

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

May 2020

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 boarders.

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 in Toronto, with expertise in clinical study design, pragmatic methodology, and biostatistics. 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 residents of long-term care facilities;
- therapeutics for the prophylaxis and management of COVID-19; and,
- mental health impacts of COVID on patients and hospital staff.
- 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.

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 support to the <u>Public Health Sudbury and Districts</u> on COVID-19 and related issues;
- developing working models on health human capital planning for the <u>Ministry of Labour</u>, <u>Training and Skills Development</u>;
- working with the <u>Ontario Pharmacies Evidence Network (OPEN)</u> to better understand vaccination capacity in Ontario;
- developing geographic definitions for COVID response on Manitoulin Island, Ontario;
- supporting 14 research teams develop applications to CIHR and other funding organizations such as the Ministry of Health, <u>Physician Services Inc. (PSI) Foundation</u> and the <u>Northern Ontario</u> Academic Medicine Association (NOAMA)

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

During the pandemic, CTO has:

- processed 39 COVID-19 clinical trials with an average Research Ethics Boards (REBs) approval time of 8 days;
- provided enhanced training resources, on boarding and extended Helpdesk hours to support research teams, sponsors and REBs in submitting and reviewing urgent applications for COVID-19 research;
- disseminating pertinent information to the research community regarding REB requirements for COVID-19 submissions;
- launched a public web portal dedicated to COVID-19 resources and updates;
- begun planning for future updates to the system that will further enhance its tracking of research related to pandemics and other emergency situations

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 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:

- Conducting data analysis for OHTs;
- Planning to use a Learning Health System approach with OHTs in the Fall.

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

- conducting local forecasting/trending of pandemic infections, Personal Protective Equipment (PPE) usage, hospital capacity (e.g, ICUs, ventilators), and human resource capacity;
- investigating novel PPE production streams shields, masks, mask holders etc.;
- 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 modeling and others.

Click here to learn more.

Institute for Clinical Evaluative Sciences

The Institute of Clinical Evaluative Studies (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

During the pandemic, ICES has:

- completed Applied Health Research Questions (AHRQs) to directly provide health system stakeholders with rapid analytics and evidence and researcher-led projects;
- negotiated access to key additional data such as eCTAS (emergency department triage) data from Ontario Health and Critical Care Information System (CCIS) from the Ministry of Health (MOH);



- supported researchers responding to the command table/Public Health Ontario (PHO) /MOH or other COVID related knowledge user to undertake a rapid analysis at ICES;
- supporting machine learning researchers access to COVID-related datasets in the highperformance computing platform (HAIDAP) that ICES has built in partnership with Vector and HPC4Health;
- supported the launch of the MoH PANdemic Threat Response (PANTHR) initiative through the provision of cleaned, curated and documented data to the PANTHR platform where authorized;
- been involved in 20 Investigator-led COVID initiatives;
- developed COVID-19 models for First Nations in Ontario which have been presented to and used by the Chiefs of Ontario, the Ontario Regional Chief, and the First Nations leadership across Ontario;
- COVID-19 models for First Nations in two specific communities and one First Nations health authority and supported one other community to produce their own models;
- provided weekly reports on the testing and test results among First Nations people living in Ontario.

INSPIRE – Primary Health Care OSSU

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 responded to three Applied Health Research Questions (AHRQ) from health system partners;
- is supporting six primary care research studies related to COVID-19;
- leadership are participating in nine Ontario Health primary care committees/tables;
- provide external review on Public Health Agency of Canada (PHAC) guidance on Personal Protective Equipment (PPE) use in Primary Care.

Click here to learn more.

McMaster Health Forum | Public and Patient Engagement Collaborative

The McMaster Health Forum | Public and Patient Engagement Collaborative 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 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.



Website: www.mcmasterforum.org

During the pandemic, the McMaster Health Forum:

- has developed a new rapid-response model to support health- and social-system decisionmakers with very short turn-around times. Browse the <u>rapid evidence profiles</u> or join the <u>upcoming webinar</u> to learn more about this model;
- has, along with its partner at the Ottawa Hospital Research Institute, developed and will
 continuously maintain a guide to COVID-19 evidence sources;
- jointly co-leads the secretariat for the <u>COVID-19 Evidence Network to support Decision-making</u> (COVIDEND) to help those already supporting decision-making to find and use the best evidence that is already out there (i.e. to support the evidence-demand side) and to help reduce duplication in and better coordinate the evidence syntheses, technology assessment and guidelines being produced (i.e., to support the evidence supply side). This network is working to support policymakers in low-, middle- and high-income countries working to address <u>publichealth measures</u>; <u>clinical management</u>; <u>health-system arrangements</u>; and <u>economic and social responses</u> to COVID-19;
- is also supporting the establishment of a COVID-19 Evidence-Coordination Mechanism to support the Ontario Ministry Emergency Operations Centre (MEOC).
- establish/support a 10-member community advisory board (CAB) for the CONvalescent Plasma for Hospitalized Adults with COVID-19 Respiratory Illness (CONCOR-1) Trial to provide advice on key aspects of trial recruitment and implementation

Click here to learn more.

MIRA | Collaborative for Health & Aging

The MIRA | Collaborative for Health & Aging brings together world-class researchers from the McMaster Institute for Research on Aging (MIRA) and the McMaster School of Nursing's Aging, 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-centered 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

During the pandemic, the MIRA | Collaborative on Health & Aging:

- opened an additional offering of a free online course entitled "Caregiving Essentials Course" to support caregivers;
- providing content to the <u>McMaster Optimal Aging Portal</u> that helps older adults stay active and engaged while practicing physical distancing;



- published guidelines for providers caring for <u>COPD patients</u> in the Canadian Journal of Respiratory, Critical Care, and Sleep Medicine;
- published guidance for Occupational Therapists, Physical Therapists, Speech-Language Pathologists and Assistants on <u>Rehabilitation for Patients with COVID-19</u> from the School of Rehabilitation Science, McMaster University.
- provided content for a publication entitled "Being Prepared in the Time of COVID-19" for The Conversation Starter (Institute for Healthcare Improvement);
- presenter for a webinar entitled "<u>Palliative Approaches to Care in Long-Term-Care during</u> COVID-19"
- contributed to a <u>COVID-19 Rapid Evidence Profile #3</u> (27 April 2020) on asymptomatic screening to identify COVID-19 case and to prevent transmission;
- contributed to development of a toolkit, fact sheets and resources for identifying vulnerable home care patients - available from Big Data and Geriatric Models of Care: title: <u>DIVERT-CARE</u>, <u>Supporting Home Care Cardiorespiratory Patients during the COVID-19 Pandemic</u>;
- participated in various news <u>articles</u> in Hamilton and Niagara;
- launched CLSA-COVID Study: National Study Collecting Data on Aging Adults' Experience during COVID-19;
- supported 8 research project applications to various funding agencies and organizations.

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:

- has supported Family Leaders to completed 28 project reviews on proposed CHEO COVID-19 research projects being submitted for funding;
- 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.
- OCHSU has provided support to 12 grant applications to CIHR and other funding agencies.

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.

Website: www.odprn.ca

During the pandemic, ODPRN has:

- initiated a project on the Impact of the COVID-19 Pandemic on Drug Utilization in Ontario;
- initiated a project on the Changing Patterns of Opioid Agonist Therapy Use and Associated Outcomes during the COVID-19 Pandemic in Ontario;
- initiated a project on the Real-World Cardiovascular Safety of Hydroxychloroquine for the Treatment and Prevention of COVID-19 Infection;
- initiated a project on the Statin Use and the Risk of COVID-19 Related Harms;
- participated in a CBC News article entitled "<u>Coronavirus a 'wake-up call' for Canada's</u>
 <u>prescription drug supply</u>" discussing how Canadian pharmacies are limiting how much
 medication can be dispensed to try to prevent shortages



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 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/

During the pandemic, OHRI:

- struck a special COVID-19 Patient Panel to help with project review and provide input for investigators;
- provided support to 26 research teams submitting applications to CIHR, Ontario MOH and other funding agencies.

Click here to learn more.

The Knowledge Translation Program

The Knowledge Translation Program (KTP) works with researchers to develop a strategy to put knowledge into practice at both the clinical and policy level. By focusing on the processes through which knowledge is effectively translated into changed decision making, KTP plays a critical role in enabling the creation and delivery of outcome-based learning experiences, and ultimately improved health outcomes

Website: https://knowledgetranslation.net/

During the pandemic, the KT Program:

- conducted a rapid review entitled "<u>COVID-19 in Older Adults in Long Term Care</u>" to identify
 infection protection and control measures for adults aged 60 years and older in long-term care
 settings. This project was commissioned by the Infection Prevention & Control of the World
 Health Organization (WHO) Health Emergency Programme.
- conducted a rapid review entitled "<u>Risks Associated with COVID-19 in Children with Brain-Based Disabilities</u>" to understand if children with brain-based developmental disabilities more likely to develop COVID-19, and have complications or poorer outcomes following infection?
- updated a review entitled "<u>Transmission of Acute Respiratory Infections During Aerosol</u>
 <u>Generating Medical Procedures: Update of 2011 CADTH Systematic Review</u>". The report provides
 an overview of the 2011 CADTH report and presents a synthesis of updated findings.



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.

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

During the pandemic, PHRI has:

- launched a vanguard phase trial on post-discharge virtual care using remote automated monitoring (PVC-RAM). A full proposal will be submitted to CIHR for funding;
- launched a trial on the use of Azithromycin-Chloroquine Therapy (ACT) to prevent progression of COVID-19;

Click <u>here</u> 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 <u>Ontario Network of Sexual Assault and Domestic Violence</u>
 <u>Treatment Centres</u> (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 "<u>Modified Routine Cardiac Imaging Surveillance of Adult Cancer</u> <u>Patients and Survivors During the COVID-19 Pandemic</u>" found in the JACC CardioOncology;
- published an Op-Ed in the Toronto Star entitled "To help combat COVID-19, we need better data to benefit all";



- developed a list of suggestions and resources on Social Connectedness Suggestions the document was distributed to over 100,000 members of the <u>Retired Teachers of Ontario</u> (RTO/ERO);
- 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;
- participated in 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;
- published a blog post on the Canadian Family Physician entitled "Uptake of virtual primary care visits during COVID-1";
- supported 15 grant applications;
- 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.

Click here to learn more.