to these guidelines. The guidelines have the ability to help improve the transparency, quality, and completeness of the reporting of trials during the COVID-19 pandemic.

Sharing information on COVID-19:

- Since the beginning of the pandemic CTO has listed publicly on its website all multi-site clinical trials and observational studies undergoing ethics review in CTO Stream. This public listing of open COVID-19 studies helps to inform investigators and others across the province and beyond about potential collaboration opportunities. Visit CTO’s [COVID-19 Resources & Updates](#) page.

Click [here](#) to learn more.

Health System Performance Network

The Health System Performance Network (HSPN) is a multi-university and multi-institutional network of Ontario researchers working closely with policy and provider decision makers, to find ways to improve management of the health system. The network includes investigators, trainees and project staff



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developing high quality evidence that is relevant to health system policy development and decision making for performance excellence.

Website: www.hspn.ca

During the pandemic, HSPN has been:

- Participated in a paper in BMJ on the equity of COVID and the pandemic response: <https://www.bmj.com/content/369/bmj.m2149>
- Co-facilitated in a webinar with the International Foundation for Integrated Care that was focused on the centrality of integrated care in response to COVID that included two patient panelists <https://vimeo.com/423320621>
- Creating customized team-specific quantitative and qualitative reports on readiness to implement integrated care for Ontario Health Teams.
- Developing a provider experience survey for evaluating system-wide quadruple aim evaluations.
- Developing a series of guidance documents on implementing population health management.
- Developing indicators and a Learning Health System developmental evaluation plan for implementation in Ontario Health Teams in the Fall.
- Received a new CIHR grant on evaluating implementation of a health information system using the learning health system model

Through its association with the Institute for Better Health, HSPN is also:

- conducting local forecasting/trending of pandemic infections, hospital capacity (e.g, ICUs, ventilators), and human resource capacity.
- worked on internal guidance documents for THP on a framework for opening to elective procedures as the pandemic continues (not as extensive as the Ontario Health report).
- Produced rapid cycle evidence reviews about rapid testing among health care workers, pandemic staffing models, and vaccine deployment models.
- undertaking analyses examining the outcomes of patients screened for COVID through in-person, virtual and drive through modalities (for individuals with both positive and negative test results).
- rapidly launching new clinical trials on investigational products to treat or prevent COVID-19 disease progression.
- launching many new research projects related to disease surveillance/epidemiology (e.g, in children), health service innovations (e.g, virtual care), patient/caregiver experience, AI/data modelling and others.
- Participating on the COVID-19 related provincial Science Advisory Table, Modelling Consensus Table, Evidence Synthesis Network, and Behavioral Science Working Group
- Manuscript
http://scholar.google.ca/scholar_url?url=https%3A%2F%2Fjammi.utpjournals.press%2Fdoi%2Fabs%2F10.3138%2Fjammi-2020-0027&hl=en&sa=T&ct=res&cd=2&d=16357793698434290158&ei=zcYrYI-EDuaKywS55JSIBQ&scisig=AAGBfm33mhqeL0vxkzSrPMrM5DWI3XvdAw&nossl=1&ws=1287x568



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[&at=Mass%20testing%20for%20asymptomatic%20COVID-19%20infection%20among%20health%20care%20workers%20at%20a%20large%20Canadian%20hospital](#)

Click [here](#) to learn more.

ICES

ICES provides researchers, students and knowledge users with access to the largest and most comprehensive collection of health-related data in Ontario through ICES Data & Analytic Services (ICES DAS). ICES DAS offers several types of services to researchers who receive funding from the public sector including access to research-ready, linked health administrative data and analytic tools through a secure online desktop infrastructure.

Website: www.ices.on.ca

Initiatives and/or programs to address the pandemic and support provided to research teams (pre-award and post-award) investigating aspects of COVID/pandemic

ICES has commenced several initiatives and programs to respond to the COVID-19 pandemic, please see below for information on the ICES COVID Committee as well as ICES Intranet updates.

The ICES COVID Committee works to ensure that ICES provides key analytics, methodological support and expertise to stakeholders, partners, and the public at large, in a manner that guides decisions and policies related to the COVID-19 pandemic and the Ontario healthcare system. In carrying out this mandate, the committee aims to avoid duplicative efforts both internally and externally and identifies key knowledge gaps within the scientific and policy landscape that ICES is uniquely able to address. Membership includes ICES' Chief Science Officer, Senior Director of Research, Data and Financial Services, the Director of Data Quality and Information Management, four Senior Scientists (including three program leads), and three research staff (one associate research methodologist and two epidemiologists). Meetings are also regularly attended by ICES' CEO, Director of Communications, Director of Strategic Partnerships, and a Staff Scientist representing the Indigenous Portfolio. The committee meets twice weekly to review internal ICES COVID-related projects, respond to stakeholder requests, review testing and vaccination data generated for weekly stakeholder reports, and review content to be posted weekly on ICES' public facing COVID-19 Dashboard (<https://www.ices.on.ca/DAS/AHRQ/COVID-19-Dashboard>).

ICES also updated Intranet and Internet pages to address the pandemic, including:

- COVID-19 ICES Bulletin
 - There were eight ICES COVID-19 bulletins released for staff across the organization. Bulletins outline Ontario reopening stages, work from home status, work from home/onsite directives, G-Wing access directives, COVID-19 procedures.



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- Intranet updates:
 - There is ongoing maintenance to “COVID-19 Info and Tools and Work from Home Resource Hub” Intranet pages.
 - The Communications team created the ICES COVID-19 Project Information page and is a point of contact for maintenance and updates.
 - The Communications team created and promoted the G-Wing Dashboard tool page (to help staff determine in-office presence and enable social distancing in the office).
 - The Communications team promoted the ICES Phased Approach [Plan](#) through ICES staff meetings, newsletters, email distributions and the Intranet, on behalf of the Getting to New Normal Committee (GNNC).
 - Through a structured process, the Getting to New Normal Committee (GNNC) and GNNC Staff Council developed a proposal for a new normal for ICES, considering the available data and the perspectives of stakeholders.
- Public website updates included:
 - ICES COVID-19 Dashboard (weekly positivity and vaccination rates) updates (<https://www.ices.on.ca/DAS/AHRQ/COVID-19-Dashboard>)
 - This dashboard provides an overview of the sociodemographic and clinical characteristics of individuals tested and confirmed positive for COVID-19 in Ontario, as well as vaccination coverage by age and geographic area.
 - By linking COVID-19 test results from the Ontario Laboratories Information System (OLIS) database to health and other administrative data from the ICES data repository, ICES provided rich information on the demographics and medical histories of individuals who are tested. This information is accessible to health system stakeholders, including the Ministry of Health and Public Health Ontario, clinicians, researchers and the public.
 - The dashboard is updated on a weekly basis (or monthly for vaccination information) using timely data provided by ICES’ data partners.
 - There is a forthcoming repository page for all COVID related ICES research.
 - A COVID-19 page which highlights ICES scientists in the news regarding COVID (<https://www.ices.on.ca/Newsroom/COVID-19-News>).
 - There were six pandemic related news releases:
 - Pandemic impacts postpartum mental health <https://www.ices.on.ca/Newsroom/News-Releases/2021/Pandemic-impacts-postpartum-mental-health>
 - Primary care office visits in Ontario declined by almost 80 per cent during the first months of the COVID-19 pandemic but virtual visits increased more than 50-fold <https://www.ices.on.ca/Newsroom/News-Releases/2021/Primary-care-office-visits-in-Ontario-declined-by-almost-80-per-cent-during-the-first-months>
 - People experiencing homelessness are more likely to be infected with and die of COVID-19 than the general Ontario population <https://www.ices.on.ca/Newsroom/News-Releases/2021/People-experiencing-homelessness-are-more-likely-to-be-infected-with-and-die-of-COVID-19>



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- New ICES report shows immigrants, refugees and other newcomers account for nearly 44% of all COVID-19 cases in Ontario
<https://www.ices.on.ca/Newsroom/News-Releases/2020/New-ICES-report-shows-immigrants-refugees-and-other-newcomers-account-for-nearly-44-per-cent>
- ICES releases up-to-date COVID-19 testing dashboards to the public
<https://www.ices.on.ca/Newsroom/News-Releases/2020/ICES-releases-up-to-date-COVID-19-testing-dashboards-to-the-public>
- Analysis of Ontario's COVID-19 test data latest production from ICES -- studies underway to reveal COVID-19 impacts on other health conditions, wait times
<https://www.ices.on.ca/Newsroom/News-Releases/2020/Analysis-of-Ontarios-COVID-19-test-data-latest-production-from-ICES-studies-underway-to-reveal-COVID>
- There were two reports were posted:
 - COVID-19 in Immigrants, Refugees and Other Newcomers in Ontario: Characteristics of Those Tested and Those Confirmed Positive, as of June 13, 2020
<https://www.ices.on.ca/Publications/Atlases-and-Reports/2020/COVID-19-in-Immigrants-Refugees-and-Other-Newcomers-in-Ontario>
 - COVID-19 Laboratory Testing in Ontario: Patterns of Testing and Characteristics of Individuals Tested, as of April 30, 2020
<https://www.ices.on.ca/Publications/Atlases-and-Reports/2020/COVID-19-Laboratory-Testing-in-Ontario>
- There were 22 COVID-19 infographics created (see file attached).
- There were 28 COVID-19 related publications released, with 7 in the pre-publication stage (Table 2).

Patient engagement related to COVID/pandemic activities

The ICES Public Advisory Council (PAC) was engaged to review and revamp the COVID-19 Dashboard (linked above). Their feedback resulted in significant changes to the dashboard visuals and usability to make it more user friendly to public audiences. Key changes based on their feedback included the addition of a “Highlights” infographic, restructuring of page content to improve navigation through a jump menu and designated sections, and a review of all text to improve accessibility to public audiences. PAC members were engaged in several COVID related projects including the report on COVID-19 in immigrant, refugee and newcomer populations and discussions with the Ontario Health Data Platform on COVID-19 related race data collection and use. Several ICES researchers have also initiated engagement process to involve members of the public or patient populations in COVID-19 related projects.

ICES hosted a Peoples’ Panel on how race and ethnicity data should be used for health data research in Ontario. Through this Peoples’ Panel, ICES sought to hear directly from members of the public, specifically those who identify as racialized, to understand their priorities and values for how these data are used and interpreted. The input of the Peoples’ Panel is shaping a race and ethnicity data framework that ICES is creating to guide the appropriate use of race and related data which, in part, was initiated as a response to the provinces’ collection of race and equity data in relation to COVID-19 positive cases.



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ICES also has a Diversity Working Group that was formed in June 2020 in response to calls to action from members of the ICES community to actively address equity, diversity, and inclusion within ICES. The Diversity Working Group's goal is foster a culture that is safe and inclusive with equitable opportunities for diverse voices and experiences. Over the next 12-15 months ICES is working with Canadian Centre for Diversity and Inclusion who are helping to develop our EDI framework and strategy.

Ongoing pandemic information and analysis support to health-system decision makers, providers, and other stakeholders

ICES supported the COVID response via 4 key tracks of work:

- 1) Conducting Applied Health Research Question (AHRQs), to directly provide health system stakeholders with rapid analytics and evidence, and researcher-led projects. To date, ICES has provided access to data or initiated studies related to COVID-19 for almost 200 projects. Titles of these projects are listed in Table 1 (below).
 - a. ICES provided weekly (and more recently monthly) reports to Public Health Ontario (PHO) and Public Health Units (PHUs) on weekly and cumulative COVID-19 vaccine coverage estimates by forward sortation area (first 3-characters of the postal code) and age groups.
 - i. ICES provided population estimates for age groups and various clinical priority groups to help with vaccination planning for the PHUs. These were provided as part of a one-time report.
 - ii. Once a month, ICES reported at the PHU level, vaccinated and unvaccinated populations, describing clinical characteristics (e.g., comorbidities, sociodemographic factors) that align with the Ontario COVID-19 clinical priority groups (<https://covid-19.ontario.ca/ontarios-covid-19-vaccination-plan>).
 - b. ICES provided weekly reports to the Ministry of Health (MOH) on testing and vaccine coverage at various levels of geography as well as by age groups.
 - i. This included weekly updates of vaccine coverage estimates (by age group and neighbourhood risk) for the Ontario COVID-19 Science Advisory Table and Vaccine Task Force.
 - c. ICES provided weekly (and then monthly) testing reports to the provincial emergency Command Table on testing in Retirement Homes.
 - d. ICES has provided Indigenous leadership organizations, including the Chiefs of Ontario, First Nations Communities, and the Métis Nation of Ontario, with routine reports of cases, testing, and outcomes in First Nations and Métis people. This work included the updating of, or collection of data for this reporting. In addition, ICES developed routine COVID-19 reports for urban Indigenous health services organizations.
 - e. In March 2021, Immigration, Refugees and Citizenship Canada (IRCC) requested a report on vaccination rates amongst immigrant populations. This information was provided by ICES in March 2021.
- 2) ICES obtained key additional data:
 - a. An amendment with the Ministry of Health was executed for the provision of weekly feeds of COVID-19 vaccination data (COVax_{ON} data), which is available for use at ICES,



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and for third-party researchers (public and private). ICES had a working group with PHO to understand data issues and to align reporting of vaccine estimates. The amendment also provided the COVID-19 case data from the integrated Public Health Information System/Case and Contact Management System (iPHIS/CCM) for broader use at ICES beyond the initial AHRQ.

1. These data have been incorporated in the ICES COVID-19 Dashboard (<https://www.ices.on.ca/DAS/AHRQ/COVID-19-Dashboard>).
 2. These data were linked with neighbourhood level characteristics and COVID-19 test data have informed the COVID-19 Science Advisory table and the Ministry of Health, identifying high COVID-risk communities.
 - b. Daily (and then weekly) feeds of OLIS COVID-19 test data linkable to ICES data repository (received, cleaned, and linked daily). The algorithm to clean these data was made publicly available and adopted by key health system stakeholders such as the Ministry of Health.
 - c. ICES negotiated the receipt of key outcome data (weekly feeds) of hospital discharge and emergency department visit records from the Canadian Institute for Health Information (CIHI).
 - d. ICES received the Critical Care Information System (critical and intensive care unit data) from CritiCall Ontario. These data have been posted for use to support health system planning and evaluation.
 - e. Additional data from Ministry of Health, including information regarding residential addresses, information about long-term care and retirement homes have been transferred to ICES.
 - f. ICES received COVID-19 related data collected through the TARGetKids! registry at the end of April. These data described the key epidemiological characteristics of COVID-19 among parents and children in Toronto, during COVID-19, physical distancing and re-opening.
 - g. ICES is in the process of amending their agreement related to the Ontario Health Study (OHS) to include additional data from a COVID-19 questionnaire provided to roughly 40,000 OHS participants.
 - h. ICES has received, processed, and posted new Ontario Social Assistance Data from the Ministry of Children, Community and Social Services (MCCSS). This data was provided for the conduct of projects related to COVID-19.
 - i. MCCSS has also expanded its Applied Health Research Question (AHRQ) with ICES to include COVID-19 vaccination rates in congregate care settings, and there is another AHRQ on the mental health effects of COVID-19.
- 3) ICES' section 45 authority under PHIPA enabled external researchers responding to a question from the Command Table/ PHO/MOH or other COVID-related knowledge user, to undertake a rapid analysis at ICES. No Research Ethics Board approval was needed under section 45. For example, this supported modelling analyses of several groups supporting the command table.
 - 4) For machine learning researchers, ICES' section 45 authority enabled machine learning (ML) researchers access to COVID-related datasets in the high-performance computing platform (HAIDAP), which ICES built in partnership with Vector and HPC4Health. This model allowed for



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rapid and flexible data access (enabling access to code repositories external to ICES) to accommodate ML researcher needs.

- 5) Support for additional COVID-19 related initiatives
 - a. ICES supported the MOH initiative Ontario Health Data Platform (OHDP).
 - i. ICES contributed through sitting on advisory boards and provided raw, cleaned, and curated data along with documentation to support the platform where necessary.
 - ii. ICES’ HAIDAP platform is a component of the OHDP. There is recognition that the HAIDAP is currently operational and providing machine learning researchers with access to expanded data compared to what is envisioned during the first phases of OHDP-Q.
 - iii. ICES is in the process of negotiating funding for ongoing operations of the HAIDAP and for enhancements to support the provincial COVID-19 response.
 - b. ICES provided feeds of cleaned Ontario Laboratories Information System (OLIS) COVID-19 data to Ontario Health-Cancer Care Ontario (OH-CCO). In addition, an amendment for the transfer of the Narcotics Monitoring System (NMS) was executed, and the historical NMS data were transferred. The NMS and OLIS data were transferred onward to OHDP-Q as well.
 - c. An amendment was executed to enable the disclosure of COVaxON to OH-CCO. ICES is transferring COVaxON data weekly to OH-CCO for their use and onward disclosure to OHDP-Q.
 - d. An amendment with OH-CCO was executed for the disclosure of Case and Contact Management System (CCM) data to OH for their use and onward disclosure to OHDP-Q.
 - e. The following data are also at OHDP, and these are data that ICES discloses to OH on a regular basis:
 - i. Continuing Care Reporting System (CCRS)
 - ii. Ontario Drug Benefits Plan
 - iii. Ontario Health Insurance Program Claims
 - iv. Ontario Mental Health Reporting System
 - v. Case and Contact Management System (CCM)

Table 1. List of studies/initiatives related to COVID-19 initiated at ICES since March 01, 2020

Applied Health Research Questions (Knowledge User Driven)	
1.	Surge planning for COVID-19 at the hospital level
2.	Informing the restriction of elective admissions in preparation for COVID-19
3.	Assessment for pandemic projections on Manitoulin Island
4.	Indigenous Health Covid-19 Project
5.	Characteristics of COVID19 diagnostic test recipients



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6.	Modelling COVID-19 Using Health Administrative Data
7.	Monitoring and predicting the risks of transmission and severe illness of COVID 19 in Ontario
8.	Are vaccines favouring the spread of certain variants of SARS-CoV-2?
9.	Impact of COVID-19 on economic activity in the health sector
10.	COVID-19 testing amongst vulnerable populations
11.	Network effects, PPE shortages, and other key factors in the spread of COVID-19 in Ontario healthcare workers
12.	COVID-19 Testing in Ontario retirement homes
13.	Indigenous Health Covid-19 Project
14.	Indigenous Health Covid-19 Project
15.	Indigenous Health Covid-19 Project
16.	COVID-19 during peripartum period and infant health
17.	The COVID-19 Pandemic and Gender-Based Violence
18.	Hotspot identification and analysis of COVID-19
19.	Indigenous Health Covid-19 Project
20.	Mechanical ventilation and ECMO in Ontario ICUs
21.	Impact of COVID-19 on outcomes of patients with kidney disease
22.	COVID-19 intensive care unit (ICU) experience in Ontario
23.	Indigenous Health Covid-19 Project
24.	Modelling ICU utilization and ventilator demand for COVID-19 in the second wave
25.	Indigenous Health Covid-19 Project
26.	Forecasting the progression of COVID-19
27.	COVID-19 pandemic impacts on adults with developmental disabilities
28.	Effect of social distancing measures in long-term care homes to help prevent spread of COVID-19
29.	Evaluation of Ontario's COVID-19 point-of care (POC) testing program
30.	Health care utilization of publicly funded rehab services for patients post COVID-19 diagnosis
31.	Indigenous Health Covid-19 Project
32.	Indigenous Health Covid-19 Project
33.	Indigenous Health Covid-19 Project
34.	Indigenous Health Covid-19 Project



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35.	Indigenous Health Covid-19 Project
ICES Investigator-led Projects	
36.	Association between ABO blood type and coronavirus illness or SARS: case-control study*
37.	Impact of the COVID-19 pandemic on drug utilization: Special attention on potential treatments, NSAIDs, ACEs and ARBs*
38.	Trends in wait-times for aortic stenosis treatment in Ontario, Canada
39.	COVID-19 in Immigrants
40.	Association of Cardiovascular Risk Factors and Angiotensin Inhibitor Drug Use with COVID-19 Infection and Subsequent Adverse Cardiovascular Events
41.	Changing patterns of opioid agonist therapy use and associated outcomes during the COVID-19 pandemic in Ontario
42.	Leveraging population-based data to validate mathematical modelling of COVID-19 transmission and inform population-specific interventions*
43.	Health impacts of COVID-19 on individuals at risk of homeless
44.	The impact of the 2019 coronavirus (COVID-19) outbreak on physicians in Ontario*
45.	Epidemiological features and clinical outcomes of children with confirmed severe acute respiratory syndrome coronavirus 2 in Ontario, Canada*
46.	Statin Use and the Risk of Coronavirus Disease 2019 (COVID-19) Related Harms*
47.	Predictors of severe outcomes associated with respiratory viruses (Substudy of: Leveraging population-based data to validate mathematical modelling of COVID-19 transmission and inform population-specific interventions; TRIM 2021 0990 380 000)
48.	Informing Ontario Cardiac Resource Needs and Wait-time Consequences during the COVID-19 Pandemic
49.	Validating diagnostic codes for acute respiratory illnesses
50.	Evaluating associations between drug exposure and coronavirus detection in suspected lung infection: a pharmacopeia-wide association study
51.	Prediction of Severe Outcomes Among Covid Patients: A Machine learning approach*
52.	Impact of COVID-19 on medication use among long-term care residents with varying frailty levels*
53.	Real-world cardiovascular safety of hydroxychloroquine for the treatment or prevention of COVID-19 infection



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54.	Evaluation of admissions for stroke, myocardial infarction, and death as well as adherence to cardiovascular medications during COVID19
55.	Characterizing the burden of surgical care in CoVID-19 positive patients
56.	Health impacts of COVID-19 on snowbirds
57.	Creation of a Learning Health System for Patients with Cardiovascular Diseases during the COVID-19
58.	Primary Care Responses to the COVID-19 Pandemic in Ontario
59.	Cardiac surgery triaging tools to reduce mortality and unplanned harm during the COVID-19 crisis
60.	COVID19 CANCER SURGERY INFECTION
61.	Cancer Surgery and COVID19: Infection Rate, Processes and Outcomes
62.	Duration of COVID 19 Viral Shedding
63.	ONDRI –Understanding the impact of COVID-19 in persons with neurodegenerative diseases
64.	Analytic approaches to understanding Covid-19 infections and outcomes in the population*
65.	Cancer-related Health Care Utilization and Outcomes During the Current (COVID-19) and Prior Pandemics*
66.	Prevalence, predictors and downstream outcomes of myocardial injury in patients with COVID-19 infection
67.	COVID-19 and diabetes: Clinical Outcomes and Navigated NEtwork Care Today - the CONNECT study*
68.	Impact of COVID19 on surgery in Ontario*
69.	Patterns of Mental Health Service Use and Outcomes for Postpartum Women in Ontario During and After the COVID-19 Pandemic
70.	Baseline Characteristics, Multimorbidity and Outcomes Among Patients with Laboratory-Confirmed COVID-19 in Ontario*
71.	Family Physician Virtual Visits during COVID-19
72.	The risk of COVID-19 infection and its related outcomes in patients with immune-mediated inflammatory diseases (IMID) – A population-based study
73.	Outpatient Care for COVID-19
74.	A serial cross-sectional study of acute care transfer from long-term care: Evaluating the impact of COVID-19*
75.	Comparing Risk Factors and Prediction for Acute Respiratory Infections and Covid-19
76.	Exploring excess deaths in older women and men during the COVID-19 pandemic: Making the most vulnerable visible*
77.	Predicting survival of long-term care residents with COVID-19 infection*
78.	COVID-19, AntiCoagulation, and Adverse Outcomes (CACAO)
79.	COVID-19 in Patients with Solid Tumor and Hematologic Malignant Diseases in Ontario



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80.	The Effects of the Health System Response to the COVID-19 Pandemic on Chronic Disease Management*
81.	Estimating Excess deaths due to covid-19
82.	Impact of COVID-19 on frail population in Ontario: has the language an effect on the health outcomes?*
83.	Outcomes of Non-COVID-19 Hospitalized Patients in Ontario During the First Six Month of the Pandemic*
84.	Development and Validation of a Frailty-Focused, Risk Prediction Model for Mortality among Hospitalized Patients with SARS-CoV-2 in Canada
85.	Physicians who work at walk-in clinics and their patients
86.	Telemedicine use among rural residents across three countries
87.	Cancer Outcomes resulting from the Covid-19 pandemic resource reallocation in Ontario
88.	Impact of COVID-19 on Antibiotic Use and Resistance
89.	Incidence of COVID-19 among childhood cancer survivors in Ontario
90.	The response of provincial health systems to COVID-19: Service provision and costs across health sectors, First Nations, and other populations
91.	The impact of the COVID-19 pandemic on virtual care use, total healthcare utilization and spending, and patient outcomes
92.	Examining the Effects of COVID-19 on Alternate Level of Care and Care Trajectories: A Time Series and Longitudinal Study
93.	Improving the care of older adults living with dementia across Canada during the COVID-19 pandemic
94.	The impact of the COVID-19 pandemic on the rates of preterm birth, stillbirth, and severe maternal morbidity in Ontario
95.	Risk of COVID-19 infection and complications with diabetes drugs
96.	Improving Canadian Outcomes Research On the Novel SARS-CoV-2 using Analytics: the CORONA Consortium - Project 1
97.	Improving Canadian Outcomes Research On the Novel SARS-CoV-2 using Analytics: the CORONA Consortium - Project 2
98.	Improving Canadian Outcomes Research On the Novel SARS-CoV-2 using Analytics: the CORONA Consortium - Project 3
99.	Deferred Care Outcomes in Canadian Children and Youth: Measuring and Mitigating Risk during COVID-19
100.	Pediatric Primary Care Access during the COVID-19 Pandemic
101.	Improving prescribing of medications at the end-of-life in long-term care facilities during and after the COVID-19 pandemic*
102.	Acute kidney injury and the need for dialysis in patients infected with COVID-19
103.	Outcomes in patients on the kidney transplant waitlist and in those scheduled for living kidney donor transplants during COVID-19



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104.	Impact of COVID-19 on patients receiving maintenance dialysis
105.	COVID-19 in solid organ transplant recipients
106.	Equity of virtual mental health care uptake for children and youth during the COVID-19 pandemic.
107.	Ontario Real-Time COVID Data and Analytics Collaborative (“howsmyflattening.ca”)*
108.	Population-estimable frailty using ‘big data’ to predict Covid-19 infection and illness severity
109.	Population-estimable frailty using ‘big data’ to predict Covid-19 infection and illness severity (Project 2)
110.	Population-estimable frailty using ‘big data’ to predict Covid-19 infection and illness severity (Project 3)
111.	Getting Ahead of the Curve: Predictive COVID-19 Case Identifications Using an Iterative Propensity Score Modeling and AI Approach*
112.	Statistical methods to examine impact of COVID19 on health services outcomes among patients with cancer
113.	Premature mortality among children and youth in Ontario
114.	CIRN PCN COVID-19 Vaccine Safety and Effectiveness
115.	Impact of COVID-19 on rheumatology services and prescribing of disease modifying anti-rheumatic drug therapy
116.	The COVID-19 Pandemic and Air Pollution Impact Research
117.	Effects of COVID-19 and disruption of addictions services on problematic substance use
118.	CIRN PCN COVID-19 VACCINE SAFETY AND EFFECTIVENESS - SUBSTUDY ON AESI
119.	The influence of glucocorticoid therapy on the risk of serious COVID-19 infection in older patients with rheumatic diseases
120.	Physician Mental Health and Wellness during COVID-19
121.	Costs and impacts of virtual care before and during the COVID-19 pandemic on older adult users
122.	Volume and outcomes of emergency department patients in Ontario without COVID-19 during the COVID-19 pandemic*
123.	Impact of the COVID-19 Pandemic among Adults with IDD
124.	Influenza vaccines, infection with SARS-CoV-2 and other coronaviruses: Do influenza vaccines reduce the risk of COVID-19 and coronavirus infection?*
125.	Filling an Urgent Gap in Understanding the Social Determinants of COVID-19: A Study of Inequities in Risk across Canadian Neighbourhoods*
126.	Trends, Causes, and Outcomes of Hospitalizations Among Homeless Individuals During the COVID-19 Pandemic in Ontario*
127.	Estimating the disease burden of COVID-19 among COPD and asthma patients*
128.	Alterations in Prescribing of Opioid Agonist Therapy due to the Pandemic (ALT-POP) Study*



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129.	Impact of the COVID-19 pandemic on primary care access and outcomes for cancer patients in Ontario, Canada.*
130.	The impact of restricted visitor policies on the care and outcomes of inpatients with cancer during the COVID-19 pandemic.*
131.	Opioid Use Disorder Pharmacy Services Mapping Study
132.	Evaluating the OHIP + program outcomes in relation to opioid use disorder and the associated outcomes during the COVID-19 pandemic in Ontario
133.	Derivation and validation of a clinical model to predict hospital length of stay after cardiac surgery
134.	Exploring inequities in adolescent sexual and reproductive health and rights (ASRHR) in Ontario during the COVID-19 pandemic
135.	The impact of the COVID-19 pandemic on trajectories of cognitive decline and delirium in long-term care homes in Ontario
136.	Telemedicine access, care, and outcomes for transient ischemic attack and stroke
137.	Geospatial theory in a time of pandemic: modelling COVID-19 transmission by neighborhood attributes*
138.	The impact of COVID 19 on racialized immigrant and refugee population with mental disorders in Ontario*
139.	Long COVID: Post-acute outcomes, healthcare utilization, disability, and long-term symptoms after SARS-CoV-2 infection
140.	Natural History of Coagulopathy in COVID-19
141.	Outcomes among survivors of COVID-19 hospitalization
142.	Outcomes after COVID-19 variant infection
143.	Impact of Primary Virtual Care Use on Emergency Department visits during COVID19
144.	Health services use among the Ontario asthma population during the COVID-19 pandemic
145.	Outcomes after COVID-19 variant infection
146.	Outcomes among survivors of COVID-19 hospitalization
147.	Ontario Community Health Profiles Partnership (OCHPP) Website indicator
148.	Safety immUnogenicity of Covid-19 vaCcines in systEmic immunE mediated inflammatory Diseases (SUCCEED) - Phase 1
149.	Provincial denominators to support COVID-19 public health response
150.	Corticosteroid use among outpatients with COVID-19
151.	Specialist and primary care physicians' response to increased mental health demand across the lifespan during the COVID-19 pandemic
DAS Projects	
152.	The Ontario Health Study - Covid-19 Ancillary Study
153.	Multimorbidity and Other Factors Associated with Susceptibility to and Outcomes of Covid-19: Focus on Long-Term Care Homes



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154.	Quantifying the backlog in ophthalmic visits and procedures and the use of virtual visits (OHDP)
155.	Preterm birth rate and stillbirth rate during the lockdown of Covid-19 pandemic in Ontario (OHDP 2020-017)
156.	Palliative care and health care utilization outcomes at the end of life for patients with cancer before and after the COVID-19
157.	The incidence of conjunctivitis and associated risk factors in patients with COVID-19: a population-based study in Ontario (OHDP)
158.	The Ontario Health Study - Covid-19 Ancillary Study
159.	Association between SARS-CoV-2 infection and disease severity among men on androgen deprivation therapy for prostate cancer
160.	The impact of COVID-19 on kidney stone disease in Ontario
161.	COVID-19 in Rheumatoid Arthritis: A comparative cross-sectional study on risk and predictors of infection, admission and mortality and effect of immunomodulating treatments
162.	Estimating the sensitivity and specificity of COVID-19 case definition in Canada's administrative and research databases (DASH 2020-025)
163.	Sex-specific profile of patients admitted to intensive care units with COVID-19: Primary prevention to reduce healthcare burden
164.	Impact of COVID-19 on Surgical Care in Ontario- Identification of Gaps in Essential Procedures and Strategies to Enhance Surgical
165.	Risk factors for acquisition of or serious illness due to Covid-19 infection: an analysis within the Canadian Study of Diet, Lifestyle, and Health
166.	Vulnerable and Left Behind: Autism Community Experiences in Canada During COVID-19
167.	COVID-19 and cancer care disruptions: effects on healthcare utilization and health outcomes in Ontario
168.	Interrupted Time Series Study of the effects of COVID 19 global pandemic on emergency room visits and mortality to non-COVID related illnesses
169.	Examining risk of infection in patients with psoriasis
170.	The effect of COVID-19 on the implementation of teleconsultation and healthcare costs
171.	Long-Term Care in Crisis: The Reality of COVID-19
172.	Mental health planning in the era of a pandemic: appropriately matching mental health needs with resources across Canada through a rapid assessment of COVID-19's impact on adults and older adults (DASH 2020-033)
173.	Investigation into increased sensorineural hearing loss in recovered individuals with positive diagnosis of COVID-19
174.	Wellness resource officers: supporting personal support workers in LTC during and after the COVID-19 pandemic
175.	Oncologic outcomes of genitourinary malignancies during the COVID-19 pandemic
176.	Creating a COVID-19 Registry with Primary Care Electronic Medical Records Data



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177.	Canadian COVID-19 Emergency Department Registry (DASH 2020-008)
178.	Study of Health Outcomes in Neonates Exposed to COVID-19 in British Columbia (SHINE-BC) (DASH 2020-015)
179.	COVID-19 Windsor/Essex County
180.	SURveilling Prospective Population cOHORTs for COVID19 pRevalence and ouTcomes in Canada (SUPPORT-Canada)(DASH 2020-021)
181.	Effectiveness of self-proning and repositioning in outpatients with COVID-19: a randomized controlled internal pilot trial
182.	Pandemic Spillover Effects on non-COVID Patients with Chronic Conditions: Assessing Healthcare Utilization, Experiences and Health Outcomes through Cross-Provincial Mixed-Methods Research (DASH 2021-049)
183.	Canadian Treatments for COVID19 (CATCO) (DASH 2020-053)
184.	Exploring Social Inequities in COVID-19 Outcomes using Geographic Information Systems
185.	Socioeconomic Status and Ambient Air Quality as Correlates of COVID-19 Infections: Evidence from Ontario
186.	The Effects of Public Health Restrictions on COVID-19 and Citizen Behaviour in Ontario
ICES Supported OHDP Projects (Externally Led)	
187.	Exploratory Analysis of the Hidden Patterns in the Data With Respect to COVID-19
188.	Retirement and Long-Term Care Outbreak due to COVID-19
189.	Who are the groups particularly vulnerable to COVID-19 in Ontario?
190.	COVID-19 risk factors, inequalities and health-care utilization and costs in people with mental health and substance use/addiction problems
191.	Using AI to Predict COVID19 Impacts on Canada's Health System IMSC-000012936
192.	CARDIAC AND NEUROLOGICAL COMPLICATIONS OF COVID-19 among ONTARIO VISIBLE MINORITIES INCLUDING CHINESE CANADIANS AND SOUTH ASIAN CANADIANS
193.	What are the characteristics of those at greatest risk of dying from COVID-19/SARS-CoV-2?
194.	Long-Term Care in Crisis: The Reality of COVID-19
195.	Prediction of hospitalizations, ICU admissions, and major adverse cardiac events
196.	Predicting future hospitalizations and deaths in Ontario, Canada.
197.	Patterns in opioid prescription
198.	Exploring the protection effect of natural COVID-19 infection on the risk of reinfection

* Projects that are ICES investigator led and also OHDP supported

**Third party OHDP Projects

ICES COVID-19 Publications



2020/21 Publications

1. Bhatia RS, Chu C, Pang A, Tadrous M, Stamenova V, Cram P. Virtual care use before and during the COVID-19 pandemic: a repeated cross-sectional study. *CMAJ Open*. 2021; 9(1):E107-E114. doi: <https://doi.org/10.9778/cmajo.20200311>
2. Chu C, Cram P, Pang A, Stamenova V, Tadrous M, Bhatia RS. Rural telemedicine use before and during the COVID-19 pandemic: a repeated cross-sectional study. *J Med Internet Res*. 2021; 23(4):e26960. doi: <https://doi.org/10.2196/26960>
3. Eskander A, Li Q, Hallet J, Coburn N, Hanna TP, Irish J, Sutradhar R. Access to cancer surgery in a universal health care system during the COVID-19 pandemic. *JAMA Netw Open*. 2021; 4(3):e211104. doi: <https://doi.org/10.1001/jamanetworkopen.2021.1104>
4. Glazier RH, Green ME, Wu FC, Frymire E, Kopp A, Kiran T. Shifts in office and virtual primary care during the early COVID-19 pandemic in Ontario, Canada. *CMAJ*. 2021; 193(6):E200-E210. doi: <https://doi.org/10.1503/cmaj.202303>
5. Gomez D, Dossa F, Sue-Chue-Lam C, Wilton AS, de Mestral C, Urbach D, Baxter N. Impact of COVID 19 on the provision of surgical services in Ontario, Canada: population-based analysis. *Br J Surg*. 2021; 108(1):e15-e17. doi: <https://doi.org/10.1093/bjs/znaa043>
6. Ray JG, Schull MJ, Vermeulen MJ, Park AL. Association between ABO and Rh blood groups and SARS-CoV-2 infection or severe COVID-19 illness: a population-based cohort study. *Ann Intern Med*. 2021; 174(3):308-315. doi: <https://doi.org/10.7326/m20-4511>
7. Richard L, Booth R, Rayner J, Clemens KK, Forchuk C, Shariff SZ. Testing, infection and complication rates of COVID-19 among people with a recent history of homelessness in Ontario, Canada: a retrospective cohort study. *CMAJ Open*. 2021; 9(1):E1-E9. doi: <https://doi.org/10.9778/cmajo.20200287>
8. Shariff SZ, Richard L, Dixon S, Clemens K. Were snowbirds disproportionately impacted by COVID-19? An Ontario analysis. *Healthc Q*. 2021; 23(4):6-8. doi: <https://doi.org/10.12927/hcq.2020.26401>

2021/22 Publications

1. Asai Y, Nguyen P, Hanna TP. Impact of the COVID-19 pandemic on skin cancer diagnosis: a population-based study. *PLoS One*. 2021; 16(3):e0248492. doi: <https://doi.org/10.1371/journal.pone.0248492>
2. Campitelli MA, Bronskill SE, Maclagan LC, Harris DA, Cotton CA, Tadrous M, Gruneir A, Hogan DB, Maxwell CJ. Comparison of medication prescribing before and after the COVID-19 pandemic among nursing home residents in Ontario, Canada. *JAMA Netw Open*. 2021; 4(8):e2118441. doi: <https://doi.org/10.1001/jamanetworkopen.2021.18441>
3. Chu JY, Kaliwal Y, Koh M, Chen R, Chow CM, Ko DT, Liu PP, Moe GW. COVID-19 and its cardiac and neurological complications among Ontario visible minorities. *Can J Neurol Sci*. 2021; Jun 24 [Epub ahead of print]. doi: <https://doi.org/10.1017/cjn.2021.148>
4. Chung H, He S, Nasreen S, Sundaram ME, Buchan SA, Wilson SE, Chen B, Calzavara A, Fell DB, Austin PC, Wilson K, Schwartz KL, Brown KA, Gubbay JB, Basta NE, Mahmud SM, Righolt CH, Svenson LW, MacDonald SE, Janjua NZ, Tadrous M, Kwong JC, CIRN PCN Investigators. Effectiveness of BNT162b2 and mRNA-1273 COVID-19 vaccines against symptomatic SARS-CoV-2



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- infection and severe COVID-19 outcomes in Ontario, Canada: test negative design study. *BMJ*. 2021; 374:n1943. doi: <https://doi.org/10.1136/bmj.n1943>
5. de Mestral C, Gomez D, Sue-Chue-Lam C, Dossa F, Nantais J, Simpson AN, Urbach D, Austin PC, Wilton AS, Baxter NN. Variable impact of COVID-19 on urgent intervention in Ontario. *Br J Surg*. 2021; 108(8):e266-e267. doi: <https://doi.org/10.1093/bjs/znab121>
 6. Eder L, Croxford R, Drucker AM, Mendel A, Kuriya B, Touma Z, Johnson SR, Cook R, Bernatsky S, Haroon N, Widdifield J. Understanding COVID-19 risk in patients with immune mediated inflammatory diseases: a population-based analysis of SARS-CoV-2 testing. *Arthritis Care Res (Hoboken)*. 2021; Sep 6 [Epub ahead of print]. doi: <https://doi.org/10.1002/acr.24781>
 7. Gomez D, Simpson AN, Sue-Chue-Lam C, de Mestral C, Dossa F, Nantais J, Wilton AS, Urbach D, Austin PC, Baxter NN. A population-based analysis of the impact of the COVID-19 pandemic on common abdominal and gynecological emergency department visits. *CMAJ*. 2021; 193(21):E753-E760. doi: <https://doi.org/10.1503/cmaj.202821>
 8. Konstantelos N, Shakeri A, McCormack D, Feld JJ, Gomes T, Tadrous M. Impact of COVID-19 on prescribing trends of direct-acting antivirals for the treatment of hepatitis C in Ontario, Canada. *Am J Gastroenterol*. 2021; 116(8):1738-1740. doi: <https://doi.org/10.14309/ajg.0000000000001287>
 9. Lunskey Y, Durbin A, Balogh R, Lin E, Palma L, Plumptre L. COVID-19 positivity rates, hospitalizations and mortality of adults with and without intellectual and developmental disabilities in Ontario, Canada. *Disabil Health J*. 2021; Jul 26 [Epub ahead of print]. doi: <https://doi.org/10.1016/j.dhjo.2021.101174>
 10. Mishra S, Ma H, Moloney G, Yiu KC, Darwin D, Landsman D, Kwong JC, Calzavara A, Straus S, Chan AK, Gournis E, Rilkoﬀ H, Xia Y, Katz A, Williamson T, Malikov K, Kustra R, Maheu-Giroux M, Sander B, Baral SD, COVID-19 Heterogeneity Research Group. Increasing concentration of COVID-19 by socioeconomic determinants and geography in Toronto, Canada: an observational study. *Ann Epidemiol*. 2021; Jul 25 [Epub ahead of print]. doi: <https://doi.org/10.1016/j.annepidem.2021.07.007>
 11. Myran DT, Cantor N, Pugliese M, Hayes T, Talarico R, Kurdyak P, Qureshi D, Tanuseputro P. Sociodemographic changes in emergency department visits due to alcohol during COVID-19. *Drug Alcohol Depend*. 2021; 226:108877. doi: <https://doi.org/10.1016/j.drugalcdep.2021.108877>
 12. Noel CW, Li Q, Sutradhar R, Eskander A. Total laryngectomy volume during the COVID-19 pandemic: looking for evidence of stage migration. *JAMA Otolaryngol Head Neck Surg*. 2021; Aug 19 [Epub ahead of print]. doi: <https://doi.org/10.1001/jamaoto.2021.2019>
 13. Ray JG, Colacci M, Schull MJ, Vermeulen MJ, Park AL. Non-ABO red cell antibodies and risk of COVID-19. *Int J Infect Dis*. 2021; 108:179-182. doi: <https://doi.org/10.1016/j.ijid.2021.05.038>
 14. Saunders N, Plumptre L, Doing C, Gandhi S, Schull M, Guttman A, Paterson JM. Acute care visits for assault and maltreatment before vs during the COVID-19 pandemic in Ontario, Canada. *JAMA Health Forum*. 2021; 2(8):e211983. doi: <https://doi.org/10.1001/jamahealthforum.2021.1983>
 15. Simpson AN, Snelgrove JW, Sutradhar R, Everett K, Liu N, Baxter NN. Perinatal outcomes during the COVID-19 pandemic in Ontario, Canada. *JAMA Netw Open*. 2021; 4(5):e2110104. doi: <https://doi.org/10.1001/jamanetworkopen.2021.10104>



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16. Sud M, Qui F, Shah R, Lee DS, Nallamothu BK, Natarajan MK, Wijeyesundera HC, Ko DT. Rate of COVID-19 infection in patients with ST-segment elevation myocardial infarction. *CJC Open*. 2021; May 21 [Epub ahead of print]. doi: <https://doi.org/10.1016/j.cjco.2021.05.012>
17. Sundaram M, Nasreen S, Calzavara A, He S, Chung H, Bronskill SE, Buchan SA, Tadrous M, Tanuseputro P, Wilson K, Wilson S, Kwong JC, Canadian Immunization Research Network Investigators. Background rates of all-cause mortality, hospitalizations, and emergency department visits among nursing home residents in Ontario, Canada to inform COVID-19 vaccine safety assessments. *Vaccine*. 2021; 39(37):5265-5270. doi: <https://doi.org/10.1016/j.vaccine.2021.07.060>
18. Vigod SN, Brown HK, Huang A, Fung K, Barker LC, Hussain-Shamsy N, Wright E, Dennis CL, Grigoriadis S, Gozdyra P, Corsi D, Walker M, Moineddin R. Postpartum mental illness during the COVID-19 pandemic: a population-based, repeated cross-sectional study. *CMAJ*. 2021; 193(23):E835-E843. doi: <https://doi.org/10.1503/cmaj.210151>
19. Welk B, Richard L, Rodriguez-Elizalde S. The requirement for surgery and subsequent 30-day mortality in patients with COVID-19. *Can J Surg*. 2021; 64(2):E246-E248. doi: <https://doi.org/10.1503/cjs.022020>
20. Yu AXY, Lee DS, Vyas MV, Porter J, Rashid M, Fang J, Austin PC, Hill MD, Kapral MK. Emergency department visits, care, and outcome after stroke and myocardial infarction during the COVID-19 pandemic phases. *CJC Open*. 2021; Jun 4 [Epub ahead of print]. doi: <https://doi.org/10.1016/j.cjco.2021.06.002>



Table 2: Submitted Publications or Reports

Authors	Paper/Report Title	Journal/Organization
Saunder NR, Toulany A, Deb B, Strauss R, Vigod S, Guttman A, Chiu M, Huang A, Fung K, Chen S, Kurdyak P	Acute mental health service use following onset of the COVID-19 pandemic in Ontario, Canada: a trend analysis	CMAJ Open
Jones A, Maclagan LC, Schumacher C, Wang X, Jaakkimainen RL, Guan J, Swartz RH, Bronskill SE	Impact of the COVID-19 pandemic on home care services among community-dwelling adults with dementia	Journal of the American Medical Directors Association
Gutierrez J, Volkovs M, Poutanen T, Watson T, Rosella L	COVID-19 risk stratification: a multivariable model based on gradient boosting decision trees	CMAJ Open
Tam DY, Qiu F, Manoragavan R, Fremes SE, Hassan A, Ko DT, Lauck SB, Naimark D, Ouzounian M, Sander B, Sun L, Wijeyesundera HC	The impact of the COVID-19 pandemic on cardiac procedure waitlist mortality in Ontario, Canada	Canadian Journal of Cardiology
Saunders N, Toulany A, Guan J, Fu L, Guttman A, Kurdyak P, Strauss R, Stukel T	Pediatric (3 to 17 years) mental health emergency department visits, hospitalizations, and outpatient physician visits through the COVID-19 pandemic in Ontario, Canada	Ministry of Health, SickKids and Ontario COVID-19 Science Advisory Table
Sundaram ME, Calzavara A, Mishra S, Kustra R, Chan A, Hamilton MA, Djebli M, Rosella LC, Watson T, Chen H, Chen B, Baral SD, Kwong JC	Identifying heterogeneity in SARS-CoV-2 testing and COVID-19 diagnosis, and sources of bias, among individuals in a large-scale administrative database	MedRxiv
Ge, E., Li, Y., Wu, S., Candido, E., Wei, X	Association of pre-existing comorbidities with mortality and disease severity among 167,500 individuals with COVID-19 in Canada: a population-based cohort study	PLOS One

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INSPIRE – Primary Health Care OSSU focuses on Primary Health Care (PHC) research, assisting Ontario researchers with primary health care-specific research consultation, knowledge translation and exchange (KTE), capacity building activities and patient engagement resources.

During the pandemic, INSPIRE-PHC OSSU:

- Has provided ongoing pandemic information and analysis support to health-system decision makers, providers and other stakeholders; Following studies all nearing completion working with Ontario primary care knowledge users
 - Rachele Ashcroft, KU:AFHTO: Kavita Mehta. Recommendations for Patient-Centered Telemedicine : Learning from patients’ experiences with synchronous virtual primary care encounters during the COVID-19 pandemic
 - Amanda Terry. KU:MOH-Digital Health: Kathryn May. Creating an Action Plan for the Use of Artificial Intelligence: COVID-19 Pandemic and Recovery in Primary Health Care in Ontario
 - Tara Kiran. KU: Ontario Health:-David Kaplan. Keeping Doors Open: Family Physicians and who continues in person visits during pandemic
 - Catherine Donnelly. KU:AFHTO: Sandeep Gill. Understanding how primary care teams have responded to COVID-19 restrictions to support access for patients and communities
- INSPIRE-PHC Project Updates:
 - **Simone Dahrouge - RCT Patient navigation program:** Our study seeks to understand patients’ expectations and experiences with telephone and video appointments during the pandemic. Findings from our study will generate recommendations to health-system decision makers, providers, and other stakeholders on how virtual care can be used to best support patients in Ontario. Currently, we have received 295 English survey respondents and 11 French survey respondents. In addition, we have conducted 39 English interviews and 3 French interviews, with the goal of completing 45 English interviews and 10 French interviews.
 - **Judith Brown - Engaging Family Physicians in OHTs:** This qualitative study using grounded theory is designed to explore the development and implementation of OHTs. With the arrival of COVID-19, we made a major shift in our focus, now examining the impact of the pandemic on the development and implementation of OHTs. Twenty interviews have been conducted with key informants, reflecting 5 regions of Ontario – N, S, E, W, and Central. These key informants have been primary care leads at OHTs, members of the COVID-19 Provincial Primary Care Advisory Table, and Ontario Health primary care representatives. The data analysis has been iterative and interpretive, and conducted by a team of 4 researchers at Western University. Key findings to date:
 1. The pandemic generally accelerated OHT development and was observed, for example, through the participation in securing PPE and staffing assessment centres. However, for some, Year 1 objectives shifted to pandemic priorities.
 2. In some OHTs, work on governance issues was deferred as they worked on specific tasks related to COVID-19.



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3. The pandemic further established and strengthened the development of primary care organizations/collaboratives, as well as their connections to the OHT. Many participants have suggested support for an umbrella primary care organization, similar to the OHA.
 4. Primary care leadership appears to be evolving from being champions who promote change to leaders who co-create change. This requires time and commitment. Consequently, the issue of remuneration has been expressed repeatedly as volunteerism is not sustainable.
 5. There appears to be a shift from describing the process as engaging primary care to investing in primary care, which is a two-way street and has more resonance with primary care providers.
 6. The pandemic has generated some remarkable innovations, e.g. family medicine setting up a respiratory assessment centre, which need to be sustained in the future.
- **Michelle Greiver - POPULAR:** 6 practiced based EMR Networks affiliated with Dept of family medicine and the Alliance now part of INSPIRE PHC. Work in conjunction with AFHTO, CSPO and OCFP.
 - **Clare Liddy – eCONSULT:** Survey of primary care and eConsult and wait times- psychiatry, mental health addictions, and frailty came up with major challenge points. Working in this space- numbers for cases of frail patients and practical examples coming out of this. Conducting a taxonomy of eConsult cases related to COVID; developing a survey of OHTs to support implementation of eConsult; drafting a protocol to survey long-term care homes in order to assess the level of Health Information Technology available in their facilities
 - **Rick Glazier-COVID and primary care study- virtual and office care:**
 - 80 % drop in office visits
 - 46 fold increase in virtual care mapped by physician networks.
 - A lot of variation by networks across the province
 - CMAJ publication -Feb.8, 2021.
 - **Mike Green-Attachment metrics for primary care:** Primary care report to be distributed to all OHTs. Key to planning and addressing primary care access in roll out of OHT during pandemic. Key outreach to multiple MOH branches and professional boards, associations.
 - Dr Clare Liddy eCase Conferencing and Complex Patients.
 - Taxonomy of econsult cases sent to COVID specialists – complete, manuscript submitted to Annals of Family Medicine
 - Dr Judy Brown, Dr Amanda Terry, Dr Bridget Ryan: PHC providers working together.
 - OMA facilitated engagement with fee for service physicians to capture rapid evolution in primary care in response to pandemic and OHT roll out.
 - Dr Mike Green, Dr Rick /Glazier:-PHC capacity and Population Needs.
 - Primary care data supports for OHTs – release of Primary Care Data Report for all OHTs set for early October, 2021. Posted to Ontario Community Health Profiles website.



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- Ontario COVID-19 vaccination Status and attachment to a Primary care study
- Virtual care and the impact of ED rates and use- study underway in conjunction with Ontario Health.
- Continuity of care/outside use of care – stoppage in care-paper under review - Annals of Family Medicine.
- ARC program Patient Advisory Committee composed of individuals from across the province who have lived experience with the health care system. Members on the committee were carefully selected to ensure representation of Ontario's diverse communities. We consult our Patient Advisory Committee on a regular basis (approximately once every two months) throughout the research process and have helped with developing our research tools, recruitment, and identifying key areas to address in our study. We will also be presenting our initial findings from our surveys and interviews for their feedback and guidance.
- Listing of COVID-related peer-reviewed publications
 - **Shifts in office and virtual primary care during the early COVID-19 pandemic in Ontario, Canada.** Richard H. Glazier, Michael E. Green, Fangyun C. Wu, Eliot Frymire, Alexander Kopp, Tara Kiran. CMAJ Feb 2021, 193 (6) E200-E210; DOI: 10.1503/cmaj.202303 <https://www.cmaj.ca/content/193/6/E200>
 - In press
 - **Development and validation of an algorithm using health administrative data to define patient attachment to primary care providers:** Journal of Health Organization and Management. 2021. Liisa Jaakkimainen, Imaan Bayoumi, Kamila Premji, Tara Kiran, : Shahriar Khan, Eliot Frymire, Michael E. Green,
 - Ashcroft, R., Donnelly, C., Gill, S., Dancey, M., Lam, S., Grill, A., & Mehta, K. **The rapid pivot of primary care during the COVID-19 pandemic: results from a provincial-wide survey.** Healthcare Policy.
- Presentations
 - 4 presentations at the North American Primary Care Research Group.
- AHRQs in this fiscal year April, 2021- March 2022 on COVID 19
 - **Sharon Johnson and William Hogg:** A community based Covid-19 health information and services needs assessment system for francophone and vulnerable populations
 - **Monica Aggarwal** The Role of Primary Care in the Rollout of COVID 19 Vaccines: A Review of International Evidence and Experience'
 - **Jonathon Fitzsimon** Access to COVID-19 assessment and testing in rural, remote and underserved communities
 - **Rachelle Ashcroft:** A Policy-Centred Knowledge Translation Strategy to Optimize Patients' Experiences with Virtual Care Appointments in Primary Care

Click [here](#) to learn more.

McMaster Health Forum

The McMaster Health Forum co-produces and supports the use of patient-oriented research about system issues; elicits patient values to inform system decisions; designs and evaluates approaches to



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combining evidence and values with other influences on the decision-making process; and, involves the full range of policy-makers and stakeholders in all aspects of its work and supports their use of what's learned through rigorous knowledge-translation approaches that are appropriate to the system level.

During the pandemic, the **McMaster Health Forum** (www.mcmasterforum.org):

- jointly co-leads the secretariat, with its partner at the Ottawa Hospital Research Unit, for the global [COVID-19 Evidence Network to support Decision-making](#) (COVIDEND), which currently has 57 and counting of the world's leading evidence synthesis groups (major accomplishments to date listed below):
- in January 2021 we launched **COVID-END in Canada**, funded by the Government of Canada through a one-year \$1 mil. CIHR grant. It is co-led with the Ottawa Hospital Research Unit, [SPOR Evidence Alliance](#) and Cochrane Canada, includes with 40+ of Canada's leading evidence synthesis groups, and provides resources specific to Canadian decision-makers and researchers:
 - dedicated section on the COVID-END website (covid-end.org) including a '[Keep current](#)' section
 - innovative [new evidence synthesis products](#) (rapid evidence profiles in 4 hours to 3 days, and living evidence profiles that are updated regularly, such as those on vaccine roll-out and long-term care crisis-management and renewal [72 Requests and completed products](#) to date, including:
 - New or updated syntheses
 - Rapid evidence profiles & syntheses – e.g., care models for post-COVID conditions, COVID-19 in pregnant persons, vaccine effectiveness among immunocompromised
 - Plain language summaries (includes summaries for living documents)
 - Living evidence syntheses
 - Living evidence profiles – e.g., lessons learned, LTC renewal, vaccine roll-out
 - Living evidence syntheses – e.g., vaccine effectiveness against VOCs, implications of VOCs
 - Living behavioural sciences documents – e.g., vaccine uptake among citizens
 - subscription available for:
 - [Canadian spotlights](#) published twice a month
 - [Global spotlights](#) published twice a month
 - [Horizon scans](#) published once a month
 - Citizen engagement: : (24 citizen partners in Canada)
The COVID-END citizen partners bring the voices of citizens to ensure their perspectives are woven into COVID-END's work, along with those of researchers, providers, policymakers and other stakeholders. Citizen partners are making a significant contribution to COVID-END by:



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- identifying (and prioritizing) issues to be addressed along the full spectrum of decisions related to the COVID-19 pandemic and response (i.e., public-health measures, clinical management, health system arrangements, and social and economic responses)
- ensuring that new evidence syntheses (e.g., living systematic reviews) being conducted address questions and outcomes that are important to them and involve citizens in their work
- ensuring that the pandemic response will reflect the values and insights of citizens, as well as equity considerations
- providing strategic guidance to the work of COVID-END global and COVID-END in Canada.
- webinars available [here](#)
- presentations available [here](#)
- Other major accomplishments
 - resources to support decision-makers:
 - 1) an [inventory of 'best evidence syntheses'](#) through which you can immediately find the best available (i.e., most up-to-date, highest quality, and transparently presented) evidence syntheses for each of: [public-health measures](#), [clinical management](#), [health-system arrangements](#), and [economic and social responses](#);
 - 2) [horizon scans for emerging issues](#) to proactively identify long-term, recurring and emergent issues that need to be prioritized in efforts to synthesize the best available research evidence to support decision-making about COVID-19;
 - 3) a [COVID-END Community](#) to facilitate large-scale collaboration and shared learning within the community of those supporting decision-making;
 - 4) a [living hub of COVID-19 knowledge hubs](#) to identify organizations that are supporting decision-making with a specific topic or sectoral focus, with a specific type of resource (e.g., recommendations, evidence syntheses or data), and/or with a specific geographic or linguistic scope; and
 - 5) additional supports: a [guide to COVID-19 evidences sources](#) (although we recommend starting with our inventory before searching other sources), [resources to help you package research evidence](#) for decision-makers, a description of a [model for responding to decision-makers' requests for research evidence](#) in very short turn-around times, and [tips and tools for responding to decision-makers' needs](#)
 - resources to support researchers:
 - 6) [priorities for new syntheses and guidelines](#);
 - 7) [resources for those considering and conducting COVID-19 evidence syntheses](#);
 - and
 - 8) [resources for those considering and developing COVID-19 guidelines](#)
 - an engagement strategy to ensure that citizen perspectives are woven in COVID-END work (and now has citizen representation at the partner's table and as part of the horizon-scanning panel)



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- at the request of WHO, being part of the secretariat for the WHO Evidence Collaborative for COVID-19
- we have a representative (John Lavis) on the Lancet COVID-19 Commission's Task force for Public Health Measures to Suppress the Pandemic
- three published papers: in the [Cochrane Library Supplement](#), in [The Lancet](#), and in the [Science Magazine](#)
- has developed, in its role as co-lead of RISE, a rapid-response model to support Ontario policymakers and stakeholders with the best available evidence about COVID-19 in timelines as short as 3-4 hours and to date has produced 24 [rapid evidence profiles](#)

In addition:

- McMaster Health Forum, in Collaboration with the Ottawa Hospital Research Institute's Centre for Implementation Research has launched the **Global Commission on Evidence to Address Societal Challenges**

The pandemic has created a once-in-a-generation focus on evidence and its importance when preparing for and responding to societal challenges. Governments and other decision makers are rethinking how, and in what ways, they rely on the best evidence to inform their responses to global challenges.

- The [COVID-19 Evidence Network to support Decision-making \(COVID-END\)](#) first identified the need for the Evidence Commission that brings together some of the most respected organizations to provide a more coordinated evidence response by drawing on the world's best evidence. Having seen how the pandemic has created a once-in-a-generation focus on evidence, COVID-END's [57 partners](#) — among the most respected organizations in their respective fields — came together to provide a more coordinated evidence response to the once-in-a-generation global challenge of COVID-19. While the pandemic has fast-tracked collaboration among decision-makers and researchers, drawing from a range of types of evidence to inform decision-making is not yet routine. At the core of Evidence Commission's work is better understanding the range of societal challenges ahead and ways to prepare decision-makers to effectively respond, drawing on the world's best evidence.
- The [Global Commission on Evidence to Address Societal Challenges](#) will produce recommendations (by December 2021) and pursue 'pathways to influence' (in 2022) to strengthen the use of evidence by decision-makers – be they government policymakers, organizational leaders (in businesses and non-governmental organizations), professionals, or citizens – in addressing societal challenges, both in routine times and in future global crises.
- [Sign up to our newsletter](#) and follow us on [Twitter](#) and [LinkedIn](#) to learn when new draft exhibits become available for review.

McMaster Collaborative for Health and Aging



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The McMaster Collaborative for Health and Aging brings together world-class researchers from the Community and Health Research Unit (ACHRU) with a mandate to support optimal aging in Ontario through capacity building and advance Ontario's health care system by using an integrated, coordinated, and people-centred approach. The collaborative seeks to address the unique needs of older adults and their caregivers through resources, consultation supports, data access, and technical services in patient-oriented research in aging.

Website: <https://mira.mcmaster.ca/research/research-centres/mira-collaborative-for-health-aging>

The members of the McMaster Collaborative for Health & Aging have continued to support efforts to address the impact of the pandemic. Below is a summary of the most recent pandemic related initiatives and products (not captured in our previous report) that our members are involved in:

- Leading the coordination of activities of COVID-END in Canada:
<https://www.mcmasterforum.org/networks/covid-end/resources-specific-to-canada>
- Coordinating between government and stakeholder requests and the evidence synthesis teams in COVID-END to conduct evidence syntheses (COVID-END evidence products can be found here: <https://www.mcmasterforum.org/networks/covid-end/resources-specific-to-canada/for-decision-makers/scan-evidence-products>).
- Engaging patient partners in COVID-END in Canada
(<https://www.mcmasterforum.org/networks/covid-end/resources-specific-to-canada/about-us/citizen-partners>)
- Partnering (as a co-investigator) on a CIHR-funded operating grant entitled: [Long COVID and episodic disability: Advancing the conceptualization, measurement and knowledge of episodic disability with people living with Long COVID \(NPI: Kelly O'Brien\)](#). This study involves an international team with strong representation of individuals and groups of people with lived/living experience of Long COVID. The goals of the study are to characterize the disability experiences of people living with Long COVID in Canada, UK, United States and Ireland and to develop a patient-reported outcome measure to assess the presence, severity and episodic nature of disability among people living with Long COVID.

Peer reviewed publications:

1. Tricco AC, Garritty CM, Boulos L, Lockwood C, Wilson M, McGowan J, McCaul M, Hutton B, Clement F, Mittmann N, Devane D, Langlois EV, Abou-Setta AM, Houghton C, Glenton C, Kelly SE, Welch VA, LeBlanc A, Wells GA, Pham B, Lewin S, Straus SE. Rapid review methods more challenging during COVID-19: Commentary with a focus on 8 knowledge synthesis steps. *Journal of Clinical Epidemiology* 2020; 126: 177-183.



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2. Pitre T, Dong AHT, Jones A, Kapralik J, Cui S, Mah J, Helmeczi W, Su J, Patel V, Zia Z, Mallender M, Tang X, Webb C, Patro N, Junek M, Duong M, Ho T, Beauchamp MK, Costa AP, Kruisselbrink R, Tsang JLY, Walsh M. Incidence and Outcomes of Acute Kidney Injury in Patients Admitted to Hospital With COVID-19: A Retrospective Cohort Study. *Can J Kidney Health Dis.* 2021 Jul 11;8:20543581211027759. doi: 10.1177/20543581211027759. PMID: 34290876; PMCID: PMC8278450.
3. Costa AP, Manis DR, Jones A, Stall NM, Brown KA, Boscart V, Castellino A, Heckman GA, Hillmer MP, Ma C, Pham P, Rais S, Sinha SK, Poss JW. Facteurs de risque d'écllosion de SRAS-CoV-2 dans les résidences pour aînés en Ontario, au Canada: étude de cohorte à l'échelle de la population. *CMAJ.* 2021 Jun 21;193(25):E969-E977. French. doi: 10.1503/cmaj.202756-f. PMID: 34155053; PMCID: PMC8248469.
4. Heckman GA, Kay K, Morrison A, Grabowski DC, Hirdes JP, Mor V, Shaw G, Benjamin S, Boscart VM, Costa AP, Declercq A, Geffen L, Sang Lum TY, Moser A, Onder G, van Hout H. Proceedings from an International Virtual Townhall: Reflecting on the COVID-19 Pandemic: Themes from Long-Term Care. *J Am Med Dir Assoc.* 2021 Jun;22(6):1128-1132. doi: 10.1016/j.jamda.2021.03.029. Epub 2021 Apr 8. PMID: 33932351; PMCID: PMC8030741.
5. Pitre T, Jones A, Su J, Helmeczi W, Xu G, Lee C, Shamsuddin A, Mir A, MacGregor S, Duong M, Ho T, Beauchamp MK, Costa AP, Kruisselbrink R; COREG Investigators. Inflammatory biomarkers as independent prognosticators of 28-day mortality for COVID-19 patients admitted to general medicine or ICU wards: a retrospective cohort study. *Intern Emerg Med.* 2021 Sep;16(6):1573-1582. doi: 10.1007/s11739-021-02637-8. Epub 2021 Jan 26. PMID: 33496923; PMCID: PMC7836340.
6. Jones A, Pitre T, Junek M, Kapralik J, Patel R, Feng E, Dawson L, Tsang JLY, Duong M, Ho T, Beauchamp MK, Costa AP, Kruisselbrink R; COREG Investigators. External validation of the 4C mortality score among COVID-19 patients admitted to hospital in Ontario, Canada: a retrospective study. *Sci Rep.* 2021 Sep 20;11(1):18638. doi: 10.1038/s41598-021-97332-1. PMID: 34545103; PMCID: PMC8452633.
7. Stall NM, Zipursky JS, Rangrej J, Jones A, Costa AP, Hillmer MP, Brown K. Assessment of Psychotropic Drug Prescribing Among Nursing Home Residents in Ontario, Canada, During the COVID-19 Pandemic. *JAMA Intern Med.* 2021 Jun 1;181(6):861-863. doi: 10.1001/jamainternmed.2021.0224. PMID: 33720285; PMCID: PMC7961468.
8. De Rubeis V, Lee J, Anwer MS, Yoshida-Montezuma Y, Andreacchi AT, Stone E, Iftikhar S, Morgenstern JD, Rebinsky R, Neil-Sztramko SE, Alvarez E, Apatu E, Anderson LN. Impact of disasters, including pandemics, on cardiometabolic outcomes across the life-course: a systematic review. *BMJ Open.* 2021 May 3;11(5):e047152. doi: 10.1136/bmjopen-2020-047152. PMID: 33941635; PMCID: PMC8098961.



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9. Husson H, Howarth C, Neil-Sztramko S, Dobbins M. The National Collaborating Centre for Methods and Tools (NCCMT): Supporting evidence-informed decision-making in public health in Canada. *Can Commun Dis Rep.* 2021 Jun 9;47(56):292-296. doi: 10.14745/ccdr.v47i56a08. PMID: 34220355; PMCID: PMC8219060.
10. Kapiriri L, Kiwanuka S, Biemba G, Velez C, Razavi SD, Abelson J, Essue B, Danis M, Goold S, Noorulhuda M, Nouvet E, Sandman L, Williams I. Priority Setting and Equity in COVID-19 Pandemic Plans: A Comparative Analysis of eighteen African Countries. *Health Policy Plan.* 2021 Sep 21:czab113. doi: 10.1093/heapol/czab113. Epub ahead of print. PMID: 34545395.
11. Williams I, Essue B, Nouvet E, Sandman L, Razavi SD, Noorulhuda M, Goold S, Danis M, Biemba G, Abelson J, Kapiriri L. Priority setting during the COVID-19 pandemic: going beyond vaccines. *BMJ Glob Health.* 2021 Jan;6(1):e004686. doi: 10.1136/bmjgh-2020-004686. PMID: 33461979; PMCID: PMC7816921.

Reports

1. Wilson MG, Gauvin FP, Waddell K, Moat, KA, Lavis JN. COVID-19 rapid evidence profile #1: What is known about approaches to and safety of conserving, re-using, and repurposing different kinds of masks? Hamilton: McMaster Health Forum, 14 April 2020.
2. Waddell K, Gauvin FP, Wilson MG, Moat KA, Mansilla C, Lavis JN. COVID-19 rapid evidence profile #2: What is known about the spread and management of COVID-19 in non-health workplaces? Hamilton: McMaster Health Forum, 20 April 2020.
3. Wilson, MG, Waddell K, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #3: What is the evidence about and international and Canadian experiences with asymptomatic screening to identify COVID-19 cases and to prevent transmission? Hamilton: McMaster Health Forum, 29 April 2020.
4. Wilson MG, Gauvin FP, Moat KA, Waddell K, Mansilla C, Wang Q, Lavis JN. COVID-19 rapid evidence profile #4: What are the most effective non-medical masks for preventing community transmission of COVID-19, and should they be required for all of society? Hamilton: McMaster Health Forum, 29 April 2020.
5. Waddell K, Gauvin FP, Wilson MG, Moat KA, Mansilla C, Wang Q, Lavis JN. COVID-19 rapid evidence profile #5: What is known about the use of medical masks by essential non-medical workers to prevent community transmission of COVID-19? Hamilton: McMaster Health Forum, 29 April 2020.
6. Waddell K, Wilson MG, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #6: What is known about strategies for supporting the use of masks under shortage conditions to prevent COVID-19? Hamilton: McMaster Health Forum, 30 April 2020.



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7. Waddell K, Wilson MG, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #7: What are the international lessons learned from re-opening non-COVID-19 activities in hospitals? Hamilton: McMaster Health Forum, 12 May 2020.
8. Wilson MG, Waddell K, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #8: How effective is temperature taking at borders or in general as a screening tool to identify people who may have COVID-19 and need to take appropriate action? Hamilton: McMaster Health Forum, 14 May 2020.
9. Waddell K, Wilson MG, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #9: What is the incremental benefit of using a history of sudden loss of taste (ageusia) and/or smell (anosmia) in symptom screening to identify people who may have COVID-19 and need to take appropriate action? Hamilton: McMaster Health Forum, 14 May 2020.
10. Wilson MG, Waddell K, Gauvin FP, Mansilla C, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #10: What screening approaches can be used in non-healthcare settings (e.g., universities, stores and office settings) to identify people who may have COVID-19 and need to take appropriate action? Hamilton: McMaster Health Forum, 15 May 2020.
11. Waddell K, Wilson MG, Gauvin FP, Mansilla C, Moat KA, Wang Q, Voorheis P, Bhuiya AR, Ahmad A, Sharma K, Lavis JN. COVID-19 rapid evidence profile #11: What is the evidence related to playground equipment and risk of COVID-19 transmission? Hamilton: McMaster Health Forum, 28 May 2020.
12. Wilson MG, Waddell K, Gauvin FP, Mansilla C, Moat KA, Wang Q, Voorheis P, Bhuiya AR, Ahmad A, Lavis JN. COVID-19 rapid evidence profile #12: What insights from the available evidence and jurisdictional scans can inform who should be tested for COVID-19 and how frequently, where, by whom and with what follow-up actions should they be tested? Hamilton: McMaster Health Forum, 2 June 2020.
13. Waddell K, Wilson MG, Bullock HL, Evans C, Gauvin FP, Mansilla C, Moat KA, Wang Q, Voorheis P, Bhuiya AR, Ahmad A, Lavis JN. COVID-19 rapid evidence profile #13: What pandemic-related mental health and addictions issues have emerged and what indicators and strategies can be used to monitor and address them, respectively? Hamilton: McMaster Health Forum, 10 June 2020.
14. Waddell K, Bullock HL, Evans C, Wilson MG, Gauvin FP, Moat KA, Mansilla C, Wang Q, Bhuiya AR, Ahmad A, Filbey L, Lavis JN. COVID-19 rapid evidence profile #14: Where and with what impacts have shifts from in-person to virtual approaches occurred in the delivery of healthcare services in general and mental health and addictions services in particular? Hamilton: McMaster Health Forum, 26 June 2020.
15. Wilson MG, Waddell K, Gauvin FP, Mansilla C, Moat KA, Wang Q, Bhuiya A, Voorheis P, Ahmad A, Gao C, Alam S, Lavis JN. COVID-19 rapid evidence profile #15: What frameworks from



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- available evidence and experiences in other countries can inform what needs to be done to plan for future waves of COVID-19? Hamilton: McMaster Health Forum, 24 July 2020.
16. Evans C, Bullock, HL, Wilson MG, Lavis JN. Rapid synthesis: The effectiveness of virtual care for adults with mental health and/or addictions issues. Hamilton: McMaster Health Forum, 29 July 2020.
 17. Wilson MG, Waddell K, Wang Q, Gauvin FP, Mansilla C, Moat KA, Ahmad A, Alam S, Bhuiya A, Lavis JN. COVID-19 rapid evidence profile #16: What provider-led virtual-care services can be used to replace in-person care in hospital-based ambulatory care settings? Hamilton: McMaster Health Forum, 31 July 2020.
 18. Wilson MG, Waddell K, Moat KA, Wang Q, Ahmad A, Alam S, Bhuiya A, Sharma K, Lavis JN. COVID-19 rapid evidence profile #17: What evidence could support modelling scenarios related to the reopening, operation and monitoring of schools? Hamilton: McMaster Health Forum, 17 August 2020.
 19. Waddell K, Wilson MG, Gauvin FP, Moat KA, Wang Q, Ahmad A, Bhuiya A. COVID-19 rapid evidence profile #18: Which types of non-medical masks are effective in community settings for reducing the spread of COVID-19 for different populations and under different conditions? Hamilton: McMaster Health Forum, 4 September 2020.
 20. Waddell K, Wilson MG, Moat KA, Wang Q, Gauvin FP, Ahmad A, Alam S, Bhuiya A, Tchakerian N, Lavis JN. COVID-19 rapid evidence profile #19: What is the risk of transmission of COVID-19 in hospital and long-term care settings, and the impacts of hospital-visitor policies? Hamilton: McMaster Health Forum, 24 September 2020.
 21. Wilson MG, Waddell K, Moat KA, Wang Q, Lavis JN. COVID-19 rapid evidence profile #20: What economic and social responses to COVID-19 have been evaluated in systematic reviews? Hamilton: McMaster Health Forum, 9 October 2020.
 22. Bullock H, Waddell K, Bhuiya A, Wilson MG, Gauvin FP, Moat KA, Alam S, Lavis JN. COVID-19 rapid evidence profile #21: What is the impact of the pandemic on substance use (particularly, alcohol and opioid use) in the population, and what policy decisions have been adopted that affect the availability and use of substances, as well as services for people who use substances? Hamilton: McMaster Health Forum, 19 October 2020.
 23. Bhuiya AR, Waddell K, Moat KA, Wilson MG, Gauvin FP, Whitelaw S, Alam S, Sharma K, Drakos A, Lavis JN. COVID-19 rapid evidence profile #22: What is known about whether vaccine injury-compensation programs and program elements affect vaccine acceptance and uptake. Hamilton: McMaster Health Forum, 29 October 2020.
 24. Bhuiya AR, Wilson MG, Moat KA, Gauvin FP, Wang Q, Whitelaw S, Alam S, Sharma K, Ahmad A, Drakos A, Dren N, Bain T, Lavis JN. COVID-19 rapid evidence profile #23: What is known about anticipated COVID-19 vaccine-delivery program elements, and whether and how federated



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- states are harmonizing these elements across constituent units of federations. Hamilton: McMaster Health Forum, 5 November 2020.
25. Bhuiya AR, Wilson MG, Wang Q, Alam S, Whitelaw S, Sharma K, Ahmad A, Drakos A, Dren N, Bain T, Moat KA, Gauvin FP, Lavis JN. COVID-19 rapid evidence profile #24: What is known about strategies for encouraging vaccine acceptance and addressing vaccine hesitancy (including efforts to combat misinformation that may lead to vaccine hesitancy) or uptake (when interpreted, at least in part, through the perspective of vaccine acceptance or hesitancy)? Hamilton: McMaster Health Forum, 17 November 2020.
 26. Wilson MG, DeMaio P, Wang Q, Gauvin FP, Alam S, Ahmad A, Bain T, Bhuiya A, Drakos A, Sharma K, Whitelaw S, Bain T, Lavis JN. COVID-19 living evidence profile #1 (version 1): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 20 January 2021.
 27. Wilson MG, Bain T, Wang Q, Al-Khateeb S, Bhuiya A, Alam S, DeMaio P, Gauvin FP, Ahmad A, Drakos A, Sharma K, Whitelaw S, Lavis JN. COVID-19 living evidence profile #1 (version 1.2): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 31 January 2021.
 28. Wang Q, Wilson MG, Alam S, Ahmad A, Bain T, Bhuiya A, Drakos A, Sharma K, Whitelaw S, Bain T, Lavis JN. COVID-19 rapid evidence profile #25: What do we know from both research and jurisdictional scans about prioritizing vaccination of asymptomatic residents in a long-term care home with an outbreak. Hamilton: McMaster Health Forum, 20 January 2021.
 29. Wilson MG, Bain T, Wang Q, Al-Khateeb S, Bhuiya A, Alam S, DeMaio P, Gauvin FP, Ahmad A, Drakos A, Sharma K, Whitelaw S, Lavis JN. COVID-19 living evidence profile #1 (version 1.3): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 11 February 2021.
 30. Wilson MG, Bain T, Wang Q, Al-Khateeb S, Bhuiya A, Alam S, DeMaio P, Gauvin FP, Ahmad A, Drakos A, Sharma K, Whitelaw S, Lavis JN. COVID-19 living evidence profile #1 (version 1.4): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 26 February 2021.
 31. Waddell K, DeMaio P, Wilson MG, Wang Q, Bain T, Bhuiya A, Alam S, Sharma K, Gauvin FP, Sharma K, Whitelaw S, Lavis JN. COVID-19 living evidence profile #2 (version 1): What is known about preventing and managing COVID-19 outbreaks and about supporting renewal in long-term care homes? Hamilton: McMaster Health Forum, 26 February 2021.
 32. Wilson MG, Bain T, Wang Q, Al-Khateeb S, Bhuiya A, Alam S, DeMaio P, Gauvin FP, Ahmad A, Drakos A, Sharma K, Whitelaw S, Lavis JN. COVID-19 living evidence profile #1 (version 1.5): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 16 March 2021.



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33. Wilson MG, Bain T, Wang Q, Al-Khateeb S, Bhuiya A, Alam S, DeMaio P, Gauvin FP, Ahmad A, Sharma K, Whitelaw S, Lavis JN. COVID-19 rapid evidence profile #26: When and in what order can COVID-19-related public-health measures be lifted (or stringency be reduced) as vaccination rates and seasonal temperatures increase? Hamilton: McMaster Health Forum, 18 March 2021.
34. Bhuiya A, Bain T, Wang Q, Al-Khateeb S, Alam S, DeMaio P, Gauvin FP, Ahmad A, Drakos A, Rintjema J, Sharma K, Santesso N, Lavis JN, Wilson MG. COVID-19 living evidence profile #1 (version 1.6): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 20 April 2021.
35. Bhuiya A, Bain T, Wang Q, Al-Khateeb S, DeMaio P, Ahmad A, Drakos A, Rintjema J, Sharma K, Matthews M, Gauvin FP, Lavis JN, Wilson MG. COVID-19 living evidence profile #1 (version 1.7): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 28 May 2021.
36. Waddell KA, DeMaio P, Wilson MG, Bain T, Wang Q, Al-Khateeb S, Alam S, Sharma K, Whitelaw S, Gauvin FP, Lavis JN. COVID-19 living evidence profile #2 (version 2.2): What is known about preventing and managing COVID-19, outbreaks of COVID-19, and about supporting renewal in long-term care homes? Hamilton: McMaster Health Forum, 31 March 2021.
37. Waddell KA, DeMaio P, Wilson MG, Bain T, Wang Q, Al-Khateeb S, Alam S, Sharma K, Whitelaw S, Gauvin FP, Lavis JN. COVID-19 living evidence profile #2 (version 2.3): What is known about preventing and managing COVID-19, outbreaks of COVID-19, and about supporting renewal in long-term care homes? Hamilton: McMaster Health Forum, 26 April 2021.
38. Waddell KA, DeMaio P, Wilson MG, Bain T, Wang Q, Al-Khateeb S, Alam S, Sharma K, Whitelaw S, Gauvin FP, Lavis JN. COVID-19 living evidence profile #2 (version 2.4): What is known about preventing and managing COVID-19, outbreaks of COVID-19, and about supporting renewal in long-term care homes? Hamilton: McMaster Health Forum, 6 July 2021.
39. Bain T, Bhuiya A, Al-Khateeb S, Wang Q, Mansilla C, Rintjema J, DeMaio P, Alam S, Gauvin FP, Santesso N, Lavis JN, Wilson MG. COVID-19 living evidence profile #3 (version 3.1): What is known about how schools (K-12) and postsecondary institutions (colleges and universities) adjust COVID-19 transmission-mitigation measures as infection rates change and vaccination rates increase? Hamilton: McMaster Health Forum, 7 May 2021.
40. Bain T, Bhuiya A, Al-Khateeb S, Wang Q, Mansilla C, DeMaio P, Rintjema J, Abeer A, Gauvin FP, Matthews M, Lavis JN, Wilson MG. COVID-19 living evidence profile #3 (version 3.2): What is known about how schools (K-12) and postsecondary institutions (colleges and universities) adjust COVID-19 transmission-mitigation measures as infection rates change and vaccination rates increase? Hamilton: McMaster Health Forum, 18 June 2021.
41. Bain T, Bhuiya A, Al-Khateeb S, Wang Q, Mansilla C, Rintjema J, DeMaio P, Matthews M, Lavis JN, Wilson MG. COVID-19 living evidence profile #3 (version 3.3): What is known about how schools (K-12) and post-secondary institutions (colleges and universities) adjust COVID-19



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transmission-mitigation measures as infection rates change and vaccination rates increase? Hamilton: McMaster Health Forum, 23 August 20.

42. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Lavis JN. COVID-19 living evidence profile #5 (version 5.1): What went well and what could have gone better in the COVID-19 response in other countries, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 15 June 2021.
43. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Bierman O, Lavis JN. COVID-19 living evidence profile #5 (version 5.2): What went well and what could have gone better in the COVID-19 response in other countries, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 15 July 2021.
44. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Biermann O, Lavis JN. COVID-19 living evidence profile #5 (version 5.3): What went well and what could have gone better in the COVID-19 response in other countries, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 13 August 2021.
45. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Lavis JN. COVID-19 living evidence profile #4 (version 4.1): What went well and what could have gone better in the COVID-19 response in Canada, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 14 May 2021.
46. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Lavis JN. COVID-19 living evidence profile #4 (version 4.2): What went well and what could have gone better in the COVID-19 response in Canada, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 15 June 2021.
47. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Lavis JN. COVID-19 living evidence profile #4 (version 4.3): What went well and what could have gone better in the COVID-19 responses, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 15 July 2021.
48. Waddell KA, Wilson MG, Bain T, Bhuiya A, Al-Khateeb S, Sharma K, DeMaio P, Lavis JN. COVID-19 living evidence profile #4 (version 4.4): What went well and what could have gone better in the COVID-19 responses in Canada, as well as what will need to go well in future given any available foresight work being conducted? Hamilton: McMaster Health Forum, 13 August 2021.
49. Gauvin FP, Wilson MG, DeMaio P, Alam S, Drakos A, Lavis JN. Evidence brief: Identifying and harnessing the potential of technology in long-term care settings in Canada. Hamilton: McMaster Health Forum, 1 & 2 February 2021.



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50. Wilson MG, Gauvin FP, Alam S, Drakos A. Dialogue summary: Identifying and harnessing the potential of technology in long-term care settings in Canada. Hamilton: McMaster Health Forum, 1 & 2 February 2021.
51. Gauvin FP, DeMaio P, Alam S, Drakos A, Lavis JN, Wilson MG. Citizen brief: Identifying and harnessing the potential of technology in long-term care settings in Canada. Hamilton: McMaster Health Forum, 15 January 2021.
52. Gauvin FP, Wilson MG, Alam S, Drakos A. Panel summary: Identifying and harnessing the potential of technology in long-term care settings in Canada. Hamilton: McMaster Health Forum, 15 January 2021.

Click [here](#) to learn more

Ontario Brain Institute

The Ontario Brain Institute (OBI) is pioneering an open-source, “team science” approach to brain health. OBI integrates the will, knowledge and resources that creates new connections across research, commercialization and care.

Website: www.braininstitute.ca

During the pandemic, OBI has:

- hosted an online conversation with CAMH experts about coping with the stress of the COVID-19 pandemic and tap into the power of being present.
- participated in a TVO.org interview with Yona Lunsky, director of the Azrieli Adult Neurodevelopmental Centre at CAMH, about how mindfulness can help those with autism — and the ways in which the COVID-19 pandemic may be affecting the mental health of people with autism and their families.
- hosted a webinar entitled “Taking Care of Body, Mind & Soul in the COVID-19 Pandemic” for people living with or caring for those with cognitive or motor problems from Alzheimer’s disease, MCI, Parkinson’s disease, ALS, Frontotemporal dementia, Stroke or Aging.

Click [here](#) to learn more.

Ontario Child Health SUPPORT Unit

The Ontario Child Health SUPPORT Unit (OCHSU) – led by The Hospital for Sick Children (SickKids) and the Children’s Hospital of Eastern Ontario (CHEO) –provides patient-oriented clinical research and data management support to researchers to enhance capacity in child health clinical research in Ontario.

Website: www.ochsu.ca

During the pandemic, OCHSU:



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- through its CHEORI Patient Engagement in Research team, supported Family Leaders to complete 28 project reviews on proposed CHEO COVID-19 research projects that were submitted for internal funding;
- Research Patient and Family Advisory Committee completed a consultation for the project- Implementing a support intervention for parents during the COVID-19 mental health crisis. This project team is also working with OCHSU on methodology and recruitment.
- through its CHEORI Patient Engagement in Research team, provided letters of support and facilitated access to the PFAC (Research Patient and Family Research Family Advisory Council) to facilitate a consultation service for the project “Natural Evolution of Serum Antibodies in Children and Adults with SARS-CoV-2 and Household Contacts.” which was then awarded close to one million dollars in funding <https://www.cheoresearch.ca/about-us/media/news/research-team-receives-almost-1-million-for-covid-19-study/>.
- The TARGet Kids! COVID-19 Study of Children and Families now has 959 subjects enrolled from 739 families. This project continue to enroll participants and has just received funding for serology testing which is now being added to their protocol and consent form. They are also working on a school questionnaire which will provide information on how COVID is affecting school-aged participants.
- has, through the SickKids Patient Engagement in Research Team, facilitated either access to the RFAC (Research Family Advisory Council) or provided a patient advisor to research teams. In total 6 projects have reached out for formal input from family advisors.
- completed three systematic reviews on N95 mask decontamination using UV, heat and chemical disinfectants. The reports were delivered to the Office of the Chief Science Advisor of Canada, by request.
- Evaluation of N95 mask fit performance, post sterilization with UV and the Clean Flow Mini devices. Manuscript in development.
- Developed a reuseable surgical mask for healthcare professionals with an industry partner. Prototype masks have undergone fit and practical penetration testing, as well as focus group testing with healthcare professional. Pilot study at hospital and wider community is in development.
- OCHSU has provided support to 12 grant applications to CIHR and other funding agencies. Eight of the submitted grants were funded - \$1,166,497.
- Worked with The Ottawa Hospital and CHEO researchers to estimate sample size requirements for comparing diagnostic accuracy of nasal and saliva COVID tests.
- OCHSU is working with the Pediatric Emergency Research Canada (PERC) Public Health Agency of Canada (PHAC) collaboration to a create surveillance system of Canadian Children with COVID-19
- Created a nationwide surveillance reporting system of pediatric COVID-19 testing in emergency departments with OCHSU, Pediatric Emergency Research Canada (PERC) and Public Health Agency of Canada (PHAC). To date there is no evidence that the COVID-19 positivity rate has changed in Canadian children.
- Obtained an OntarioTogether, PSI and CHAMO grants to study COVID spread within families and of antibody development within households.



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- Grant to study COVID cellular (T-cell) immunity (co-PIs: Bhatt and Zemek).
- Successful through the National Medical Laboratory to examine the sensitivity and specificity of saliva testing for COVID in children.
- Three new COVID-19 rapid grants to study concussion as in-person visits are limited.
- Three papers published with three accompanying registered OSF protocol:
 - O'Hearn, K. et al. (2020) Efficacy and safety of disinfectants for Decontamination of N95 and SN95 Filtering Facepiece Respirators: A Systematic Review. (2020) J. Hosp. Infect 106, 504-521.
 - O'Hearn, K. et al. (2020) Decontaminating N95 masks with Ultraviolet Germicidal Irradiation (UVGI) does not impair mask efficacy and safety: A Systematic Review. J. Hosp. Infect. 106, 163-175
 - Gertsman, S. et al. (2020) Microwave-and Heat-Based Decontamination of N95 Filtering Facepiece Respirators (FFR): A Systematic Review. J. Hosp. Infect. 106, 536-553.
- Lead statistical analysis for a prospective pan-Canadian cohort assessment of SARS-CoV-2 variant of concern disease severity and association with long-term symptoms in children. [CIHR Emerging COVID-19 Research Gaps and Priorities – Variants, funded ~\$460,000]
- Lead machine learning analysis for a tailored automated COVID vaccine communication strategy to build primary care providers' capacity to address vaccine hesitancy among their patients. [PHAC Immunization Partnership Fund via the Eastern Ontario Health Unit, funded \$450,000]
- Clinical research advisor for a grant on the sequential classification under uncertainty: a mathematical toolkit for decision makers. [Carleton University COVID-19 priorities grant, \$10,000]
- Lead analyst on project about predicting SARS-CoV-2 infections for children and youth with single symptom screening. This will help guide how screening and school reopening is operationalized this fall.
- Worked with Dr. Birken and the TARGeT Kids! team on "COVID-19 Mental Health & Substance Use Service Needs and Delivery" CIHR operating grant submission to evaluate cost effectiveness of a virtual behavioural intervention -
- Health Economics support to Dr. Science (Sickkids on a CIHR COVID Emerging Research Gaps and Priorities grant awarded in Summer 2021 "The School SPIT study (Saliva to Promote Improved Testing): A Stepped-wedge Cluster Randomized Controlled Trial of Take-home Saliva to Promote Symptomatic Testing" has been awarded \$305,000
- Continue to work with all investigators on the SPOR funded CHILDBRIGHT Projects to address COVID related health service changes
- OCHSU supported the grant process of the funded grant entitled "Knowledge mobilization activities to support decision-making by public citizens using a systematic and living map of evidence and recommendations on COVID-19" which was funded by CIHR for \$993,919. OCHSU, SK will connect the team with family advisors in the development and execution of the study.

New Grants since July 2021:

1. CIHR: REVIVE – Frailty, Rehabilitation, and Hospitalization Outcomes in Adult and Pediatric Survivors of COVID-19



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Principal Investigators: ME Kho, OG Rewa, K Choong

Collaborator: **R Zemek**

Funding Agency: Canadian Institutes of Health Research

Funds Awarded: \$738,224; 2021-2024

2. Health Canada \$1,007,000

"A Multi-Center Evaluation of Buccal Swabs with the Abbott ID NOW COVID-19 for Point-of-Care Detection SARS-CoV-2 in Pediatric Emergency Departments." It will compare a self-collected (or study team as per family preference) buccal swab on the Abbot ID Now to the local PCR reference standard.

The nominated PI is Stephen Freedman (U-Calgary) and **Roger Zemek** is co-PI.

Richard Webster (CHEO RI) is a co-investigator and lead analyst

3. CIHR (COVID Immunity Task force).

"A Prospective Pan-Canadian Cohort Assessment of SARS-CoV-2 Variant of Concern Disease Severity and Association with Long-Term Symptoms in Children" has been approved for funding. While we just missed the main cut-off, our grant was picked up for funding by COVID-19 Immunity Task Force.

The nominated PI is Stephen Freedman (U-Calgary) and co-PIs are **Roger Zemek** and Anna Funk

Richard Webster (CHEO RI) is a co-investigator

\$465,120

4. Public Health Agency of Canada (through PERC) approved a new funding extension April 1, 2021 to March 31, 2022) for our PERC PHAC COVID-19 Surveillance study. **Roger Zemek**: Co-PI
Amount = \$500,000.

5. Physician Services Incorporated (PSI) Foundation approved funding for our Clinical Research application "Persistence of T cell Immunity in Children with SARS-CoV-2 and Household contacts" (PITCH Study) in the amount of \$248,000.00 over 3 years.

Roger Zemek is co-applicant

6. CIHR

Title: "The Canadian Network of COVID-19 Clinical Trials Networks"

Period: from: 2020-12-01 to: 2022-06-30

Amount: \$6,000,000

2020-2021

Co-Investigator: **Zemek, Roger**

7. "The effect of Covid 19 policies on road traffic injury among vulnerable road users in Canadian cities."

Principal Investigator: L Rothman

Co-Investigators: **C Macarthur** and others

Funding Agency: Canadian Institutes of Health Research

Funds Awarded: \$545,000; 2021-2024

New Publications:

1. Effect of the COVID-19 Pandemic on Patient Volumes, Acuity, and Outcomes in Pediatric Emergency Departments: A Nationwide Study. Yaron Finkelstein 1, Bryan Maguire, Roger Zemek, Esli Osmanliu, April J Kam, Andrew Dixon, Neil Desai, Scott Sawyer, Jason Emsley, Tim



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Lynch, Ahmed Mater, Suzanne Schuh, Maggie Rumantir, Stephen B Freedman, Pediatric Emergency Research Canada (PERC). *Pediatr Emerg Care*. Jun 1 2021. doi: 10.1097/PEC.0000000000002484. Online ahead of print. PMID: 34074990

2. Predicting SARS-CoV-2 infections for children and youth with single symptom screening. Richard J. Webster, Deepti Reddy, Mary-Ann Harrison, Ken J. Farion, Jacqueline Wilmore, Michelle Foote, Nisha Thampi. doi: <https://doi.org/10.1101/2021.08.19.21262310>
[Predicting SARS-CoV-2 infections for children and youth with single symptom screening](#)
[| medRxiv](#)

Click [here](#) to learn more.

Ontario Drug Policy Research Network

The Ontario Drug Policy Research Network (ODPRN) is a collaboration between researchers and drug policy-makers across Ontario that aims to respond rapidly to the need for high-quality, timely, relevant and scientifically rigorous research to support drug policy decisions. The network's core mandates are to: generate scientifically sound evidence related to real-world drug utilization, safety, effectiveness, and costs of drugs in Ontario; and, develop partnerships for cross-provincial comparisons of drug safety and utilization. The ODPRN also aims to focus its research agenda on priority areas identified by patients and the general public through meaningful engagement, consultation, collaboration, and integration of patients and citizens throughout its entire research process.

Website: www.odprn.ca

During the pandemic, the ODPRN has:

1. Expanded Patient and Citizen Engagement

- Engaged with members of the ODPRN Citizens' Panel and Lived Experience Advisory Group to discuss the impact of COVID-19 on Ontarians, particularly among those with substance use disorders, and identify potential research questions. Members have also been involved in several COVID-19 projects as research team members.

2. Launched research to explore the impact of the COVID-19 pandemic on at-risk populations

- Led projects reports in collaboration with Public Health Ontario (PHO), the Office of the Chief Coroner/Ontario Forensic Pathology Service (OCC/OFPS), the Centre on Drug Policy Evaluation, and individuals with lived experience, to examine circumstances surrounding opioid-related harms in Ontario:
 - The first report released in November 2020 described [Preliminary Circumstance Surrounding Opioid-Related Deaths in Ontario during the COVID-19 Pandemic](#) during the first three months of the COVID-19 pandemic.
 - This report was featured in various media outlets such as [CBC News](#), the [Globe and Mail](#), [CTV News](#), among others.



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- ODP RN Principal Investigator, Dr. Tara Gomes, discussed findings from this report in a CTV W5 segment on *“Canada’s Epidemic within a Pandemic”*.
- A second report, released in May 2021, updated the data provided in the initial preliminary report and described [Changing Circumstances Surrounding Opioid-Related Deaths in Ontario during the COVID-19 Pandemic](#). This report includes data up to December 2020.
 - This report was featured in various media outlets such as [Canadian Press](#), [CP24](#), [Global News](#), [AM640](#), CBC National News, among others.
- Results from these reports have been presented to the Ontario COVID-19 Science Table and the Ontario Ministry of Health Mental Health & Addiction COVID-19 Response Table.
- The ODP RN is currently conducting a study using linked healthcare administrative databases to describe patterns of healthcare and prescription medication use among people who died of an opioid-related overdose in Ontario during the COVID-19 pandemic compared to people who died of an opioid-related overdose prior to COVID-19.
- In collaboration with the Chiefs of Ontario, the ODP RN launched a study to conduct ongoing monitoring of trends for select indicators over time, including during the COVID-19 pandemic, among First Nations people in Ontario and compare trends among non-First Nations in Ontario. This study integrates the perspectives of the Opioid Steering Committee which is comprised of representatives from various First Nations communities within Ontario.
- Published a manuscript [Measuring the Burden of Opioid-Related Mortality during the COVID-19 Pandemic](#).
- Updated the ODP RN’s [Ontario Prescription Opioid Tool](#) to explore changing patterns on opioid prescribing indicators and the distribution of naloxone during the COVID-19 pandemic.
- Nearing completion on a project on the Changing Patterns of Opioid Agonist Therapy Use and Associated Outcomes during the COVID-19 Pandemic in Ontario, which has integrated perspectives of people with lived experience from the Lived Experience Advisory Group.
- In response to a request from the Noojmowin Teg Health Unit, completed a project that characterized indicators related to the use of prescription opioids, the uptake of pharmacy-dispensed naloxone, and the burden of opioid-related harm among residents of Manitoulin Island before and during the COVID-19 pandemic. This information will be used by the Noojmowin Teg Health Unit to determine the impact of COVID-19 on opioid use and related harms among this population and inform community efforts aimed at better understanding the needs of residents of Manitoulin Island.
- In response to a request from Ontario Health, initiated a project on the Impact of the COVID-19 Pandemic on Medication Use and Healthcare Services among Adults with Intellectual and Developmental Disabilities in Ontario. This study integrates the perspectives of individuals with lived experience and members of the ODP RN Citizens’ Panel.

3. Monitored Ontario’s drug utilization and professional pharmacy services during the pandemic



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- Released the [COVID-19 Ontario Prescription Drug Utilization Tool](#), which provides public access to data on drug utilization in Ontario during the COVID-19 pandemic.
 - This data can be used to determine the impact of the COVID-19 pandemic on potential drug shortages among patients, healthcare professionals, and the healthcare system, as well as uptake of flu shots and pharmacy-based COVID-19 tests and COVID-19 vaccinations.
 - This tool was featured in various media outlets such as [CBC News](#), and the [Globe and Mail](#), among others and will be regularly updated with new data as it becomes available.
 - Members of the ODPRN Citizens' Panel have contributed to this work as project team members.
 - Building on shifting drug utilization trends observed in this tool, the ODPRN published a [manuscript](#) that describes methodological considerations for drug-related research during the COVID-19 pandemic.
- In response to a request from the Ontario College of Physicians (OCP), completed a project on the Impact of the COVID-19 Pandemic on Prevalence of Pharmacist-Prescribed Opioids in Ontario.
- Published a manuscript describing the [Impact of COVID-19 on Prescribing Trends of Direct-Acting Antivirals for the Treatment of Hepatitis C in Ontario, Canada](#).
 - Findings from this study will be presented to over 100 attendees from various organizations during the September 2021 Public Health Ontario Rounds.
- Participated in a CBC News article entitled "[Coronavirus a 'wake-up call' for Canada's prescription drug supply](#)" discussing how Canadian pharmacies are limiting how much medication can be dispensed to try to prevent shortages.

4. Evaluating drugs related to the treatment or risk of COVID-19 infections

- In collaboration with the Canadian Immunization Research Network Provincial Collaborative Network Investigators, released a manuscript to estimate the [Effectiveness of BNT162B2 and mRNA-1283 Covid-19 Vaccine Against Symptomatic SARS-CoV-2 Infection and Severe COVID-19 Outcomes in Ontario, Canada](#).
- Nearing completion of a study that examines the risk of a COVID-19 diagnosis shortly following receipt of the first dose of the COVID-19 vaccine to identify any potential transmission events that occur at time of vaccination.
- Launched collaborations and accessed additional funding to support research into drug effectiveness and safety related to COVID-19. This includes a project studying Statins and Alpha-1 Receptor Blocker Use and the Risk of COVID-19 Related Harms.

Click [here](#) to learn more.

Ottawa Methods Centre

The Ottawa Methods Centre (OMC), a sub-unit of the Ottawa Hospital Research Institute, provides expert methods consultation to provincial researchers and/or decision makers planning or currently involved in POR-related projects. OMC's robust infrastructure of services includes a specific focus on



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patient engagement wherein we offer training, mentorship, and conduct specialized methods research. We offer a range of other services including research design and methodology support, data management and big data analytics, statistical consultation and health economics, and knowledge syntheses, knowledge translation, and evidence implementation support

Website: <http://ohri.ca/ottawamethodscentre/>

- Dr Dean Fergusson, OSSU Scientific lead, was a member of the International trial steering committee for two open-label, adaptive, multiplatform, controlled trials, in which patients who were hospitalized with Covid-19 were randomly assigned to receive pragmatically defined regimens of either therapeutic-dose anticoagulation with heparin or usual-care pharmacologic thromboprophylaxis. Both studies included patient partners within the trial steering committee. The studies were published in the New England Journal of Medicine in early August 2021:

Therapeutic Anticoagulation with Heparin in Noncritically Ill Patients with Covid-19

https://www.nejm.org/doi/full/10.1056/NEJMoa2105911?query=featured_home

Therapeutic Anticoagulation with Heparin in Critically Ill Patients with Covid-19

https://www.nejm.org/doi/full/10.1056/NEJMoa2103417?query=featured_home

- Dr Grimshaw and Dr Justin Prowse (OMC Scientist) continue to serve as members of the Behavioural Science Working Group (Dr Prowse serving as Co-Chair) for the Ontario COVID-19 Science Advisory Table. The Science Table's mandate is to provide weekly summaries of relevant scientific evidence for the COVID-19 Health Coordination Table of the Province of Ontario, integrating information from existing scientific tables, Ontario's universities and agencies, and the best global evidence. Drs Prowse and Grimshaw were authors of the Science Brief "Strategies to Support Ontarians' Capability, Opportunity, and Motivation for COVID-19 Vaccination", published in June 2021
<https://covid19-sciencetable.ca/sciencebrief/strategies-to-support-ontarians-capability-opportunity-and-motivation-for-covid-19-vaccination/>
- Dr Grimshaw (OMC Scientist) was also a leader in a University of Ottawa-led project which has been awarded \$9 million by the Canadian Institutes of Health Research to create a national network for better researching and responding to the global threat of COVID-19 variants. The Coronavirus Variants Rapid Response Network or CoVaRR-Net, will enable the real-time assessment of both the immune response to the virus variants and whether existing vaccines generate protective immunity to these variants. The findings will provide decision makers with guidance regarding drug therapy, vaccine effectiveness, and other public health strategies. Dr. Grimshaw is the lead of the Knowledge Mobilization pillar (along with OMC Scientist Dr Prowse), which will undertake knowledge translation activities to ensure Canadians are informed in a timely fashion about variants of concern, their implications and recommendations for action.



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- Dr Sylvain Boet has been supported by the OMC to develop a multicenter randomized controlled trial of normobaric versus hyperbaric oxygen therapy for hypoxemic COVID-19 patients (OMC Scientists: Dr Dean Fergusson, Dr Kednapa Thavorn, Dr Monica Taljaard; Patient partner: Ms. Laurie Proulx). The protocol for the trial was published as a preprint on the medRxiv server 31 July 2021
<https://www.medrxiv.org/content/10.1101/2020.07.15.20154609v2>
- The Cellular Immuno-Therapy for COVID-19 Acute Respiratory Distress Syndrome (CIRCA-19) trials (Principal Investigator: Duncan Stewart; OMC Support: Dr Dean Fergusson) has completed the initial Phase 1 study (CIRCA-1901), and has now begun the pre-specified phase 2 component (CIRCA-1902). CIRCA-1901 was an open-label, dose-escalating and safety trial to determine the safety, and maximum feasible tolerated dose of repeated delivery of Umbilical Cord Mesenchymal Stromal Cells (UC-MSC) intravenously. CIRCA-1902 is a single-arm, open-label extension of the CIRCA-1901 trial to assess early signs of efficacy (major morbidity and mortality). The Phase 2a trial (CIRCA-1902) will enroll 12 patients to assess early signals of benefit on mortality and major morbidity in a high risk, high mortality population.
- Dr Tetyana Kendzerska (OHRI Scientist) published a review of the literature pertaining to the effects of the health system response to the COVID-19 pandemic on chronic disease management (February 2021): <https://pubmed.ncbi.nlm.nih.gov/33623448/>
- Dr Kednapa Thavorn (OMC Scientist) was part of a team that examined the global prevalence of mental health issues among the general population during the coronavirus disease-2019 pandemic: <https://pubmed.ncbi.nlm.nih.gov/33986414/> as well as an analysis of symptoms, pulmonary function and functional capacity four months after COVID-19: <https://pubmed.ncbi.nlm.nih.gov/33872135/>

Click [here](#) to learn more.

Public and Patient Engagement Collaborative

Established in 2011, the Public and Patient Engagement (PPE) Collaborative conducts research and service activities focus on the role of patients and publics in health system policy making and health research, with a specific focus on the evaluation of these efforts.

During the pandemic, the **PPE Collaborative** (<https://healthsci.mcmaster.ca/ppe>)

- Supported research teams (pre-award and post-award) investigating aspects of COVID/pandemic:
 - New research grants awarded through internal McMaster and Labarge COVID-19 research competitions:
 - The impact of priority setting on pandemic preparedness and response: A Global comparative analysis of the role of priority setting and equity during the COVID-



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- 19 pandemic (PIs: Kapiriri L, Essu B; Co-applicants: Abelson J, Biemba G, Danis M, Gibson J, Goold S, Nouvet E, Sundman L, Williams I).
 - The #Caremongering social media campaign: Understanding its impact and adaptability to combat social isolation among older adults affected by COVID-19 (PI: Seow H; Co-applicants: Abelson J, Chan T, Gardner P, Moll S, Urowitz S, Williams A)
- Studied aspects of patient engagement related to COVID/pandemic activities.
 - Interviews with patient partners and patient engagement leads working with the newly-formed Ontario Health Teams to discuss, amongst other things, the challenges associated with their engagement during the COVID-19 pandemic (Ontario-specific). A report on these findings will be shared with the Ministry of Health, OHTs and with a community of practice for patient engagement in OHTs.
 - this is work that falls under responsibilities with the OHT Program of Central Supports
 - Surveyed over 500 patient partners across the country through a CIHR-funded Canadian Patient Partner Study (CPPS) to better understand the Canadian patient partner community, activities, roles and experiences. The survey included questions on whether and how COVID influenced respondents' patient engagement experiences and work. The team is currently analyzing these data and preparing a publication on the impact of COVID on Canadian patient partners and their activities.
- Publications:
 - Williams I, Essu B, Nouvet E, Sandman L, Razavi D, Noorudlhuda M, Goold S, Danis M, Biemba G, Abelson J, and Kapiriri L. Priority setting during the COVID-19 pandemic: going beyond vaccines. *BMJ Global Health*, 2021; 6:e004686. doi:10.1136/bmjgh-2020-004686.

Click [here](#) to learn more.

The Knowledge Translation Program

The Knowledge Translation Program (KTP) works with researchers and knowledge users (including patients, the public, clinicians, managers, policy makers) to develop a strategy to use knowledge at both the clinical and policy levels. Our vision is to ensure high quality evidence reaches patients, health care providers and policy makers by using effective strategies to improve quality of care and strengthen the health system. By focusing on co-creation with knowledge users and the processes through which knowledge is effectively translated into changed decision-making, we aim to improve patient-relevant health outcomes.

Website: <https://knowledgetranslation.net/expertise/covid-19/>



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Please see below to find out more about the work being done by the KT Program during the COVID-19 pandemic.

Project title: Wellness Hub (In progress)

Funded by: John and Myrna Daniels Foundation, COVID-19 Immunity Task Force, Canadian Immunization Research Network, Ontario Ministry of Labour

Knowledge user: Long term care homes, Public Health Ontario

Led by: Drs. Sharon Straus, Sharmistha Mishra, Stef Baral and Tina Fahim, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto; Dr. Adrienne Chan, Sunnybrook Health Sciences Centre, Toronto; Dr. Allison McGeer, Mt. Sinai Hospital, Toronto.

Description: The COVID-19 pandemic has identified critical challenges with preventing and managing outbreaks in long-term care homes (LTCH whose frail and medically complex population is at highest risk of morbidity and mortality). Worldwide, Canada has one of the highest COVID-19 mortality rates for older adults living in LTCH facilities; more than 80% of COVID-19 related deaths are associated with LTCH homes. Guidance from the Ontario Ministry of Health (MOH) mandated that acute care hospitals must provide support to LTC and retirement homes to assist with outbreak preparation and management. The Solution: Our team recently completed a scoping review of infection prevention and control measures (IPAC) that informed the WHO's guidance document for COVID-19. We have now used this evidence to co-create IPAC+. IPAC+ is a rapidly-scalable, checklist-based tool and implementation strategy to optimize IPAC measures in LTCH along with staff wellness and resilience. It was co-created with end users; specifically, barriers and facilitators to implementation of IPAC measures were identified and mapped to effective intervention strategies. Resources include those focused on optimizing physical and mental wellness for LTCH staff. Partners include the Canadian Foundation for Healthcare Improvement, Public Health Ontario, and the Regional Geriatric Program amongst many others.

We also received funding from the COVID-19 Immunity Task Force to expand our work in this area. With this funding, we will estimate the change in prevalence and correlates of prior SARS-CoV-2 infection and factors associated with infection in a diverse population of LTCH residents, their essential family visitors/caregivers, and LTCH staff and their household members. We will use an integrated KT approach to implement and evaluate a rapidly scalable infection prevention and control intervention (IPAC+) on preventing infections across the four populations. This project has more than 40 partners, including caregivers of LTCH residents, Family Councils Ontario, Ontario PSW Association, Ontario Long-term Care Association, PHAC, Public Health Ontario, and the National Microbiology Lab, amongst others.

We also received funding to co-create tailored messaging with LTCH staff to reduce COVID-19 (SARS-CoV-2) vaccine hesitancy and to determine the impact of such tools, coupled with tailored facilitation, on rates of LTCH staff vaccinations. Vaccine hesitancy among long-term care home (LTCH) staff presents a significant challenge to COVID-19 vaccine implementation. We will form a working group of diverse LTCH stakeholders to steer the study. We will engage LTCH staff to identify barriers to vaccination including common questions/myths leading to hesitancy. These findings will be used to create accessible, evidence-based tools. Tools will be iteratively created/updated based on need and tailored to LTCH populations as needed. Tools will be disseminated via the ongoing IPAC+ study; intervention sites will receive tailored tools + tailored facilitation, control sites will receive the tailored tools only. We will assess rate of vaccinations and rate of intentions to receive the vaccine, over time.



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In addition, we received funding from the Ontario Ministry of Labour to create a repository titled **CARE+**. This is in response to concerns from our partners in LTC about occupational health and safety (OHS) issues, wellness, and mental health challenges. To date, there is no comprehensive repository that provides plain-language, accessible tools to support LTC homes to address such OHS challenges during COVID-19. With CARE+ we are compiling and creating OHS, wellness and mental health resources to support LTC staff (specifically personal support workers (PSWs)) during COVID-19. CARE+ will build on our IPAC+ repository. This work will support tailored implementation efforts at LTCs in Ontario to implement CARE+ and IPAC+ resource recommendations. This work will be completed in partnership with the Ontario PSW Association.

Products/ results to date:

1. the creation of a publicly available infection prevention and control [tool repository](#), which contains 21 new tools and resources, as well as hundreds of external resources,
2. the development of an [interactive tool](#) for LTC self-assessment of IPAC preparedness,
3. a vaccine booklet addressing common myths/questions related to COVID-19 vaccines created and publicly disseminated - [Link to vaccine booklet](#)
4. presentation of a town hall for the Ontario Personal Support Workers' Association ([link to view](#)), which was attended by:
 - Ontario Minister of Long-Term Care Dr. Merrilee Fullerton,
 - Chief Coroner (responsible for vaccine rollout) Dr. Dirk Huyer,
 - Drs Allison McGeer, Upton Allen
 - Infection Prevention And Control leads Erickson Velasco, Shara Junaid
5. presentation of a 2nd town hall for the Ontario Personal Support Workers' Association ([link to view](#)), attended by:
 - Dr. Kevin Gough - Infectious disease specialist, Unity Health Toronto
 - Dr. Iswarya Manohoran - fellow, Infectious Diseases
 - Dr. Christine Song – Immunology and allergy specialist, Unity Health Toronto
6. presentation of a 3rd town hall for the Ontario Personal Support Workers' Association attended by:
 - Dr. Tina Fahim – Scientist, Unity Health Toronto
 - Dr. Kevin Gough - Infectious disease specialist, Unity Health Toronto
 - Dr. Melody Ren - Infectious disease specialist, University Healthcare Network
 - Dr. Sharon Straus – Physician in Chief, Unity Health Toronto
7. presentation of a 4th town hall for the Ontario Personal Support Workers' Association attended by:
 - Dr. Theresa Tam – Chief Public Health Officer of Canada
 - Dr. Vivian Ewa – Geriatrician, Alberta Health Services
 - Dr. Kevin Gough – Infectious disease specialist, Unity Health Toronto
8. presentation of a 5th town hall, on moral injury/ PTSD, for the Ontario Personal Support Workers' Association, attended by:
 - Dr. Anthony Nazarov – Scientist, MacDonald Franklin OSI Research Centre
 - Dr. Saadia Sediqzadah – Psychiatrist, Unity Health Toronto



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- Dr. Margaret McKinnon – Homewood Chair in Mental Health and Trauma, McMaster University

Study recruitment: ([link to WH recruitment PDF](#))

Project title: Comparing the accuracy of virtual and in-person comprehensive geriatric assessments and determining barriers and facilitators to the conduct of virtual assessments

Funded by: Mary Trimmer Chair, University of Toronto

Knowledge user: Regional Geriatric Program

Led by: Dr. Jennifer Watt, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto

Description: With the COVID pandemic, there was a shift from in-person to virtual ambulatory patientcare where possible. In-person assessments were prioritized for those individuals who needed to be seen urgently. This rapid shift to virtual care presented challenges and opportunities. Overnight, physicians focused on supporting patients via telephone/web-platforms. However, this shift also exposed challenges – what is the accuracy of the clinical assessment (such as cognitive testing) when done over the telephone versus in-person? How can patients be assessed as outpatients when they don't have a computer or smartphone? Does virtual care lead to more health inequities? This project will advance our knowledge of how best to meet the needs of older adults requiring ambulatory care.

Products/ results to date:

[Journal article](#)

[Journal article](#)

Project title: Developing strategies and tools to combat misinformation, fear and stigma in the wake of COVID-19

Funded by: Canadian Institutes of Health Research

Led by: Drs. Tina Fahim, Sharon Straus, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto. In partnership with the University of Laval, University of Ottawa and the Singapore GERI Team

Description: The primary goal of this study is to develop strategies and tools to combat misinformation as it relates to stigma and fear during an outbreak. To achieve this objective, we have partnered with the Chinese Canadian National Council for Social Justice (CCNC-SJ) and the Chinese Canadian National Council Toronto Chapter (CCNCTO), which are advocacy organizations aiming to eliminate stigma and racism facing Chinese- and Asian-Canadians. Additionally, we have engaged the Yee Hong Center for Geriatric Care to ensure the perspectives of healthcare providers caring for a primarily Chinese-Canadian population are considered.

[Read more about this project.](#)

Products/ results to date: In progress

Project title: Effective Models of Provider Care in Long-Term Care Homes: A Rapid Scoping Review

Funded by: SPOR Evidence Alliance

Knowledge user: Royal Society of Canada



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Led by: Dr. Brian Hutton in partnership with Sharon Straus, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto

Description: We are working on a rapid scoping review looking at effective models of provider care in long-term care facilities. This builds on the [Restoring Trust](#) document, which was published by the Royal Society of Canada.

Products/ results to date:

[Research Protocol](#)

[Final Report](#)

Project title: Preventing Respiratory Illness in Older Adults Aged 60 Years and Above Living in Long-Term Care: A Rapid Overview of Reviews

Funded by: World Health Organization

Knowledge user: Infection Prevention & Control, Health Emergencies Programme, World Health Organization

Led by: Dr. Andrea Tricco, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto

Description: This review provides an overview of the effectiveness of infection prevention and control measures that have been studied in systematic reviews.

Products/ results to date:

[Pre-print](#)

Project title: Guidelines for Preventing Respiratory Illness in Older Adults Aged 60 Years and Above Living in Long-Term Care: A Rapid Review of Clinical Practice Guidelines

Funded by: World Health Organization

Knowledge user: Infection Prevention & Control, Health Emergencies Programme, World Health Organization

Led by: Dr. Andrea Tricco, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto

Description: This review provides a comprehensive overview of existing CPGs for long-term care facilities published across the globe and summarizes their recommendations for infection prevention and management.

Products/ results to date:

[Pre-print](#)

Project title: Preventing the Transmission of Coronavirus (COVID-19) in Older Adults Aged 60 Years and Above Living in Long-Term Care: A Rapid Review

Funded by: Canadian Frailty Network

Knowledge user: Canadian Frailty Network

Led by: Dr. Andrea Tricco, Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Unity Health Toronto



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Description: This review provides a comprehensive review of current evidence and guidelines for infection prevention and control measures specific to COVID-19 populations in long-term care facilities.

Products/ results to date:

[Research brief](#), [Journal Article](#)

Committees

Dr. Straus became a member of the Data and Health Working Group for the Royal Society for the G7/S7, which is focused on pandemic recovery.

Dr. Straus was named a member of the Chief Scientist's Expert Advisory Group on Implementation strategies during COVID.

Dr. Straus became a member of the Royal Society of Canada Task Force on COVID-19.

Dr. Straus became a member of the Royal Society's COVID-19 Task Force working group on Recovery of the Health Care system.

Dr. Straus became a member of the Royal Society's COVID-19 Task Force working group on Research Recovery.

Consults

Dr. Straus consulted on these COVID-19 projects:

- Socio-Cultural Implications of COVID-19: Educating, Engaging & Empowering the Public (Principal Investigators: Jeanna Parsons Leigh, Kirsten Fiest)
- Social frailty interventions that can best support vulnerable older adults during the COVID-19 pandemic: A rapid review (Principal Investigators: Monika Kastner, Jayna Holroyd-Leduc)

Grants

Drs Fahim and Straus are co-PIs on these projects which were funded:

- Fahim C (NPI), Straus S (co-PI). Evaluating the impact of resource navigators to support LTCH PSWs during COVID-19. Temerty Knowledge Translation in Health Inequities Grant. \$85,000. July 2021-June 2022.
- Fahim C (NPI), Straus S (co-PI). Vaccine Readiness Grant. Canadian Immunization Research Network. \$25,000. January 2021 to August 2021.
 - The purpose of this study is to co-create with LTCH staff tailored messaging to reduce COVID-19 (SARS-CoV-2) vaccine hesitancy and to determine the impact of such tools, coupled with tailored facilitation, on rates of LTCH staff vaccinations.
- Fahim C (NPI), Straus S (co-PI). Evaluating the impact of resource navigators in supporting Long Term Care Home personal support workers during the COVID-19 pandemic. Canadian Institutes of Health Research (CIHR) Operating Grant: Emerging COVID-19 Research Gaps and Priorities - Long-term care. \$393,502. April 2021-March 2022. Straus S (NPI), Baral S, Chan A, Fahim C (co-PIs). Implementation of rapid antigen testing for covid/influenza a and b in congregative living settings. Health Canada. \$1.3M. 2021 – 2023.

Dr. Jenn Watt is a co-PI and Dr. Straus is a collaborator on this project which was funded:



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- Hutton B (NPI), Watt J (co-PI). Models for Primary Medical Care, Nursing Care and Personal Care in Long-Term Care Homes: Systematic Reviews to Inform Change in Canada. \$96,667. April 2021-Sept 2022.

Dr. Tricco is a co-principal investigator and Dr. Straus a co-investigator on this project which was funded:

- Lavis J (NPI), Tricco AC (co-PI), Grimshaw J (co-P), Santesso N (co-PI). [CIHR COVID-19 Knowledge Synthesis Network - Operating Grant](#). COVID-END. \$1,000,000. Dec 2020 to Dec 2021.

Dr. Watt is a principal investigator on this project which was funded. Dr. Tricco and Dr. Straus are co-investigators:

- PI: Goodarzi ZS, Holroyd-Leduc JM, Watt JA. Co-Is: Ewa V, Fox L, Ismail Z, Kirkham J, Liu B, Seitz D, Straus SE, Tricco AC, Veroniki AA. Depression In community Residing Elders (DIRE): A Rapid Review and Network Meta-Analysis of Depression Telemedicine Treatments for Older Adults Living in the Community. CIHR Operating Grant: Knowledge Synthesis: COVID-19 in Mental Health & Substance Use. \$50,000. 2020-2021.

Drs. Straus and Tricco are co-PIs on this funded project:

- Active Surveillance for Safety and Effectiveness of Health Products for COVID-19 (Q20-23), CIHR, Rapid Funding for DSEN Targeted Research. NPI: Wells G. PIs: Tricco AC, Straus S, Hutton B, Moher D. Co-I: Kelly S. 2021-2022, \$135,808.

Dr. Tricco is a co-I on this funded project:

- PI: Sriharan A, Lupea D, Ratnapalan S. Co-Is: Tricco AC. Stress, burnout and depression in women in healthcare during COVID-19 Pandemic: A Rapid Evidence Synthesis. CIHR Operating Grant: Knowledge Synthesis: COVID-19 in Mental Health & Substance Use. \$50,000. 2020-2021.

Presentations

Presenter: Dr. Andrea Tricco

Presentation title: Engaging in Rapid Reviews

Presented to: Public

Type: Webinar

Date: May 26, 2021

Presenter: Dr. Andrea Tricco

Presentation title: What is knowledge synthesis?

Presented to: Public

Type: Webinar

Date: May 13, 2021

Presenter: Dr. Sharon Straus

Presentation title: Vaccine hesitancy among healthcare workers in long-term care

Presented to: Public



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Type: Online interview

Date: April 26, 2021

Presenter: Dr. Sharon Straus

Presentation title: COVID-19 in Long-Term Care

Presented to: Public

Type: Online interview

Date: March 16, 2021

Presenter: Dr. Andrea Tricco

Presentation title: Navigating new waters together: patient/citizen engagement in COVID-19 evidence synthesis

Presented to: Public

Type: Webinar

Date: Feb. 23, 2021

<http://www.youtube.com/watch?v=8zVEbDojKhM&feature=youtu.be>

Presenter: Dr. Sharon Straus

Presentation title: What do COVID-19 vaccines mean for me?

Presented to: Public

Type: Town hall – webinar

Date: Feb. 18, 2021

Presenter: Dr. Andrea Tricco

Presentation title: Conducting Rapid Reviews for Health System Decision-Makers through COVID-END

Presented to: Public

Type: Webinar

Date: Feb. 16, 2021

http://www.youtube.com/watch?v=a6J_wcxPZFQ&feature=youtu.be

Presenter: Dr. Andrea Tricco

Presentation title: COVID-END- Methods for Rapid Synthesis Work

Presented to: COVID-END Researchers

Type: Online – webinar

Date: Feb. 16, 2021

Presenter: Dr. Andrea Tricco

Presentation title: Rapid Reviews during COVID-19

Presented to: NHS England

Type: Webinar

Date: December 7, 2020

<https://www.youtube.com/watch?v=o3hU40K00D0>



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Presenter: Dr. Andrea Tricco

Co-Presenters: Drs. Shannon Kelly, Brian Hutton

Presentation title: COVID-19 and Rapid Reviews

Presented to: DSECT/ DSEN Monthly Seminar Series

Type: Webinar

Date: October 22, 2020

<https://play.library.utoronto.ca/play/08af355f8a3b98cb7ea767fd4784d83c>

Presenter: Dr. Sharon Straus

Presentation title: Restoring Trust – COVID-19 and the Future of Long-Term Care

Presented to: The Royal Society of Canada

Type: Webinar

Date: October 15, 2020

https://youtu.be/-z5bWo_vAmk

Presenter: Dr. Andrea Tricco

Presentation title: Rapid Review Methodological Challenges During COVID-19

Presented to: COVID-END Synthesizing Group

Type: Webinar

Date: July 15, 2020

Publications (completed)

Watt JA, Lane NE, Veroniki AA, Vyas MV, Williams C, Ramkissoon N, Thompson Y, Tricco AC, Straus SE, Goodarzi Z. Diagnostic accuracy of virtual cognitive assessment and testing: Systematic review and meta-analysis. *J Am Geriatr Soc.* 2021 May 4. doi: 10.1111/jgs.17190. Epub ahead of print.

<https://pubmed.ncbi.nlm.nih.gov/33948937/>

Shamseer L, Bourgeault I, Grunfeld E, Moore A, Peer N, Straus SE, Tricco AC. Will COVID-19 result in a giant step backwards for women in academic science?. *Journal of Clinical Epidemiology.* 2021 Mar 8.

[https://www.jclinepi.com/article/S0895-4356\(21\)00076-7/fulltext](https://www.jclinepi.com/article/S0895-4356(21)00076-7/fulltext)

Curran J, Dol J, Boulous L, Somerville M, McCulloch H. Transmission characteristics of SARS-CoV-2 variants of concern – rapid scoping review. 2021 Mar 17.

<https://sporevidencealliance.ca/wp-content/uploads/2021/03/Transmission-characteristics-SARS-CoV-2-VOC-Full-Report-17MAR2021.pdf>

Egunsola O, Mastikhina L, Dowsett L, Saxinger L, Clement F, on behalf of the University of Calgary Health Technology Assessment Unit. Transmissibility of COVID-19 among vaccinated individuals – targeted literature search. 2021 Mar 12.

https://sporevidencealliance.ca/wp-content/uploads/2021/03/Transmissibility-of-COVID-19-Among-Vaccinated-Individuals_Updated-Report_12MAR2021.pdf



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Arevalo-Rodriguez I, Tricco AC, Nussbaumer-Streit B, Steingart KR, Kaunelis D, Alonso-Coello P, Bossuyt PM, Javier Z. Developing rapid reviews of diagnostic tests in the time of COVID-19: current knowledge and future steps. In: Collaborating in Response to COVID-19: Editorials and methods initiatives across Cochrane. Cochrane Database of Systematic Reviews, (12 Suppl 1):[32-36]. 2020 Dec 10.

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD202002/full>

Rios P, Radhakrishnan A, Williams C, Ramkissoon N, Cormack GV, Grossman MR, Muller MP, Straus SE, Tricco AC. Preventing the transmission of COVID-19 and other coronaviruses in older adults aged 60 years and above living in long-term care: a rapid review. Systematic reviews. 2020 Dec;9(1):1-8.

https://sporevidencealliance.ca/wp-content/uploads/2020/05/COVID-19-in-LTC_Research-Brief-for-CFN_v1.pdf

<https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-020-01486-4>

Wang L, Ma H, Yiu KC, Calzavara A, Landsman D, Luong L, Chan AK, Kustra R, Kwong JC, Boily MC, Hwang S. Heterogeneity in testing, diagnosis and outcome in SARS-CoV-2 infection across outbreak settings in the Greater Toronto Area, Canada: an observational study. CMAJ open. 2020 Oct;8(4):E627.

<http://cmajopen.ca/content/8/4/E627.full>

Tricco AC, Garritty CM, Boulos L, Lockwood C, Wilson M, McGowan J, McCaul M, Hutton B, Clement F, Mittmann N, Devane D. Rapid review methods more challenging during COVID-19: commentary with a focus on 8 knowledge synthesis steps. Journal of clinical epidemiology. 2020 Oct 1;126:177-83.

<https://pubmed.ncbi.nlm.nih.gov/32615209/>

Holmes B, Straus SE. Resilient Research. The Globe and Mail. 2020 August 6.

<https://rsc-src.ca/en/voices/resilient-research>

Mishra S, Wang L, Ma H, Yiu KC, Paterson JM, Kim E, Schull MJ, Pequegnat V, Lee A, Ishiguro L, Coomes E. Estimated surge in hospital and intensive care admission because of the coronavirus disease 2019 pandemic in the Greater Toronto Area, Canada: a mathematical modelling study. CMAJ open. 2020 Jul;8(3):E593. <http://cmajopen.ca/content/8/3/E593.full>

Estabrooks C, Flood C, Straus S. We must act now to prevent a second wave of long-term care deaths. The Globe and Mail. 2020 June 10.

<https://rsc-src.ca/en/voices/we-must-act-now-to-prevent-second-wave-long-term-care-deaths>

Estabrooks CA, Straus S, Flood CM, Keefe J, Armstrong P, Donner G, Boscart V, Ducharme F, Silvius J, Wolfson M. Restoring trust: COVID-19 and the future of long-term care. A Policy Briefing by the Working Group on long-Term Care. Royal Society of Canada. 2020 June.

https://rsc-src.ca/sites/default/files/LTC%20PB%20%2B%20ES_EN.pdf

Straus SE, Watt J. Unintended consequences. RSC COVID-19 Series, Publication #11. 2020 May 22.



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<https://rsc-src.ca/en/voices/unintended-consequences>

Armstrong P, Straus SE. What's missing from discussions on nursing homes. RSC COVID-19 Series, Publication #10. 2020 May 21.

<https://rsc-src.ca/en/voices/what%E2%80%99s-missing-from-discussions-nursing-homes>

Rios P, Radhakrishnan A, Thomas SM, Darvesh N, Straus SE, **Tricco AC**. Preventing respiratory illness in older adults aged 60 years and above living in long-term care: A rapid overview of reviews. medRxiv, 2020 March 27. (pre-print) <https://www.medrxiv.org/content/10.1101/2020.03.19.20039081v2>.

Rios P, Radhakrishnan A, Antony J, Thomas SM, Muller M, Straus SE, Tricco AC. Effectiveness and safety of antiviral or antibody treatments for coronavirus. medRxiv. 2020 Jan 1. (pre-print)

<https://www.medrxiv.org/content/10.1101/2020.03.19.20039008v2>

Rios P, Radhakrishnan A, Thomas SM, Darvesh N, Straus SE, Tricco AC. Guidelines for preventing respiratory illness in older adults aged 60 years and above living in long-term care: A rapid review of clinical practice guidelines. medRxiv. 2020 Jan 1. (pre-print)

<https://www.medrxiv.org/content/10.1101/2020.03.19.20039180v3>

Dugas M, Carnovale V, Poirier AA, Mailot B, Skidmore B, Faust L, Costello C, Thomson D, Majnemer A, Goldowitz D, Miller S. COVID-19 in Children with Brain-Based Developmental Disabilities: A Rapid Review. medRxiv. 2020 Jan 1. (pre-print)

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Antony J, Rios P, Williams C, Ramkissoon N, Straus SE, Tricco AC. Safety and effectiveness of dose-sparing strategies for seasonal influenza vaccine: a rapid scoping review of fractional dosing of the intramuscular influenza vaccine. medRxiv. 2020 Jan 1. (pre-print)

<https://www.medrxiv.org/content/10.1101/2020.07.31.20163717v1>

Publications (in progress)

- Rapid review: [Testing for Asymptomatic COVID-19: A rapid systematic review and jurisdictional/healthcare organizational scan](#)
- Intradermal versus Intramuscular Administration of Influenza Vaccination
- Rapid scoping review of fractional dosing of the intramuscular influenza vaccine
- Preventing the transmission of coronavirus (COVID-19) in older adults aged 60 years and above living in long-term care: a rapid review. *Manuscript submitted: currently under revisions with the Systematic Review Journal. Authors : Patricia Rios, Amruta Radhakrishnan, Chantal Williams, Naveeta Ramkissoon, Ba' Pham, Gordon V. Cormack, Maura R. Grossman*
- Updated a review entitled "[Transmission of Acute Respiratory Infections During Aerosol Generating Medical Procedures: Update of 2011 CADTH Systematic Review](#)". The report provides an overview of the 2011 CADTH report and presents a synthesis of updated findings.



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- Conducted a rapid scoping review: [*Rapid scoping review of the effectiveness and safety of treatments for COVID-19 and other coronaviruses that cause serious respiratory tract infections*](#)
- Conducted a review: [*Efficacy and safety of treatments \(antivirals and antibodies\) for coronavirus \(CoV\)*](#)
- Conducted a review: [*Digital Health Interventions for the Prevention, Detection and Management of Mental Health Problems in People with Chronic Diseases*](#)
- Conducted a review: [*Rapid and Point-of-Care Diagnostic Test for SARS-COV-2 \(COVID-19\): A Rapid Summary*](#)
- Conducted a review: [*Risk of Acquiring COVID-19 Associated with Singing in a Choir: A Quick Response Report*](#)

KT Program Scientist Dr. Andrea Tricco is the Nominated Principal Applicant for The Drug Safety and Effectiveness Network (DSEN) Methods and Applications Group for Indirect Comparisons (MAGIC). DSEN-MAGIC is a pan-Canadian team of investigators with world-renowned expertise in knowledge synthesis, biostatistics; knowledge translation; clinical epidemiology; sex and gender analysis; and health economics.

[This page](#) showcases COVID-19 work being conducted by MAGIC in response to decision-maker needs.

Dr. Tricco is also the Nominated Principal Applicant for the SPOR Evidence Alliance. The SPOR Evidence Alliance is a Canada-wide alliance of researchers, research trainees, patients, healthcare providers, policy makers and organizations who use research to inform decisions. The alliance was established to provide national-level support in knowledge synthesis, clinical practice guidelines development, knowledge translation, and patient-oriented research. It provides evidence-based answers to clinicians, patients, and policy makers to make sure high-quality information is available to inform decisions.

[This page](#) showcases knowledge synthesis work being conducted by the Alliance researchers in response to decision-maker needs and COVID-19.

Click [here](#) to learn more.

Population Health Research Institute

The Population Health Research Institute (PHRI) is an internationally-recognized global health research institute of McMaster University and Hamilton Health Sciences specializing in large clinical trials and population studies. Originally formed with a focus on cardiovascular disease and diabetes, PHRI's research areas have broadened to include population genomics, perioperative medicine, stroke, thrombosis, cardiac surgery, renal disease, obesity, and other areas. PHRI has developed expertise in epidemiology, population health, clinical trial methodology, and patient and citizen engagement in research, as well as in the examination of biological, social, and environmental determinants of health.



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Website: <http://www.phri.ca/>

During the pandemic, PHRI has launched and received funding for several COVID-19 projects, including these initiatives (please see website for details):

- Post Discharge After Surgery Virtual Care with Remote Automated Monitoring Technology (PVC-RAM) Trial (now completed enrollment and follow-up)
- Anti-Coronavirus Therapy (ACT) to prevent COVID-19 disease progression: a clinical trial platform to rapidly evaluate whether several commonly available interventions can be repurposed for treating COVID-19 (recruiting internationally)
- Assessing Coagulation Biomarkers to Accelerate the Discovery of Effective Therapies for COVID-19 (ACT-COAG)
- PURE SARS-CoV-2, examining factors that affect the risk of infection and long-term health effects of getting infected by COVID-19

Click [here](#) to learn more.

Women’s College Hospital: Women’s Xchange

Women’s Xchange (WX) is a research knowledge translation and exchange centre within Women’s College Hospital that aims to support women’s health research in academic and community settings and helps to disseminate those findings across the province of Ontario. The team offers support to researchers to enhance the integration of sex and gender in their research by reviewing proposals during the pre-funding and post-funding phases and providing feedback or recommendations on every element of the proposed study or project.

Website: <http://womensxchange.womensresearch.ca/>

During the pandemic, WX:

- developed an infographic with Ontario Network of Sexual Assault and Domestic Violence Treatment Centres (SADVTCs), highlighting the other global pandemics and rates of violence against women with additional information on how to access their services during this time
- published an article entitled “Modified Routine Cardiac Imaging Surveillance of Adult Cancer Patients and Survivors During the COVID-19 Pandemic” found in the *JACC CardioOncology*;
- published a paper entitled “The Missing Pieces of the COVID-19 Puzzle” found in *JAGS*, looking at the intersection of sex and age and its importance in informing our understanding of COVID-19 through exploring publicly available international data;
- published a paper entitled “Increasing the Visibility of Older Women in Clinical Research” currently in press in *The Lancet*, illustrating that there is a gap in the consideration of the unique health needs of older women in clinical research;
- published an Op-Ed in the Toronto Star entitled “To help combat COVID-19, we need better data to benefit all” (<https://www.thestar.com/opinion/contributors/2020/04/15/to-help-combat-covid-19-we-need-better-data-to-benefit-all.html>);



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- developed two new modules to add to The Health Researcher's Toolkit;
- developed a list of suggestions and resources on Social Connectedness Suggestions – the document was distributed to over 100,000 members of the Retired Teachers of Ontario (RTOERO);
- distributed an REB approved survey of >5,000 members of the RTOERO identifying how and to what extent the COVID-19 pandemic has impacted older adults, particularly in terms of social isolation and loneliness;
- examined Ontario-wide COVID-19 data on vulnerable residents in LTC homes to identify strategies to improve outcomes going forward;
- launched a study using provincial COVID-19 databases to examine excess COVID deaths (related to measures such as physical distancing, or due to lack of access to usual healthcare) among different groups of vulnerable older adults, in order to target resources to where they are most urgently needed to prevent future deaths;
- Participating in the launch of a study on the impact of COVID-19 on vulnerable populations led by Dr. Bayoumi at St. Mike's
- Participating on a study to adapt digital safety planning tools for women in abusive relationships led by Dr. O'Campo at St. Mike's
- published an Op-Ed in the Toronto Star entitled "Family caregivers will be key during the COVID-19 pandemic" on the impact of COVID-19 pandemic on family caregivers (<https://www.thestar.com/opinion/contributors/2020/03/31/family-caregivers-will-be-key-during-the-covid-19-pandemic.html>);
- Invited member on the Long-Term Care Staffing Study Advisory Group (Ontario Ministry of Health) to provide strategic advice on staffing in the long-term care sector across the province of Ontario;
- invited member of an expert panel for a federal Task Group on COVID-19 in long-term care homes; this group has been convened to provide practical advice to the Government of Canada on the topic of long-term care homes;
- published a blog post on the Canadian Family Physician entitled "Uptake of virtual primary care visits during COVID-19";
- supported 15 grant applications;
- developed EDI content for the NFRF Transformation proposal submitted by Dr. Lewis
- established the Equity, Diversity, and Inclusion across Women's Working Group (EDIWWG) to establish harmonized and consistent approaches to considerations of equity, diversity and inclusion across the organization during the current COVID-19 pandemic and beyond;
- participated in all OSSU meetings and related activities.
- Dr. Paula Rochon is on the Ontario COVID-19 Science Advisory Table
- Dr. Nathan Stall is a member of the secretariate and Assistant Scientific Director of the Ontario COVID-19 Science Advisory Table
- Dr. Paula Rochon and Dr. Nathan Stall are members of the COVID-19 Modelling Consensus Table
- Dr Rochon is chair of the newly established Congregate Care Setting Working Group where Dr. Rachel Savage and Dr. Nathan Stall are members



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- Dr. Rochon is a co-author in a science brief “COVID-19 and Long-Term Care Homes” (<https://doi.org/10.47326/ocsat.2020.01.05.1.0>) led by Dr. Stall, examining the disproportionate impact that the pandemic has had on Ontario long-term care home residents and proposing measures for prevention of infection.
- Dr. Rachel Savage led a paper entitled: “Loneliness among older adults in the community during COVID-19”, currently under review for publication (Preprint: <https://doi.org/10.1101/2020.11.23.20237289>)
- Dr. Mason authored a paper entitled: “Doing Better: Eleven Strategies to Integrate a Sex and Gender Plus Lens in Health Research” (doi.org/10.1186/s41073-020-00102-2)
- Dr. Mason co-author an article in Healthy Debates entitled “ [For people living with diabetes, pandemic impacts are far from over](#) ”
- Dr. Mason published with Dr. Janice Du Mont an editorial entitled: “Addressing a global pandemic within a global pandemic”. (<https://sciencepolicy.ca/news/addressing-global-pandemic-within-global-pandemic>)

Click [here](#) to learn more.