What is Academic Healthcare?
Research in Canada’s Patient Care Organizations

HealthCareCAN
Canada’s policy makers, members of Parliament and journalists are important members of the health and health research team in Canada. What you do results in the conditions that healthcare organizations, clinicians, scientists, healthcare workers, patients and the public experience in which to generate and use research and innovation. As such, we have prepared a brief primer to introduce you to research in the patient care organizations that are members of HealthCareCAN.

Canada’s Academic Healthcare Organizations and their partner patient care organizations that have membership in HealthCareCAN are a national resource. Their specialized role and interest in patient care, research and innovation ensures that health research breakthroughs lead directly to benefits for patients, health systems and populations. The high-quality research and training conducted within these institutions allows the standard of patient care to be at the forefront of best practices in Canada.

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Regional and provincial bodies and patient-care organizations
What is an Academic Healthcare Organization?

Academic healthcare organizations are patient care organizations with a publicly stated tripartite mandate of care, training and research. There are close to 40 such organizations in Canada.

- They include research hospitals, health authorities, academic regional health authorities, and their research institutes. They may be single or multi-site corporations.

- They can also be specialized by segment of the population, by disease area, by phase of care, and/or contain a general and far-reaching patient care mandate.

- While they are under provincial jurisdiction, academic healthcare organizations are considered national resources because of the roles that they play in highly specialized care, research, innovation, and commercialization.

- The significant research and innovation function of an academic healthcare organization affects its structure, function, governance, culture, and performance.

- When considered in the context of the university-healthcare partnership, they are referred to as academic health sciences centres, and more recently, academic health sciences networks.

- Each academic healthcare organization is necessarily affiliated with at least the Faculty of Medicine, but often many other faculties as well.

HealthCareCAN is currently developing a set of formal credentialing indicators for academic healthcare organizations. Indicators will be available for consultation in the fall and finalized in the winter of 2016.
Why are Academic Healthcare Organizations important to other parts of the Health System?

- Academic centres help smaller patient care organizations meet the needs of patients with highly complex, rare, or difficult conditions. They serve as transfer and/or regional centres, allowing smaller centres to alleviate patient flow issues and serve other members of the community.

- Academic centres also partner with industry and the university sector to serve as receptor sites for the earliest stage of research. They provide safe and controlled settings for clinical trials and testing of devices. For more information on clinical trials at Canada’s Academic Healthcare Organizations, please visit: www.healthcarecan.ca/clinicaltrials.

- Canada’s Academic Healthcare Organizations have partnered with Canada’s health charities to enjoy and foster further success in health research to the benefit of Canadians. Through this partnership, health charities and academic healthcare organizations have achieved thousands of successful partnerships in health research and applied innovation. Please visit www.healthcarecan.ca/caringforeverybody.

- Academic centres partner with Facilities of Health Sciences and Medicine to form Academic Health Science Centres where the integration of patient care, training and research allows for best practices and the training of specialists who can in turn take their skills and expertise to other parts of the system. Please visit www.ahsn.ca.
Canada’s Academic Healthcare Organizations by the Numbers*

Canada’s Academic Healthcare Organizations

- Publish more than 11,000 peer-reviewed articles/year
- Create hundreds of spin off companies and world firsts (lists available)
- Provide 99% of the care for the top 13 most rare and/or complex conditions
- Produce 1000s of patents, disclosures & licenses
- Generate millions of dollars in technology transfer revenues & licensing income
- Were awarded over $250 million in CIHR funding in 2014/15
- Are the primary affiliation for 1000s of scientists
- Are recognized as one of the top innovation performer groups in Canada
- Provide 99% of the care for the top 13 most rare and/or complex conditions
- Are the primary affiliation for 1000s of scientists
- Generate millions of dollars in technology transfer revenues & licensing income
- Were awarded over $250 million in CIHR funding in 2014/15

Their Stats

- Enjoy the support of more than 45,000 volunteers
- Employ more than 650,000 Canadians
- Train more than 55,000 health providers/year
- Admitted over 1.4 million patients in over 60,000 beds
- Had more than 6 million visits to their emergency departments
- Receive over 12 million outpatient visits/year

Their Budgets

- Total annual operating budgets: $45 Billion+
- Total research budgets: $2.6 billion

* based on various data sets from 2008-2015
Why are Canada’s Academic Healthcare Organizations important to the public?

Canada’s Academic Healthcare Organizations are responsible for the generation and introduction of research and innovation in Canada’s health system. Two recent surveys tell us about the importance of this mandate to the public.

Health Care in Canada Survey 2013-14

Canadians were asked who they believe has primary responsibility for introducing research and innovation into the healthcare system. Results are as follows.

- The top two groups were: (1) the federal government, and (2) the country’s research hospitals, academic regional health authorities, and their research institutes. The results are consistent when the same questions are asked to doctors, nurses, pharmacists and administrators.

- Canadians, doctors, nurses, pharmacists and administrators were asked whether they agree with a series of statements concerning investments in health research and innovation. The results are indicated below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Cdns.</th>
<th>Doctors</th>
<th>Nurses</th>
<th>Pharm.</th>
<th>Admin.</th>
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<td>More government incentives to encourage the adoption and use of innovations in health care</td>
<td>78%</td>
<td>77%</td>
<td>74%</td>
<td>80%</td>
<td>83%</td>
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<td>More government incentives to encourage more private sector investment in health research</td>
<td>70%</td>
<td>91%</td>
<td>91%</td>
<td>78%</td>
<td>91%</td>
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<td>Increased federal and provincial government funding for health research to support innovation</td>
<td>78%</td>
<td>90%</td>
<td>93%</td>
<td>86%</td>
<td>92%</td>
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<td>Increased investments in technologies to support patients in managing their chronic illness</td>
<td>80%</td>
<td>90%</td>
<td>93%</td>
<td>86%</td>
<td>92%</td>
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<tr>
<td>Increased investments in education to support patients managing their chronic illness</td>
<td>77%</td>
<td>87%</td>
<td>94%</td>
<td>93%</td>
<td>96%</td>
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1. Developed by POLLARA Research, in consultation with HealthCareCAN, the Canadian Home Care Association, the Canadian Medical Association, the Canadian Nurses Association, the Health Charities Coalition of Canada, Université de Montréal, Merck Frosst Canada Ltd., and Rogers Media. Results based on telephone interviews with samples of 1,223 members of the Canadian public, 202 doctors, 201 nurses, 202 pharmacists and 201 health managers.
A survey commissioned by Research Canada, HealthCareCAN and others also asked Canadians about the importance of research. The survey says:

- **90%** of Canadians feel that health research is part of an evidence based health system.
- **84%** of Canadians are more likely to vote for a candidate that supports health research.
- **71%** of Canadians feel that health research should receive the same tax treatment as patient care.
- **92%** of Canadians say basic research should be supported by the federal government.
- **85%** of Canadians made at least one change to their health behaviours as a consequence of health research.
- **70%** of Canadians express interest in participating in health research, but only 31% feel they are aware of research being conducted at hospitals/universities.

2. Commissioned by Research Canada, in collaboration with HealthCareCAN, the Association of Faculties of Medicine of Canada, the Health Charities Coalition of Canada, Rx&D, the Saskatchewan Health Research Foundation, and the Michael Smith Foundation for Health Research. Online survey sample included more than 1,000 Canadians and was conducted by Vision Critical from January 29, 2015 to February 2, 2015.
Health research is dedicated to improving the well-being of Canadians. Canada’s leading healthcare organizations – our research hospitals, academic provincial and regional health authorities and their research institutes – are a national resource whose unique role in the health system advances research and innovation and solves health challenges of the future.

Their successes are reported in mainstream print media sources every day in stories containing information to help improve our health, modernize the health system, show public support for health research, introduce new treatments, and address public health issues.

Offering you a one-stop shop for this information, HealthCareCAN’s Innovation Sensation database:

- Contains over 7000 news stories
- Utilizes more than 800 print media sources
- Features 40+ of Canada’s leading healthcare organizations
- Encompasses over 3 years of media stories

Popular health impact topics found in the database:

- 800 stories on cancer
- 350 stories on mental health
- 300 stories on heart disease
- 300 stories on respiratory health
- 300 stories on child & maternal health
- 200 stories on strokes
- 200 stories on diabetes
- 150 stories on Alzheimer’s
- 100 stories on Aboriginal health

For more information:
www.healthcarecan.ca/innovation-sensation
innovationsensation@healthcarecan.ca
What are some winning conditions for Academic Healthcare Organizations in Canada?

1. **Strategic coordination for the health and life sciences**
   - Better coordinate the range of funders and stakeholders within the health and research ecosystem, including academic healthcare, provincial funding bodies, charities, industry, government, and others.
   - Coordinate across federal granting councils to bridge capital and operating costs and ensure the accommodation of interdisciplinary endeavors (like health technology development).
   - Assess the implications of new funding models (such as the trend towards matching funds for grant applications) and the expiry of various National Centres of Excellence (such as the Stem Cell Network).
   - Support reinvigoration of the Clinical Trials landscape through the Canadian Clinical Trials Coordinating Centre.
   - Ensure sufficient coordination and funding between academic and industry-led trials.
   - Establishment of a Canadian Health Innovation Network/Consortium and resources to help get research and innovation into practice

2. **Strategic investment in the health research and innovation ecosystem**
   - Ensure that the federal granting councils have sufficient budgets to retain promising individuals and ideas, and manifest their full potential to Canada’s advantage.
     Modernize the CIHR budget to reflect the original 1% of health spending solution per Henry Friesen. By repatriating the full CIHR budget to open grants programs and creating a Health Innovation Fund.
   - Ensure that the Building Canada Research Excellence Fund, the Building Canada Infrastructure Fund, and Canada’s S&T update adequately reflect the inclusion of academic healthcare organizations.
• Increase the Federal Indirect Costs program to cover the full costs of research and compete with similar programs internationally.

• Maintain and enhance successful commercialization programs like the Proof-of-Principle-Program and Strategy for Patient Oriented Research without compromising the open grants program.

• Increase the GST rebate on all eligible purchases made by publicly funded, not-for-profit institutions in the health sector to 100% (like municipalities).

3. **Strategic policy to better align health, science and technology**

• Create a federal policy space for the recognition and leveraging of academic healthcare organizations and academic health sciences centres/networks, nationally to the benefit of all Canadians.

• Explore a credentialing system that ties additional infrastructure funding to performance accountability for the relevant roles and responsibilities in academic healthcare.

• Provide tax and intellectual property incentives for companies and individuals who wish to invest in technologies developed within academic healthcare organizations.

• Explore the applicability of the Small Business Innovation Research Program and the Small Business Technology Transfer Program that have proven successful in the United States.

• Align organizational, provincial and federal procurement policies to support Canadian jobs, products, and companies while meeting safety and patient care needs.

• Attract venture capital by facilitating market entry for Canadian health innovations.

• Offer the same tax treatment to all research dedicated to improving the health of Canadians as the sector itself.
In addition to helping achieve the winning conditions for science and technology in Canada, policy makers can help introduce novel policies that leverage the capacity of Canada’s leading academic centres.

The national and federal policy framework does not currently recognize the national role of Canada’s Academic Healthcare Organizations. Below are five novel policy motions proposed by the Vice Presidents of Health Research from across the country’s academic healthcare organizations.

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<th>Proposed Motion</th>
<th>Proposed Rationale</th>
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<td>Resolved, that the Federal Government assign a fixed percentage of public healthcare spending to publicly funded health research and innovation.</td>
<td>Research is the lifeblood of an evidence-informed healthcare system. Evidence informed care is an ethical imperative for many healthcare practitioners, organizations, and administrators. It is required to provide safe, effective, and leading edge care for patients suffering from injury, disease, or disability. Despite this, the health sector does not have a dedicated and predictable budget for health research and innovation. In an environment where total spending exceeds $180B and where 40% of provincial budgets are dedicated to healthcare, this is problematic. Is it time for Canada to be more deliberate and purposeful in our quest to eliminate disease, alleviate the impacts of disability and improve quality of life and health of populations? We would welcome a debate on whether a fixed percentage of healthcare spending should be dedicated to health research and innovation.</td>
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<td>Resolved, that a national coordinating table be struck to guide research policy decisions for the health and life sciences.</td>
<td>There are many important stakeholders involved in the health and life sciences research and innovation ecosystem. These stakeholders include different levels and types of government, the private sector, healthcare organizations, universities, charities, colleges, and granting councils responsible for research operations, research capital, and the domains of health, the humanities and social sciences, and the natural sciences and engineering. Decisions taken in one part of the health research and innovation ecosystem can have an unintended and unexpected impact on another part of the system. Capital investments are not maximized unless maintenance and operating dollars are linked. The ability to produce important technology and social innovations will not occur unless granting councils responsible for each of these areas are able to coordinate. Reforms intended to modernize the research ecosystem, will not be well-monitored unless we can take an enterprise wide pulse of research in the health and life sciences.</td>
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<td><strong>Resolved, that healthcare organizations providing significant research infrastructure be formally recognized by the Federal Government as a national resource.</strong></td>
<td>Canada has approximately 40 academic healthcare organizations with a publicly stated tripartite mandate of patient care, training, and research (ACAHO, 2013). These organizations serve the rest of the country in many ways. Nationally, they provide research infrastructure that allows for the generation, introduction, training and spread of new and novel procedures in a safe, ethical, and effective manners. They are sought after globally to assist other countries in building health systems on both a knowledge economy and humanitarian basis. Provincially, they often provide rare and complex care, serve as transfer locations when care cannot be delivered safely at other sites. They often have a higher proportion of more complex patients and higher proportion of patients with “flagged” (most costly conditions). The research mandate within a healthcare organization creates different requisites for structure, function, and performance (French et al, 2014). At the same time however, the cost structure and patient care mix at these sites has been shown to differ from sites of similar size but without the academic mandate (Hay Group, 2009; GTA Rehab Network, 2006). As a result, these organizations have implicit national, and often international, functions. Canada currently has no mechanism for formally recognizing organizations with this role, or facilitating transfer of knowledge created therein to non-academic healthcare providers. Should Canada pursue this?</td>
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<td><strong>Resolved, that research conducted in patient care settings receive the same tax treatment as patient care itself.</strong></td>
<td>Effective tax policy supports already established health, research &amp; innovation policies at the federal level. It cuts administrative red tape and aligns fiscal policy with science and technology policies. Currently tax rebates differ according to whether an expense is considered research or patient care. In many cases, research is part of the care modality and not be differentiated. Standardizing the range of rebates to 100% increases overall efficiency and administration at the local level, increases fairness across Canada, and avoids penalizing institutions investing in research and innovation. The additional funds could accelerate further innovation and commercialization, bending the cost curve for healthcare, and transforming the delivery of care to Canadians.</td>
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Resolved, that Provincial and Federal Governments formally recognize the costs healthcare organizations pay to support the indirect costs of health research and salaries for researchers funded by agencies as partnerships and provided with tax incentives.

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<td>Each year, researchers apply for and receive grants from provincial and federal agencies to help cover important endeavours in health research. The problem is these grants will cover the research itself, but not the full costs of the research. For example, there are salaries to be paid, access to patient care units, ethics review operations, office and lab space, legal fees, staffing costs, library services, and an overarching infrastructure that allows for quality research to be conducted. If the grants are not covering these costs, who is? Healthcare organizations are often left to find unique and innovative ways to fund the full costs of health research. They may work with foundations or engage in revenue generating initiatives in the lobbies of their healthcare organizations. While Canada does have an Indirect Costs program, this program covers only small percentage of indirect costs and is set at rates that are much lower than those in comparator countries. We would like to encourage a debate on whether Federal and provincial governments should provide these organizations with tax incentives.</td>
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