ICES North Satellite

DR MIKE CONLON
IAN LANE

NOAMA AGM

NOVEMBER 10, 2018

Faculty/Presenter Disclosure

Speaker Name: Dr. Michael Conlon

- Relationships with for-profit or not-for-profit organizations
  - **Other:** Employee of HSNRI / Institute for Clinical Evaluative Sciences (ICES) North

Speaker Name: Ian Lane

- **Relationships with for-profit or not-for-profit organizations**
  - **Other:** Employee of HSNRI / Institute for Clinical Evaluative Sciences (ICES) North

CEPD
continuing education and professional development

Mission, Vision & Values

ICES is a not-for-profit research institute encompassing a community of research, data and clinical experts, and a secure and accessible array of Ontario's health-related data.

ICES MISSION

Our mission is research excellence resulting in trusted evidence that makes policy better, health care stronger and people healthier.

ICES VISION

Our vision is to be a world-leading research institute where data and discovery improve health and health care.

ICES VALUES

- **Excellence** — demonstrated by the quality, innovation and rigour of our work
- **Integrity** — expressed through independence, transparency and impartiality
- **Relevance** — by providing high-value, timely results that are responsive to health priorities
- **Collaboration** — through effective partnerships, accessible data and a spirit of openness
- **Respect** — exemplified by responsible stewardship, inclusiveness and appreciation of each other

Introduction to ICES

The Institute for Clinical Evaluative Sciences (ICES) leads cutting-edge studies that evaluate health care delivery and outcomes.

ICES researchers access a vast and secure array of Ontario's health-related data, including population-based health surveys, anonymous patient records, and clinical and administrative databases.

ICES is recognized as a leader in maintaining the privacy and security of health information.

An independent, not-for-profit corporation that is an impartial and credible source of high-quality health and health services research and evidence.

ICES receives core funding from the Ontario Ministry of Health and Long-Term Care.

Research Programs

- **Primary Care and Population Health:**
  Accessibility and effectiveness of primary health care, burden of disease, effectiveness of public health interventions, indigenous health.
- **Cardiovascular**
- **Cancer**
- **Chronic Disease and Pharmacotherapy:**
  Epidemiology and management of chronic illnesses; safety and effectiveness of prescription drugs.
- **Health System Planning and Evaluation:**
  The organization and delivery of care, including integration, transitions in care, and service quality.
- **Kidney, Dialysis & Transplantation:**
  Prevention and treatment of kidney disease, dialysis, and transplantation
- **Mental Health and Addictions:**
  Access to mental health and addiction services, social determinants of mental health

Introduction to ICES

The vast majority of the information ICES collects originates in Ontario's publicly funded health care system.

ICES collects this information from:

- health care providers directly
- the Ministry of Health and Long-Term Care
- other organizations like ICES that have a mandate to enable health care monitoring and evaluation

This may be supplemented by other data collection methods e.g. surveys, that are compiled by ICES or others and under the oversight of a research ethics board.

Who Collects Administrative Data?

In Ontario:

- **The Ministry of Health and Long-Term Care**
- **The Canadian Institute for Health Information (CIHI) collects hospital-based data**
- **Cancer Care Ontario (cancer diagnoses and treatment-related data)**
- **Ontario Association of Community Care Access Centres (CCACs) (home care data and applications to long-term care)**

Types of ICES data

ICES holds several kinds of data in the following categories:

1. HEALTH SERVICES ADMINISTRATIVE DATA

- Physician billings
- Prescription drug claims for those 65 and older
- Inpatient hospital discharges
- Emergency and ambulatory care visits
- Home care and rehabilitation claims
- Long-term care visits

2. PEOPLE AND GEOGRAPHY

- Population estimates
- Canada census profiles
- Death records
- All Ontarians eligible for health care benefits

3. SPECIAL COLLECTIONS

- Registries (cancer, stroke, cardiac care)
- First Nations and Métis
- Developmental disabilities
- Federal immigration information

4. DERIVED CONDITIONS

- Diabetes
- Hypertension
- Chronic obstructive pulmonary disease (COPD)
- Asthma
- Acute myocardial infarction
- Congestive heart failure
- Inflammatory bowel disease

5. SURVEY DATA

- Health Surveys

6. CLINICAL DATA

- Patient information collected with consent in primary clinical studies
- Supplementary clinical data from individual hospitals and other institutions

7. CHART ABSTRACTION DATA

- Information on processes and quality of care collected directly from patients' charts

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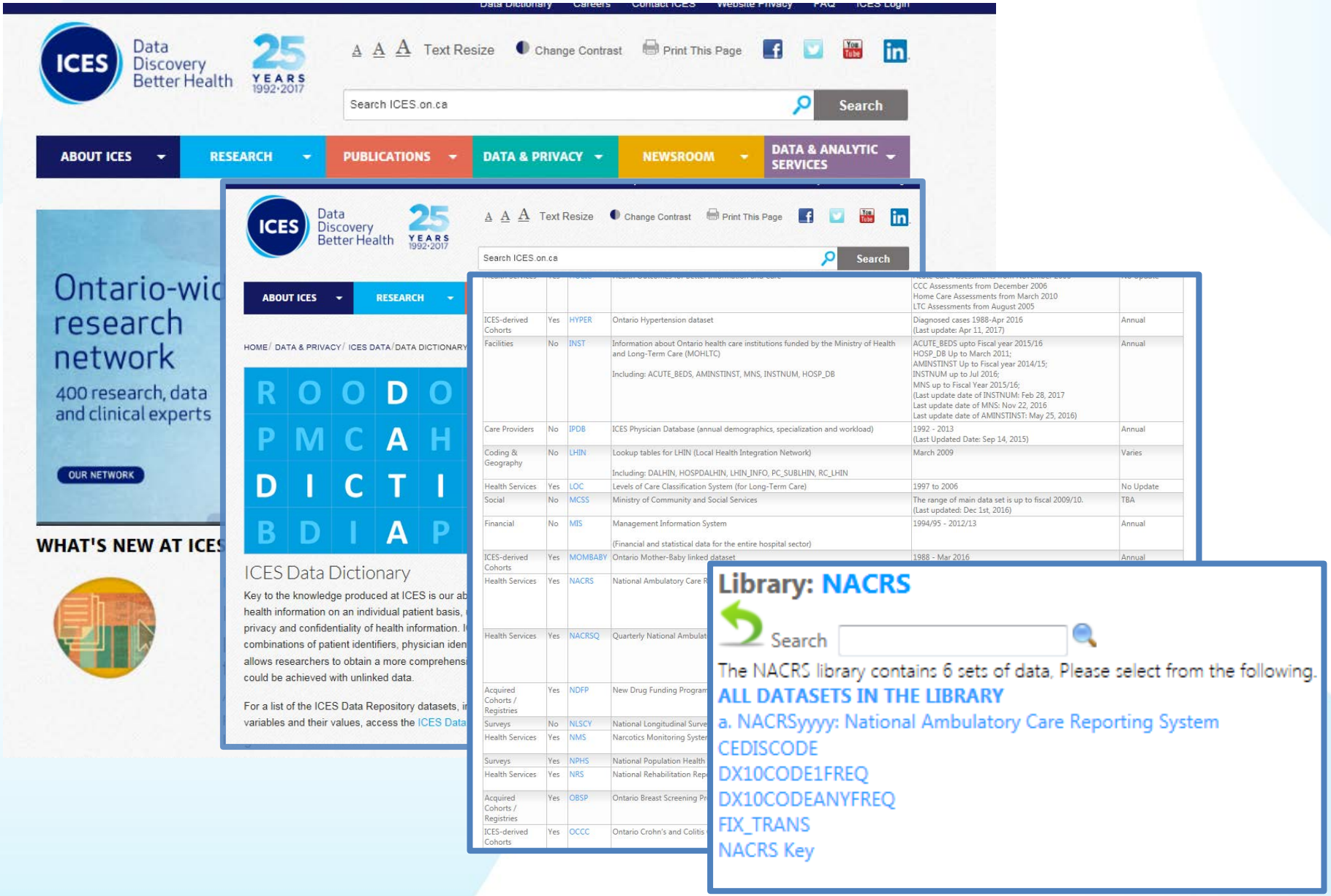
Limitations:

1) Not designed with research in mind but routinely collected information
2) Limited clinical information, no test results, proxy measures often used
3) Data lag
4) Data somewhat remuneration dependent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R O O D O
P M C A H
D I C T I
B D I A P
ICES Data Dictionary
Key to the knowledge produced at ICES is our ab
health information on an individual patient basis,
privacy and confidentiality of health information.
combinations of patient identifiers, physician iden
allows researchers to obtain a more comprehens
could be achieved with unlinked data.
For a list of the ICES Data Repository datasets, i
variables and their values, access the ICES Data
CCC Assessments from December 2006
Home Care Assessments from March 2010
LTC Assessments from August 2005
ICES-derived Cohorts Yes HYPER Ontario Hypertension dataset Diagnosed cases 1988-Apr 2016 (Last update: Apr 11, 2017) Annual
Facilities No INST Information about Ontario health care institutions funded by the Ministry of Health and Long-Term Care (MOHLTC) Including: ACUTE_BEDS, AMINSTINST, MNS, INSTNUM, HOSP_DB ACUTE_BEDS upto Fiscal year 2015/16 HOSP_DB Up to March 2011; AMINSTINST Up to Fiscal year 2014/15; INSTNUM up to Jul 2016; MNS up to Fiscal Year 2015/16; (Last update date of INSTNUM: Feb 28, 2017 Last update date of MNS: Nov 22, 2016 Last update date of AMINSTINST: May 25, 2016) Annual
Care Providers No IPDB ICES Physician Database (annual demographics, specialization and workload) 1992 - 2013 (Last Updated Date: Sep 14, 2015) Annual
Coding & Geography No LHIN Lookup tables for LHIN (Local Health Integration Network) Including: DALHIN, HOSPDALHIN, LHIN_INFO, PC_SUBLHIN, RC_LHIN March 2009 Varies
Health Services Yes LOC Levels of Care Classification System (for Long-Term Care) 1997 to 2006 No Update
Social No MCSS Ministry of Community and Social Services The range of main data set is up to fiscal 2009/10. (Last updated: Dec 1st, 2016) TBA
Financial No MIS Management Information System (Financial and statistical data for the entire hospital sector) 1994/95 - 2012/13 Annual
ICES-derived Cohorts Yes MOMBABY Ontario Mother-Baby linked dataset 1988 - Mar 2016 Annual
Health Services Yes NACRS National Ambulatory Care R
Health Services Yes NACRSQ Quarterly National Ambulat
Acquired Cohorts / Registries Yes NDFP New Drug Funding Program
Surveys No NLSCY National Longitudinal Surve
Health Services Yes NMS Narcotics Monitoring Syster
Surveys Yes NPHS National Population Health
Health Services Yes NRS National Rehabilitation Rep
Acquired Cohorts / Registries Yes OBSP Ontario Breast Screening Pr
ICES-derived Cohorts Yes OCCC Ontario Crohn's and Colitis
Library: NACRS
Search
The NACRS library contains 6 sets of data, Please select from the following.
ALL DATASETS IN THE LIBRARY
a. NACRSyyyy: National Ambulatory Care Reporting System
CEDISCODE
DX10CODE1FREQ
DX10CODEANYFREQ
FIX_TRANS
NACRS Key

Administrative Databases

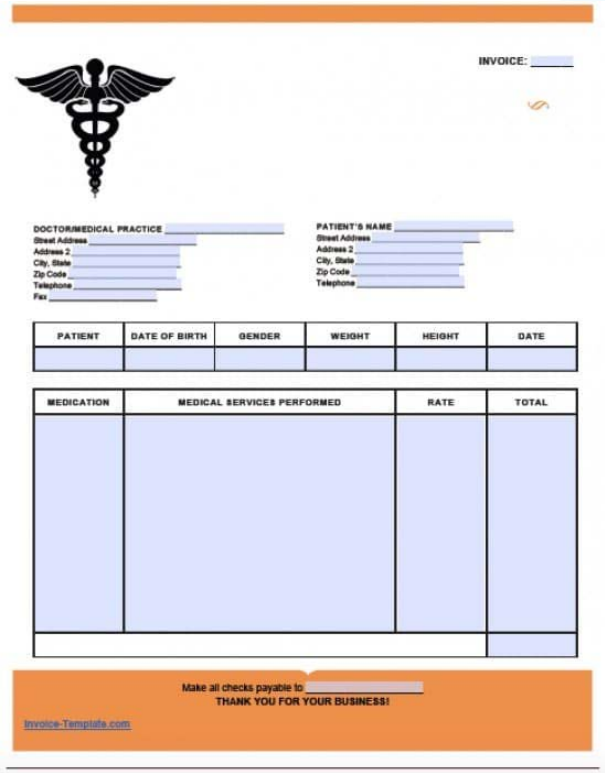
Registered Persons Database (RPDB)

- Contains basic demographic information about anyone who has ever received an Ontario health card number (e.g. age, sex, area where they live)

- We can link the RPDB to other health administrative databases

Physician and lab billing records

- **One record for each service**
- **Patient identifier**
- **Provider identifier**
- **Date of service**
- **Fee code: identifies the service**
  (e.g. A003 = routine check-up;
  X145 = bone density test) or
  lab test (e.g. L055 = cholesterol
  test)
- **Diagnosis code (reason for the visit)**



Emergency Department Visits

- **One record for each visit**
- **Patient identifier**
- **Arrival and departure dates**
- **Reason for the visit (up to 10 diagnosis codes)**
- **Interventions (up to 10 procedure codes)**

Hospital Discharge Records

- **One record for each hospital stay**
- **Patient identifier**
- **Admission and discharge dates**
- **Diagnosis codes (up to 25)**
- **Procedure codes (up to 20)**

VOLUME 29 · NUMBER 12 · APRIL 20 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Trends in the Aggressiveness of End-of-Life Cancer Care in the Universal Health Care System of Ontario, Canada

Thi H. Ho, Lisa Barbera, Refik Saskin, Hong Lu, Bridget A. Neville, and Craig C. Earle

From the Ontario Institute for Cancer Research; Odette Cancer Centre; Institute for Clinical Evaluative Sciences, Toronto, Ontario; and Dana-Farber Cancer Institute, Boston, MA.

Submitted August 2, 2010; accepted January 11, 2011; published online ahead of print at www.jco.org on March 14, 2011.

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The opinions, results, and conclusions reported in this article are those of the authors and are independent from the funding sources. No endorsement by Ontario Institute for Cancer Research, Institute for Clinical Evaluative Sciences, the Government of Ontario, or Ontario Ministry of Health and Long-Term Care is intended or should be inferred.

Presented at the Institute on Innovations in Palliative Care in Toronto, Ontario, in May 2009.

Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

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0732-183X/11/2912-1587/$20.00

DOI: 10.1200/JCO.2010.31.9897

ABSTRACT

Purpose
To describe trends in the aggressiveness of end-of-life (EOL) cancer care in a universal health care system in Ontario, Canada, between 1993 and 2004, and to compare with findings reported in the United States.

Methods
A population-based, retrospective, cohort study that used administrative data linked to registry data. Aggressiveness of EOL care was defined as the occurrence of at least one of the following indicators: last dose of chemotherapy received within 14 days of death; more than one emergency department (ED) visit within 30 days of death; more than one hospitalization within 30 days of death; or at least one intensive care unit (ICU) admission within 30 days of death.

Results
Among 227,161 patients, 22.4% experienced at least one incident of potentially aggressive EOL cancer care. Multivariable analyses showed that with each successive year, patients were significantly more likely to encounter some aggressive intervention (odds ratio, 1.01; 95% CI, 1.01 to 1.02). Multiple emergency department (ED) visits, ICU admissions, and chemotherapy use increased significantly over time, whereas multiple hospital admissions declined ($P < .05$). Patients were more likely to receive aggressive EOL care if they were men, were younger, lived in rural regions, had a higher level of comorbidity, or had breast, lung, or hematologic malignancies. Chemotherapy and ICU utilization were lower in Ontario than in the United States.

Conclusion
Aggressiveness of cancer care near the EOL is increasing over time in Ontario, Canada, although overall rates were lower than in the United States. Health system characteristics and patient or physician cultural factors may play a role in the observed differences.

J Clin Oncol 29:1587-1591. © 2011 by American Society of Clinical Oncology

INTRODUCTION

Despite advances in early detection, treatment, and survival, cancer remains a leading cause of death in most developed countries. The disease accounts for nearly 30% of all deaths in Canada[1] and approximately one quarter of all deaths in the United States.[2] With the number of deaths from cancer and other chronic diseases expected to increase as a result of a growing and aging population, the inevitable need for quality end-of-life care has become increasingly important.[3] A number of measures of the quality of end-of-life care that can be evaluated by using administrative data have been developed and reported previously.[4-6] These assess processes, such as overuse of chemotherapy; underuse of hospice care; and outcomes of frequent emergency room visits, hospitalizations, and intensive care unit (ICU) admissions (possibly indicating misuse of aggressive intervention) near the end of life. Evaluation of these measures in Medicare claims for 28,777 patients older than age 65 years who died of cancer in the 1990s found steadily increasing use of aggressive care during that decade.[5] Proposed reasons for this observation have included increasing technology available near the end of life, uneven availability of hospice and palliative care services, and financial incentives that exist in the United States to continue providing treatment when it is medically futile. Previous Canadian studies have also shown that a significant proportion of patients with cancer have indicators of poor quality end-of-life care, although they did not assess how this has changed over time.[7-9] In Canada's universal health care system, the palliative care system is also a patchwork of services that varies interprovincially and regionally within provinces,[3,10] although financial incentives for treatment may be significantly less. Patient and

ICES CORE Data Repository: Coded and Linkable

Provider/ Facilities

Physicians

Hospitals

Complex care

Long-term care homes

Home care

Real-time

Health Outcomes for Better Information Care (nursing home)

Implantable Cardiac Defibrillators

Health Service Encounters

Physician claims

Hospital discharge abstracts

Emergency visits

Ontario Drug Benefit claims

Narcotics Monitoring System

Home care

Rehab

Long-term care

People & Geography

People in Ontario eligible for health care since 1985

Unique individual ICES Key Number (IKN) used for linking across all data sets

Demographics

Deaths

Census

Special Collections*

Disease registries (ex. cancer, stroke, cardiac, perinatal)

HIV clinics

Immigration

First Nation

Métis

Social Assistance

Disabilities

Early Development Instrument

* Special governance

Derived Chronic Conditions

Using routine ICES data

Diabetes

Respiratory problems (ex. Asthma, chronic obstructive pulmonary disease)

Cardiac problems (ex. heart attacks, hypertension)

Schizophrenia

Many others

Project Specific Research Data

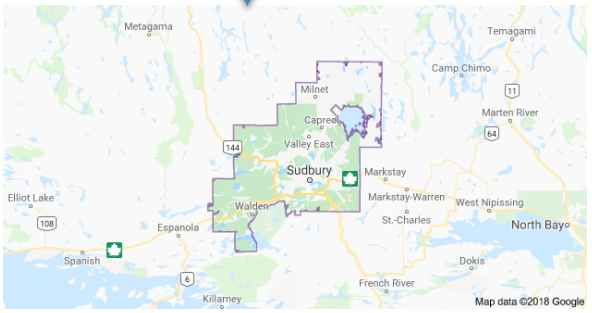
Linked data set

ICES

Ontario Cancer Registry

The Ontario Cancer Registry (OCR) is the provincial database of information about all Ontario residents diagnosed with cancer. It also includes data on those who have died of cancer. The registry continually collects, manages and analyzes cancer data to produce timely and high-quality information on the burden of cancer in the province.

ICU

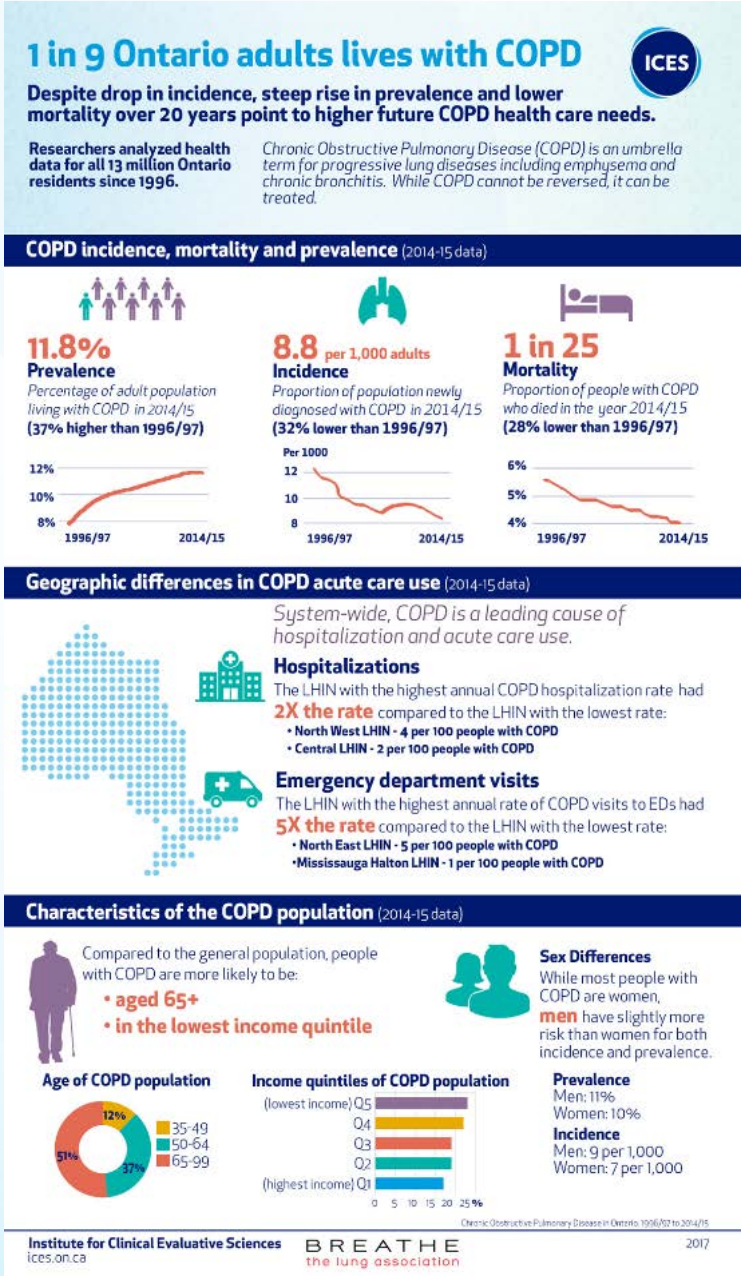


Cancer cases in Ontario between 2007 and 2015 from OCR, linked with RPDB (N = 322,713)

Excluded N = 2,386	Decedent	Included N = 320,327
Excluded N = 33,167	Days from diagnosis to death > 30	Included N = 287,160
	Linked to SMC data share	
	Linked to OHIP (chemotherapy and ICU indicators)	
	Linked to NACRS (ED indicator)	
	Linked to CIHI-DAD (death in acute care and hospitalization indicators)	
Excluded N = 281,811	Sudbury residence	Included N = 5,349
Excluded N = 2,822	Index years 2012 to 2015	Included N = 2,527

Results

Outcome	p*	SMP %	Non-SMP %	|ARR| % (95% CI)	NNT (95% CI)	RR (95% CI)
Hospitalization	0.04	4.77	7.56	2.79 (2.76-2.82)	35.84 (35.45-36.25)	0.63 (0.42-0.95)
Emergency Department	0.03	9.42	13.13	3.71 (3.66-3.76)	26.95 (26.57-27.35)	0.72 (0.53-0.97)
Chemotherapy	0.20	1.46	2.52	-	-	-
Intensive Care Unit	<0.001	1.06	12.20	11.14 (11.11-11.17)	8.98 (8.95-9.00)	0.09 (0.04-0.18)
Any AEoLC	<0.001	12.47	25.20	12.73 (12.65-12.81)	7.86 (7.81-7.91)	0.50 (0.39-0.62)
Death in Acute Care	<0.001	24.14	44.03	19.89 (19.78-20.00)	5.03 (5.00-5.06)	0.55 (0.47-0.64)

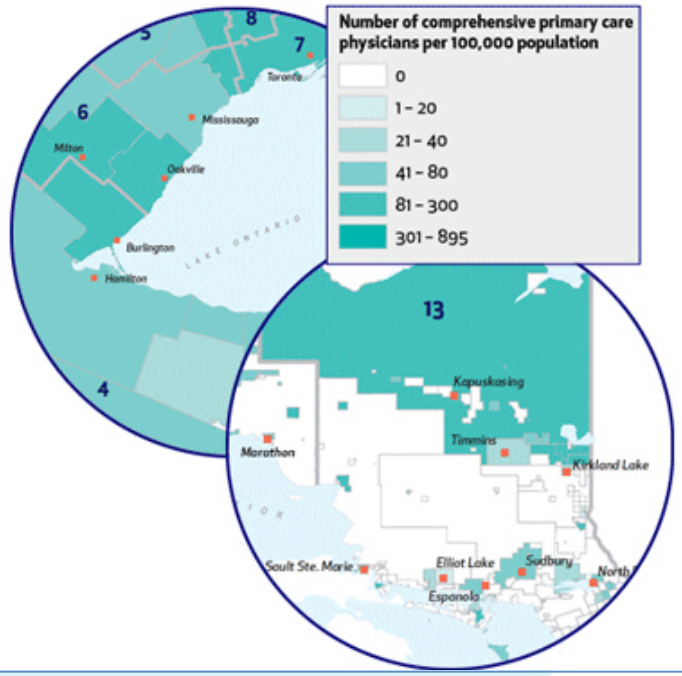

1 in 9 Ontario adults lives with COPD
ICES
Despite drop in incidence, steep rise in prevalence and lower mortality over 20 years point to higher future COPD health care needs.
Researchers analyzed health data for all 13 million Ontario residents since 1996.
Chronic Obstructive Pulmonary Disease (COPD) is an umbrella term for progressive lung diseases including emphysema and chronic bronchitis. While COPD cannot be reversed, it can be treated.
COPD incidence, mortality and prevalence (2014-15 data)
11.8%
Prevalence
Percentage of adult population living with COPD in 2014/15
(37% higher than 1996/97)
12%
10%
8%
1996/97
2014/15
8.8 per 1,000 adults
Incidence
Proportion of population newly diagnosed with COPD in 2014/15
(32% lower than 1996/97)
Per 1000
12
10
8
1996/97
2014/15
1 in 25
Mortality
Proportion of people with COPD who died in the year 2014/15
(28% lower than 1996/97)
6%
5%
4%
1996/97
2014/15
Geographic differences in COPD acute care use (2014-15 data)
System-wide, COPD is a leading cause of hospitalization and acute care use.
Hospitalizations
The LHIN with the highest annual COPD hospitalization rate had
2X the rate compared to the LHIN with the lowest rate:
• North West LHIN - 4 per 100 people with COPD
• Central LHIN - 2 per 100 people with COPD
Emergency department visits
The LHIN with the highest annual rate of COPD visits to EDs had
5X the rate compared to the LHIN with the lowest rate:
• North East LHIN - 5 per 100 people with COPD
• Mississauga Halton LHIN - 1 per 100 people with COPD
Characteristics of the COPD population (2014-15 data)
Compared to the general population, people with COPD are more likely to be:
• aged 65+
• in the lowest income quintile
Sex Differences
While most people with COPD are women, men have slightly more risk than women for both incidence and prevalence.
Age of COPD population
12%
51%
37%
35-49
50-64
65-99
Income quintiles of COPD population
(lowest income) Q5
Q4
Q3
Q2
(highest income) Q1
0 5 10 15 20 25 %
Prevalence
Men: 11%
Women: 10%
Incidence
Men: 9 per 1,000
Women: 7 per 1,000
Chronic Obstructive Pulmonary Disease in Ontario, 1996/97 to 2014/15
Institute for Clinical Evaluative Sciences
ices.on.ca
BREATHE
the lung association
2017

Wide regional variation in Ontarians' access to family doctors

Novel mapping techniques provide new detail about Ontarians' access to primary care, including distribution, drive times and practice models.

Researchers analyzed data for all 13 million residents and 9,000 comprehensive primary care physicians in Ontario.

DISTRIBUTION OF FAMILY DOCTORS



Most family doctor concentration occurs in the densely populated urban areas of the Greater Toronto Area and elsewhere in southwestern and southeastern Ontario.

However, some rural settings, such as the Muskoka region, have greater access to family doctors, and some urban settings, including Hamilton, Cobourg, Thunder Bay and Sault Ste. Marie, have less access.

Supportive Care in Cancer
October 2015, Volume 23, Issue 10, pp 3025–3032 | Cite as

Does routine symptom screening with ESAS decrease ED visits in breast cancer patients undergoing adjuvant chemotherapy?

Authors Authors and affiliations

L. Barbera, R. Sutradhar, D. Howell, J. Sussman, H. Seow, D. Dudgeon, C. Atzema, C. Earle, A. Husain, Y. Liu, M. K. Krzyzanowska

Privacy

Privacy

ICES is designated as a *prescribed entity* under Personal Health Information Protection Act 2004 (s. 45[1] and O. Reg 329/04 section 18[1]

Health information custodians (e.g., Ontario Ministry of Health and Long-Term Care) may disclose personal health information (PHI) to ICES for the purposes of:

- Managing the health system
- Allocation of resources
- Evaluation and monitoring
- Planning for all or part of the health system

Work with First Nations

Work with First Nations

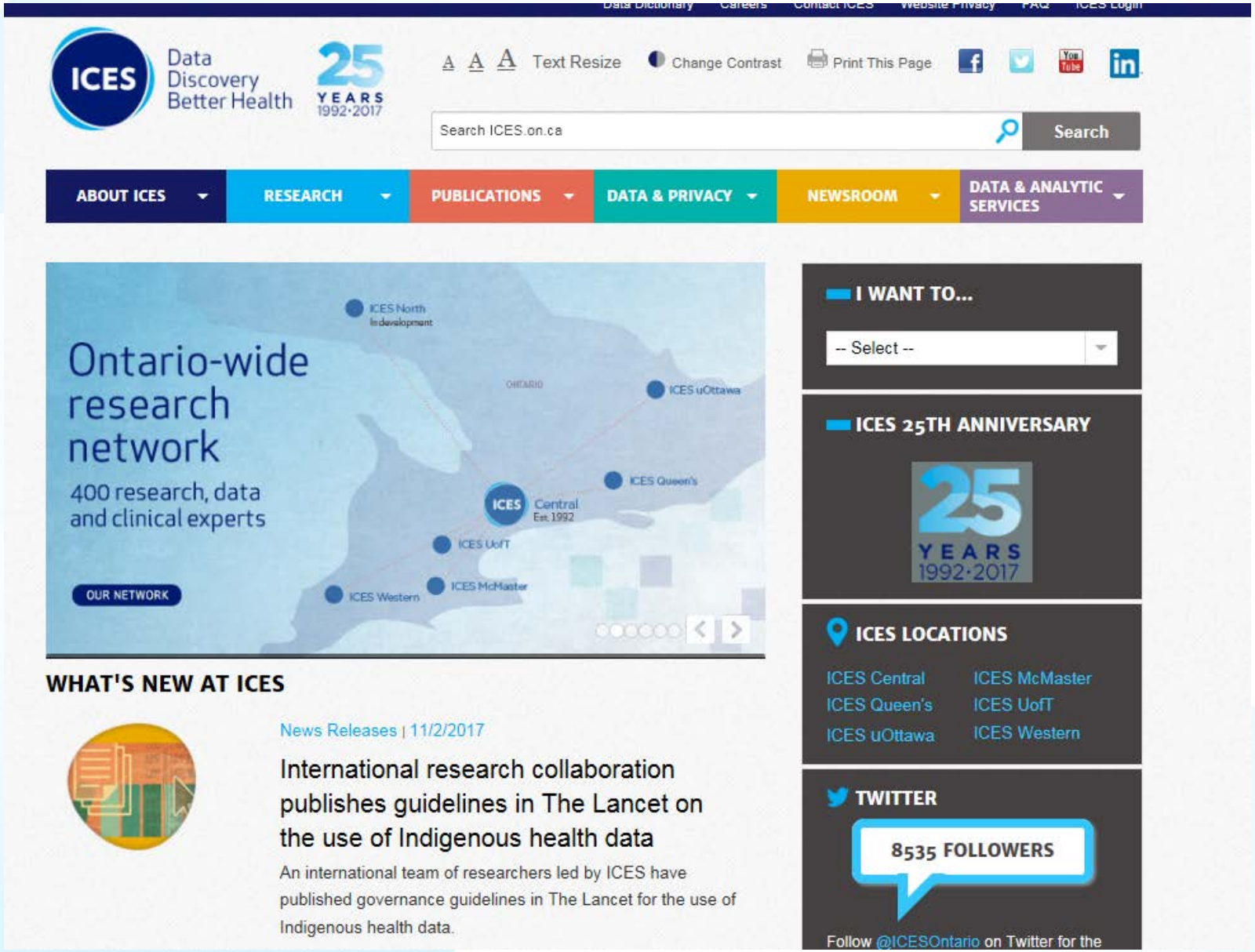
ICES-COO Data Governance Agreement (DGA):

- DGA is an umbrella document meant to protect the interests of all First Nations communities
- Use of data is governed by OCAP Principles and will only be used under guidance of First Nations communities
- Any community can directly contact ICES for health analysis or research partnership requests
- Physical data resides at ICES and cannot be accessed by any government bodies or agencies without permission

Work with First Nations (continued)

ICES and the Chiefs of Ontario entered into a Data Governance Agreement in 2012 (passed as All-Ontario Chiefs Conference (AOCC) resolution in September 2010)

- **Enables ICES to carry out health-related analyses for COO and First Nations communities in Ontario**
- **Oversees use of First Nations data by ICES in a manner that respects OCAP (Ownership, Control, Access and Possession) principles.**
- **Governs linkage and use of Indian Registry System (IRS) data**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Ontario-wide research network
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WHAT'S NEW AT ICES
News Releases | 11/2/2017
International research collaboration publishes guidelines in The Lancet on the use of Indigenous health data
An international team of researchers led by ICES have published governance guidelines in The Lancet for the use of Indigenous health data.

IC/ES Data Discovery Better Health

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ICES North

ICES North is located at the Health Sciences North Research Institute (HSNRI) Ramsey Lake Health Centre campus in Sudbury. ICES North launched on June 12, 2018 in a redesigned 1,000 square-foot facility that is strategically located to welcome clinical investigators, scientists, staff and students. This initiative is facilitated through a strategic partnership between HSNRI, Laurentian University, and the Northern Ontario School of Medicine whereby ICES North connects all partners' strategic research priorities in health research. ICES North will serve to centralize Northern Ontario's unique health research questions and demographic composition that are rooted in rural and remote health. ICES North would like to thank the Northern Ontario Heritage Fund Corporation, FedNor, and the Greater Sudbury Development Corporation for supporting this initiative.

Contact ICES North

ANNOUNCEMENTS & EVENTS

What's New?

9/28/2018 | ICES North

New ICES satellite site launches

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ABOUT ICES

- Mission, Vision & Values
- New Name and Logo
- ICES 25th Anniversary
  - Top 25 in 25
- Key Contacts
- Corporate Reports
- Board of Directors
  - Scientific Advisory Committee
- Public Advisory Council
- Collaborations & Partnerships
  - Integrated Client Care Project (ICCP)
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Health Sciences North Research Institute
Institut de recherches d'Horizon Santé-Nord

ICES North

Northern Ontario School of Medicine
École de médecine du Nord de l'Ontario

Laurentian University
Université Laurentienne

FedNor invests in development of ICES North satellite site

November 17, 2017

FedNor today announced a $563,424 investment from the Government of Canada, Province of Ontario and Greater Sudbury Development Corporation in support of ICES North, an ICES satellite site currently in development in Sudbury at Health Sciences North Research Institute in partnership with Laurentian University and the Northern Ontario School of Medicine. This investment will benefit researchers and health care professionals in Northern Ontario, and help to advance health research and innovation in the region.

"Connecting Health Sciences North to ICES' network will help increase scientific collaboration and assist in developing tools for better patient outcomes. I look forward to the positive results today's announcement will deliver for patients, families and health care professionals living and working in the region," says Marc Serré, Member of Parliament for Nickel Belt.

ICES satellite sites expand our capacity to generate high-quality research that contributes to the improvement of health care and health services in Ontario. ICES adjunct scientist Mike Conlon was appointed ICES North site director earlier this year. The site is planned to be operational in 2018.

Key Funders

- GSDC
- FedNOR
- NOHFC

centre de recherche en santé dans les milieux ruraux et du nord

CRaNHR

centre for rural and northern health research

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About Us

Français

The Centre for Rural and Northern Health Research (CRaNHR) is an academic and applied research centre at Laurentian University in Sudbury, Ontario. To access information about CRaNHR at Lakehead University in Thunder Bay, Ontario, click here.

From 1992 to 1997, the research centre was known as the Northern Health Human Resources Research Unit (NHHRRU). Since then we have been known as the Centre for Rural and Northern Health Research (CRaNHR), to reflect a much broader research mandate.

CRaNHR's mandate is to conduct i
particularly in rural and northern co
CRaNHR and with the support of re
(see Researchers) conduct studies
on various health workforce issues.

CRaNHR is committed to timely dis
health care decision-makers, plann

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For more information, please visit the following link(s):

- **Potential Supervisors**

Department Info

Interdisciplinary PhD in Rural and Northern Health

PhD

Overview | Requirements | Courses | Degree Options | Faculty Members

LANGUAGE	CAMPUS	DELIVERY
English	Sudbury	On campus

PROGRAM OVERVIEW

The only doctoral program in Canada dedicated to researching rural and northern health issues.

Enhance and promote the quality and quantity of research focused on rural and northern health.


Northern Ontario School of Medicine
École de médecine du Nord de l'Ontario
Innovative Education and Research for a Healthier North.
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RESEARCH
COMMUNITIES
ABOUT NOSM
Innovative Education and Research for a Healthier North
The Northern Ontario School of Medicine (NOSM) is committed to the education of high quality physicians and health professionals, and to international recognition as a leader in distributed, learning-centred, community-engaged education and research.
Vision
Innovative Education and Research for a Healthier North.
Mission
The Northern Ontario School of Medicine (NOSM) is committed to the education of high quality physicians and health professionals, and to international recognition as a leader in distributed, learning-centred, community-engaged education and research.
NOSM will accomplish this by:
Being socially accountable to the needs and the diversity of the populations of Northern Ontario
Actively involving Aboriginal, Francophone, remote, rural and underserviced communities
Leading and conducting research activities that positively impact the health of those living in Northern communities
Fostering a positive learning environment for learners, faculty, and staff
Achieving an integrated, collaborative approach to education, learning, and programming
Increasing the number of physicians and health professionals with the leadership, knowledge and skills to practice in Northern Ontario

Health Sciences North Research Institute

Institut de recherches d'Horizon Santé-Nord

CIHR announces $1.4 Million in funding for Indigenous Health Research to HSNRI

About Us | Contact Us | Clinical Trials | Donate to Research

The Health Sciences North Research Institute (HSNRI) is focused on contributing to sustainable solutions for health challenges faced by Ontario's Northern and Indigenous communities. Our research priority areas - Infection & Immunity, Cancer Solutions, Personalized Medicine and Healthy Aging - are wrapped around a population health focus to achieve health equity for Ontario's Northern and Indigenous communities.

Our Research Priorities

Cancer Solutions | Infection & Immunity | Personalized Medicine

Healthy Aging | Northern & Indigenous Health


Health Sciences North
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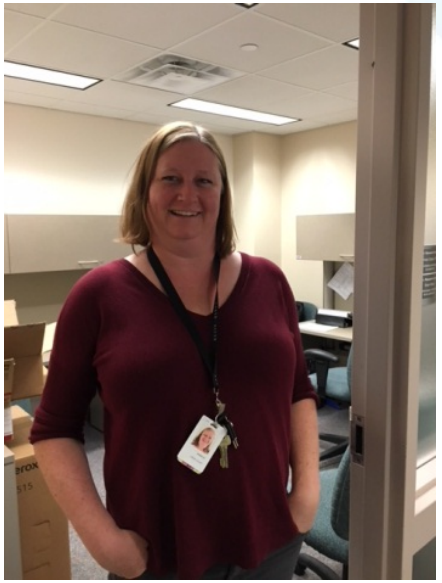
Your Voice. Your Vision.
#YourHSN #YourHSNRI
HSN & HSNRI 2019-24 Strategic Plan
Hospital Map
Parking
Visiting Hours
Emergency Dept.
Accessibility
Health Sciences North (HSN) is a new approach to delivering the highest quality patient care, research, teaching and learning to our region and beyond. It is a network of integrated facilities and programs working together for the benefit of our patients, communities, physicians, researchers, staff and learners in the areas of prevention, diagnosis, treatment and care.
HSN offers a variety of programs and services that meet many patient care needs, with leading regional programs in the areas of cardiac care, oncology, nephrology, trauma and rehabilitation.
Recent News
18-06-1 • An outbreak of Vancomycin-resistant Enterococcus (VRE) has been declared over – 4th Floor, North Tower
18-05-30 • HSNRI Researcher Presents the Importance of Screening for Distress in Cancer Patient at International Oncology Conference
18-05-22 • Max Liedke Appointed Senior Vice-President and Chief Operating Officer at Health Sciences North

ICES North Core Staff

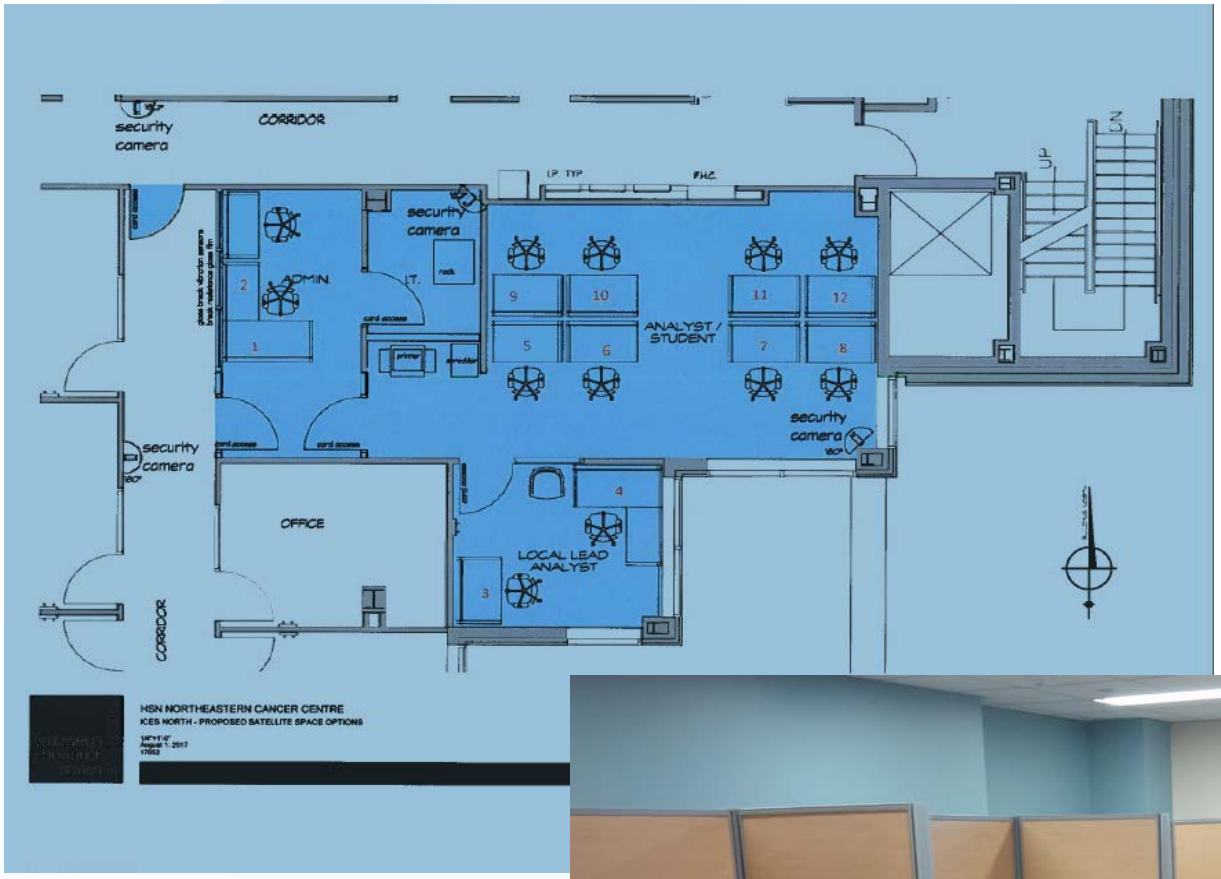
Mike Conlon
Site Director

Joe Caswell
Local Lead Analyst

Ian Lane
Facility Administrator



Sheri Webb
Local Privacy & Security Officer



Location – HSNRI

- Bell MPLS installation is used for connection to ICES Central Remote Access Environment (RAE)
- ICES North site employs newest technology
- 1000 square feet; work stations for 8 analysts/students; Local Lead Analyst/Site Director; Admin

How to access data/analytics at ICES

Through a collaboration with an ICES Scientist at any satellite site

- Access to the entire data repository and analytic staff
- ICES project—ICES PI responsible for the final product

Through ICES Data & Analytic Services

- Access to most data repositories (individual-level records)
- Analytic services
- Considered third party project
- REB governed

AHRQ

Knowledge Users, users of research evidence, include policy development staff, planners and decision makers from the Ontario Ministry of Health and Long-Term Care (MOHLTC). Other organizations with knowledge users include, but are not limited to:

- other government ministries
- Local Health Integration Networks (LHINs)
- hospitals (acute and rehabilitation)
- Community Care Access Centres
- provincial associations and agencies across Ontario (e.g., Ontario Brain Institute)

ICES McMaster

WAYS TO ACCESS ICES DATA

		ICES PROJECT			THIRD PARTY RESEARCH (NON-ICES PROJECT)
		Become an ICES Scientist*	Collaborate with a Full Status ICES Scientist	Become an ICES Student, Post-Doctoral Trainee, Fellow or Visiting Scholar*	Use Data & Analytic Services (DAS)
Data & Analytics	Data access	Access to **all** data holdings from the ICES data repository required to conduct research study, subject to permissions and approvals.			Access to subset of the ICES data repository, including all core and ICES-derived datasets.
	Responsibility For dataset creation & analysis	ICES analytic staff	ICES analytic staff	ICES analytic staff (dataset creation) ICES student, post-doctoral trainee, fellow or visiting scholar (data analysis)	DAS analytic staff (dataset creation) Any authorized research team member (data analysis)
	Location of analysis	ICES site only	ICES site only	ICES site or remote access	Remote access
Cost		Costs vary according to complexity and type of service request. For planning purposes, general guidelines are provided below: ▪ Basic project requiring dataset creation only (e.g. Master's thesis): $10K to $15K ▪ Standard project (e.g. uses only ICES core data sets): up to ~$30K ▪ Complex project (e.g. new data or methodology): up to ~$70K ▪ Other potential fees, if applicable: importation & linkage of external data§			▪ Dataset creation: $10K to $15K + One-time set-up fee: $200 + Per user account: $300 ▪ Cancer projects eligible for subsidy† ▪ Other potential fees, if applicable: importation & linkage of external data; analytic servicesP§
Pros		▪ Access to a broader set of ICES data holdings ▪ May supervise students ▪ Access to ICES community of researchers and data & methodology experts	▪ Access to a broader set of ICES data holdings ▪ Access to expert ICES analytic staff to conduct analyses	▪ Access to a broader set of ICES data holdings	▪ Available to any public sector researcher, trainee or knowledge user (ICES or non-ICES affiliated). ▪ Excellent for simple research objectives ▪ 24/7 access to dataset ▪ Analytic service requests from private sector accepted
Cons		▪ Cannot be directly funded by industry	▪ Cannot be directly funded by industry ▪ Analysis must be conducted by ICES analytic staff	▪ Cannot be directly funded by industry ▪ Limited on-site access hours ▪ Access to project dataset only (not raw data)	▪ Access to a subset of ICES data repository ▪ Dataset has less detail than what is available for ICES projects. ▪ REB approval is required.

* Subject to eligibility and application requirements, available at www.ices.on.ca/Research/Information-for-researchers.
† Subject to eligibility and application requirements, available at https://www.ices.on.ca/DAS/Public-Sector/cd-link
§ Costs vary according to complexity. Contact us for more information.

For more information: www.ices.on.ca
Contact: icesmcmasteradmin@ices.on.ca

- **Fully operating site**
- **Engagement of Clinicians/Faculty/Staff occurring through Project Development; often with northern health focus**
  - **OTN use, access to oncologist care, frailty, ED diagnostic algorithms, colorectal surgery outcomes**

Thank You

ICES North
c/o HSNRI
Northeast Cancer Centre, Level 3, Room 32020
41 Ramsey Lake Road
Sudbury, ON, P3E 5J1

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ICESNorthAdmin@ices.on.ca