THREE-YEAR STRATEGIC PLAN^{2017·18}-PLAN^{2019·20}



Data Discovery Better Health

About ICES

Population-based health research that makes a difference

Since its inception in 1992, the Institute for Clinical Evaluative Sciences (ICES) has led cutting-edge studies that evaluate health care delivery and outcomes. ICES researchers have access to 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 goes to great lengths to protect privacy and is recognized as an international leader in maintaining the privacy and security of health information.

World-class research teams

ICES is a community of research, data and clinical experts. Most ICES scientists are internationally recognized. A number of them are practicing clinicians who understand the everyday challenges of health care delivery. They lead multidisciplinary teams that include expert statisticians and epidemiologists, as well as specialists in knowledge translation and information security, privacy and technology. The diversity within these teams and their expertise at using ICES' linked data sets are the foundation of the innovative approach to research at ICES.

Impact

ICES research results in an evidence base that is published as atlases, investigative reports and peer-reviewed papers. Many ICES reports are undertaken to answer specific questions (known as Applied Health Research Questions) posed by health system stakeholders and policy-makers. ICES research and reports influence the development, implementation and evaluation of health policy and the delivery of health care. ICES studies and reports are highly regarded in Canada and abroad.

Independence

ICES is an independent not-for-profit corporation with an international reputation as a trusted, 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. ICES faculty and staff have highly successful track records competing for peer-reviewed grants from federal agencies, such as the Canadian Institutes of Health Research, and from provincial and international funding bodies.

A growing network across Ontario

ICES Central is located on the campus of Sunnybrook Health Sciences Centre in Toronto. It has physical satellite sites at Queen's University in Kingston (ICES Queen's), the University of Ottawa (ICES uOttawa), the University of Toronto (ICES UofT), Western University in London (ICES Western) and McMaster University in Hamilton (ICES McMaster). An additional satellite site is in development at the Health Sciences North Research Institute in Sudbury in partnership with Laurentian University and the Northern Ontario School of Medicine (ICES North).

Contents

About ICES]
Message from the President and CEO	
Mission, Vision and Values	Z
Research Impact	E
Data Leadership	6
Strategic Partnerships	- /
High Value Services	8
Public Engagement	C
Organizational Excellence	10
Measuring Our Success	11
A Growing Research Network	12



Message from the President and CEO



This report presents the ICES three-year strategic plan for 2017/18 to 2019/2020. The strategic planning and development process was guided by a focus on engagement with internal and external stakeholders, an environmental scan of similar research organizations in Canada and internationally, and a town hall meeting that brought together over 160 ICES scientists and staff. We carefully reflected on our growth and activities over the past three years, our success in achieving milestones in our previous strategic plan, and the current context in which ICES operates.

An important outcome of this exercise is that our new strategic plan reaffirms the ICES mission, vision and values. These will continue to provide direction to our activities and aspirations over the next three years.

A second key outcome of our plan is that ICES remains, first and foremost, a research institute focused on excellence and impact, guided by our research programs and research priorities. As we grow, we will need to ensure that new activities reinforce, and in no way detract from, ICES' core strengths. For example, by expanding our efforts to enable researchers outside ICES to access more data and analytic services, we will have greater research impact and enhance a highly regarded service for the broader research community.

Our plan is rooted in the external environment in which ICES exists today. In a time of constrained budgets in the public sector, any growth in our activities will be predicated on appropriate resources being available through increased efficiency and, where needed, new and more diversified funding. In a time of significant pressures to improve the guality and value of health services, ICES will enhance its key role of providing timely and relevant evidence to decision- and policy-makers through better alignment with the research priorities of our stakeholders, more effective knowledge translation and exchange, and strengthened partnerships to better leverage our capacity and that of other agencies and organizations. Given that ICES is often approached by scientists and provincial, national and international organizations regarding potential partnerships, our decisions about which data sources and partnerships to invest in will be based on the mission and strategy outlined in this document. Finally, in a time when we must ensure that our data stewardship reflects and respects the values of Ontario's patients and citizens, we will develop a new focused agenda on public engagement.

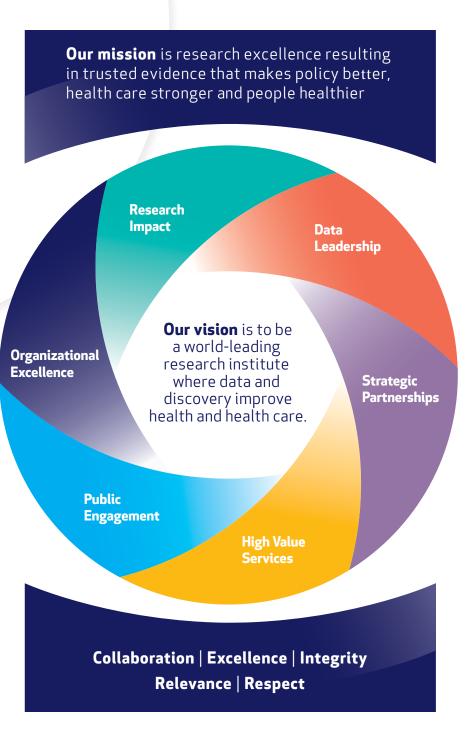
It is fitting that ICES is launching a new strategic plan in 2017, the year of our 25th anniversary, since it builds on our long tradition of research excellence while also ensuring growth in areas that will increase our impact and relevance for Ontario and the world.

Milael D

Michael Schull, MSc, MD, FRCPC

Mission, Vision and Values

This strategic plan is founded on our mission, vision and values. To fulfill our mission and make progress toward our long-term vision, we must focus on the activities and initiatives that will have the greatest impact on our success. Six success factors have been identified as key to achieving our vision for 2017/18 to 2019/20. These interrelated success factors provide the basis for our planned strategic initiatives.



Research Impact

ICES is, first and foremost, a research institute across six sites, including five university-based satellites. As we grow, we must strengthen our capacity for research in new priority areas while continuing to support existing areas of strength. New and enhanced knowledge translation and exchange activities will be developed to ensure that ICES research plans and findings are communicated effectively to organizations and individuals who are in a position to act upon them. The alignment between ICES' research activities and the needs and priorities of key stakeholders and funders will be assessed and refocused as required.

For ICES, this means:

- We will continue to be a leader in high-impact health research and discovery, investing in infrastructure to foster novel research, discovery and methodological innovation.
- We will ensure that our research priorities and programs are informed by and continue to align with the needs of our funders and stakeholders.
- We will expand our KTE activities to ensure that our research is targeted to the appropriate audiences to inform policy and decision-making and that there are appropriate mechanisms for knowledge exchange between knowledge users and our research community.

Ensure our research activities align with ICES' core mission, our defined research priorities and stakeholder needs

ACTIONS

Develop guiding principles to support current and future strategic decisions and investments

Consult with key partners and stakeholders to ensure better alignment of priorities

Complete the ICES university-based satellite network with the opening of ICES North

Create a knowledge translation and exchange (KTE) strategy

ACTIONS

Identify and categorize key partners based on their KTE requirements

Determine how existing KTE tools can be strengthened and identify new ways of communicating research findings to policy makers, researchers, and the public

Introduce strategies for support of integrated KTE activities in addition to end-of-grant dissemination

- **Q** Increase ICES' capacity to **conduct novel research**
- by investing in new and innovative areas

ACTIONS

Focus on our research priorities including:

- Indigenous health
- Social determinants of health and non-health data linkage
- Policy evaluation
- Health system evaluation and interjurisdictional comparison
- Data science

Identify and invest in strategies and policies that further enable ICES scientists to conduct novel research (e.g., electronic health data strategy, privacy policies)

Leverage collaborations with university-based academics to build capacity in new or novel areas of research (e.g., data science and social policy)

Data Leadership

Data is at the heart of our work and our research, and we continuously strive to have the best data holdings available for research, along with the right tools and resources to conduct rigorous analyses. ICES should continue to be a recognized leader in data stewardship, making investments that directly increase the quality and value of data holdings.

For ICES, this means:

- We will continue to strategically expand and enhance our data holdings and data partnerships in a targeted manner to enable research.
- We will continue to act as effective stewards of data by enhancing data quality and developing innovative access models and ensuring that appropriate privacy and security protocols are in place.
- We will ensure that our data infrastructure and resources support the ICES research program and health system priorities.

Develop and implement a more focused **data acquisition strategy** that helps determine how and when to acquire multi-sectoral and multi-jurisdictional data

ACTIONS

Execute a communications strategy and dialogue with existing data partners on how to maximize the value of ICES data holdings

Align our data acquisition strategy with our research priorities, including adding some non-traditional data sets

Develop costing models to support the integration and prioritization of new data holdings

Enhance the value of **ICES data**

ACTIONS

Develop a data acquisition framework informed by the current data prioritization criteria

Implement a team-based approach for enhancing new and existing data sets

Continue to implement the ICES data quality framework

6 Continually improve ICES' data and research infrastructure

ACTIONS

Create an engagement approach to consult ICES scientists to ensure that their needs are understood and reflected

Regularly assess whether ICES has the right tools, infrastructure and data access models to support the production of research and evidence, and improve these as required

Strategic Partnerships

ICES has many partners, including universities, data custodians, policy-makers and organizations involved in service delivery. These partnerships have always been a cornerstone of our operations. ICES will strive to establish new and strengthened partnerships that directly address the elements of the 2017/18-2019/20 strategic plan.

For ICES, this means:

- We will work in partnership with external organizations to achieve important outcomes that neither ICES nor the partner could have achieved on their own.
- We will continue to pursue cross-sectoral partnerships with both data providers and knowledge users at the local, national and international levels.
- We will ensure that our partnerships foster effective knowledge translation and exchange, minimize duplication, and leverage the capacity of ICES and our partners.

7 Improve ICES' approach to partnership management

ACTIONS

Strengthen the process and criteria by which ICES identifies, defines, prioritizes and evaluates partnerships to ensure they are mutually beneficial and deliver high value

Create mechanisms for engagement across departments to support partnership development and information sharing

Assign resources so that each of ICES' partnerships has a relationship owner or steward

Create a strategy to strengthen relationships with existing partners and funders, as well as similar organizations nationally and internationally

Explore complementary collaborations, particularly to gain experience with non-health data (e.g., with social scientists) and novel methods (e.g., partnerships related to computer science, genomics and data science)

Grow partnerships with Indigenous leadership organizations and communities through focused support

ACTIONS

Work jointly with Indigenous communities and leadership organizations to strengthen and target ICES' capacity to conduct Indigenous-focused research in keeping with our agreed governance structures

Continue to engage with Indigenous communities and organizations to develop an in-depth understanding of their attitudes and views toward the use of ICES data

High Value Services

Given our role as a data and research leader, ICES is constantly striving to maximize the potential of our data holdings, both internally and externally. This has led to a number of analytic and data service offerings, but demand is growing for new types of services based on ICES' expertise. Our goal is to have a well-defined and highly valued set of services that increase the impact of ICES' data holdings without negatively impacting our core functions as a research institute.

For ICES, this means:

- Building on the data access services provided through our Data and Analytic Services (DAS) unit, we will enhance data access in ways that are responsive to the needs of researchers, stakeholders and partners, and contribute to reducing duplication of data services across the system.
- We will produce trusted, timely and relevant research and evidence for health system policy-makers and other stakeholders.
- We will ensure that the services we offer bring value to ICES and its stakeholders by strengthening existing services and developing new and unique offerings.

9 Develop a more client-focused service delivery model for internal and external data users

ACTIONS

Conduct a needs assessment to gain an understanding of potential users and the types of services they would require

Be open and nimble to test and implement new service offerings

Use past successes and learnings to continue to develop our **services related to data**

ACTIONS

Assess and enhance our linked data for our clients through DAS

Reduce administrative barriers to service delivery

Continue to refine and strengthen analytic services in support of the Applied Health Research Question portfolio

Develop communications products to increase awareness of our services and capabilities

Public Engagement

With patient information being at the heart of our work, it is critical that ICES' data stewardship reflects the values of patients and the Ontario public more broadly. This includes establishing mechanisms to engage patients and the wider public in the design, delivery and dissemination of ICES research and activities. It also means that we will reflect the input of the public and patients in our research activities and service offerings.

For ICES, this means:

- We will seek input from patients and members of the public regarding how they want to be involved in ICES' work, and to learn their views on current and potential ICES research activities.
- We will develop and implement targeted mechanisms to engage patients and members of the public in the design, delivery and dissemination of ICES' research and activities.
- We will build the capacity of staff and scientists to engage with and involve patients and the public.
- We will develop communications products that build awareness and help non-scientists understand how ICES works with administrative and other data.

Develop an institutional public engagement strategy

ACTIONS

Conduct an environmental scan of best practices for patient and public engagement

Design and implement mechanisms to engage patients and the public in the design, delivery and dissemination of ICES research

Develop tools, training and supports (in partnership with other organizations as appropriate) for ICES staff and scientists to engage patients and the public in their work

2 Develop communications products that directly address public and patient needs and concerns

ACTIONS

Develop an in-depth understanding of the attitudes and views of the public and patients about the work ICES does, including tailored and separate engagement with Indigenous populations, high-needs users and other special populations

Create a clear plain language story of what ICES is, what we do and how we work with health system partners and knowledge users

Organizational Excellence

We recognize that our people are our strength. ICES staff and scientists are passionate about conducting and supporting research that makes a difference. Effective engagement of the ICES community is essential to our success. We must also invest in our teams, staff and scientists at all levels, and ensure that our policies, processes and funding constitute a robust foundation upon which they can make their best contributions.

For ICES, this means:

- We will empower our people to ensure that they have the skills and expertise to do outstanding work and champion our mission, vision and values.
- We will be an organization where people want to work and build their careers so that we can recruit and retain highly qualified staff.
- We will continue to maintain financial growth and stability of the organization through a commitment to efficient operations, partnerships with new funders, and smart investments that are focused on value, results and outcomes.
- We will continuously improve our policies, processes and procedures to support organizational success both internally and for external stakeholders.

13 Identify and secure **new funding partners** for priority areas

ACTIONS

Focus on multi-year funding engagements and agreements Identify potential partners from multiple sectors Develop and implement a staff and scientist engagement strategy that enhances communication, openness and transparency

ACTIONS

Identify best practices for staff and scientist engagement and organizational development

Continue the staff satisfaction survey and any working groups as needed

Ensure proper investments in staff training and development opportunities

15 Make smart internal investments to support operational success and long-term value

ACTIONS

Continue to implement and improve the research quality framework

Make strategic investments in information technology and information management

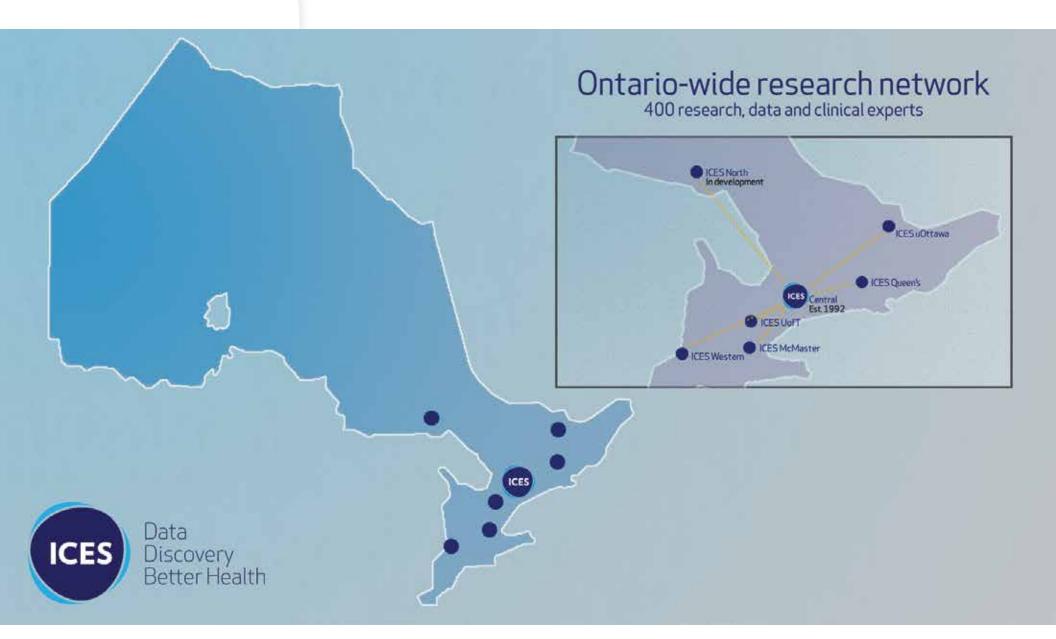
Continuously focus on internal quality improvement for operations, policies and procedures

Measuring Our Success

We will be accountable for the work we undertake. Through regular monitoring, measurement and reporting, we will be transparent about our progress toward implementing each strategic initiative in this plan, using the following measures to track our progress against the objectives and activities set out:

Success Factors	Measures of Success	
Research Impact	 Evidence/exemplars of impact, including number and nature of impact stories for ICES research Increased number of collaborations (e.g., with non-ICES scientists or organizations from other sectors) Increased number of integrated knowledge translation and exchange activities and partnerships Completion of ICES satellite network with opening of ICES North 	
Data Leadership	 Increased number of novel and non-health data sets (e.g., electronic medical records, genomics and other "omics" data, and community-based mental health and addictions data) Increased number of studies using multi-sectoral and multi-jurisdictional data 	
Strategic Partnerships	 Number of tangible outcomes produced through partnerships (e.g., new data made accessible, new technology being utilized, new knowledge user receiving evidence from ICES, new data shared and used in a study) Measures of partner engagement, satisfaction and impact as indicated through a survey of partners, including qualitative inputs about benefits achieved 	
High Value Services	 User/client satisfaction on key service elements, such as timeliness, data access and quality New metrics for service quality (e.g., turnaround time) 	
Public Engagement	 Public engagement mechanisms and processes established Number of public engagement activities Impact stories that illustrate how patient or public engagement has influenced ICES research and services 	
Organizational Excellence	 Strong staff and scientist satisfaction and engagement as measured by the ICES staff satisfaction survey and by staff and scientist engagement in activities such as methods guide development, concept dictionary development, leading rounds, workshops, and policy improvement Stable financial outlook with an adequate reserve maintained, and with multi-year funding agreements in place An increase in total annual funding with greater diversification (i.e., the proportion of total funding from the Ministry of Health and Long-Term Care versus other sources) 	

A Growing Research Network



Institute for Clinical Evaluative Sciences **www.ices.on.ca**