



# HealthCareCAN Submission to the Advisory Panel on the Federal Research Support System

November 2022

# INTRODUCTION

HealthCareCAN, the national voice of health research institutes, hospitals, and healthcare organizations across Canada, welcomes the opportunity to submit this brief to the Advisory Panel on the Federal Research Support System in follow up to our meeting with the Advisory Panel on October 21, 2022.

This submission provides a high-level overview of the specific actions that HealthCareCAN believes are needed to strengthen the federal research support system and position researchers and Canada for future success.

Our opening remarks, as presented in the meeting on October 21, 2022, are included in Appendix A.

# RECOMMENDATIONS

## Develop a long-term vision and strategy for research in Canada

In March 2021, the Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry, noted that “[g]reat science and research is the first step in driving innovation. Now more than ever, Canadians are looking to their researchers to develop innovative solutions to real-world problems.” Canada needs a long-term vision and strategy for research that reflects this ambition and takes us from a country that is lagging to one that is a global leader.

The Advisory Panel’s work is a chance to start to articulate a long-term, ambitious vision for research in Canada, one that will enable us to support our exceptional home-grown talent and allow us to compete with our global peers for top talent and investment.

Canada is starting from a strong position: Canadian health research institutes and universities are highly ranked internationally, our population is well-educated, and the research workforce is highly skilled, knowledgeable, and enterprising. Canada punches above its weight in research, but our global peers are redoubling their commitment to research having clearly outlined their objectives and corresponding funding to achieve them. If Canada wants to remain competitive and become a world leader in this space while simultaneously furthering its transition towards a knowledge-based economy, we must do the same.

### Opportunities for action:

- Establish a partner table that is representative of Canada’s research community (public sector, private sector, not-for-profit sector, academia, etc.) to provide oversight and foster coordination of research in Canada, through a new advisory body as recommended in the final report of the Advisory Panel on Federal Support for Fundamental Science with the creation of the National Advisory Council on Research and Innovation (NACRI).
- Define a clear vision and strategy for research in Canada. As leaders in this area, representing the full spectrum of science, from basic research to innovation and commercialization, Canada’s Vice Presidents of Health Research would be ideally positioned to serve on a partner table and inform a long-term vision and strategy for Canada’s research support system.

## **Establish a more coordinated, cohesive, and complementary federal research support system with enhanced accountability and governance**

Canada's federal research support system is complex and difficult to navigate. Funding exists across various institutes and government departments, and they do not effectively coordinate research programs and opportunities, both within their own institution/department or across the federal research support system. This reduces the impact of Canadian scientific priorities and research dollars.

The research support system is not set up to best support Canadian researchers and their work. Application processes and deadlines often place additional burden and stress on researchers at all career levels. Increasingly more frequent competitions, shorter submission timelines, and decreasing success rates are not conducive to researchers applying broadly for and securing funding, nor does it position Canada as an attractive country in which to conduct research with the next generation of researchers.

With strategic science, Canada has taken a fragmented and continuously evolving approach that has not been very effective. With initiatives existing within the Tri-Council and outside of it through various programs, such as the Canada First Research Excellence Fund (CFREF), New Frontiers in Research Fund (NFRF), Canada Excellence Research Chairs (CERC), Strategic Science Fund (SSF), Strategic Innovation Fund (SIF), and Networks of Centres of Excellence (NCE) program, accountability and governance is scattered, with no clear line of sight on the impact and success of these various initiatives and programs.

### **Opportunities for action:**

- In the short term, better distribute existing funding, moving away from strategic pots of funding towards the main operating grant competitions. However, an increase in funding, especially for fundamental, investigator-led research, will be necessary soon to truly address current challenges and ensure the competitiveness of Canada's health research system now and into the future, including for the Tri-Council and for the Research Support Fund to support a greater proportion of the full costs of health research, including salaries for researchers and the costs of operating a lab.
- Allow for more flexibility in terms of what funding can be used for as is done by the Natural Sciences and Engineering Research Council (NSERC).
- Provide greater support to trainees, post-doctoral fellows, and early-career investigators.
- Ensure Canada's continued competitiveness by recruiting and retaining, including by offering competitive salaries and opportunities, outstanding scientists in Canada.
- Consider reinstating the role of the Minister of Science to help focus the federal government's approach to science and infuse better governance and accountability (in one place/role) for research at the federal level.

## **Ensure all organizations conducting research, including health research institutes, have direct and equal access to all funding opportunities**

In recent years, new federal innovation and infrastructure programs have established criteria that preclude research institutes and healthcare organizations from applying for funding. As an example, while research hospitals can apply directly to Canadian Institutes of Health Research (CIHR), they must go through their affiliated universities when applying to most other federal research and innovation agencies and programs such as the Canada Foundation for Innovation (CFI), the Research Support Fund, the Canada Research Chairs, Mitacs, and others. More recently, the federal government's Innovation Superclusters Initiative and the Strategic Innovation Fund (SIF) – except for Stream 4 – are all industry-led initiatives.

While many research institutes have good relationships with their affiliated universities, this process places health research institutes at a disadvantage since the university, which has its own research priorities, ultimately decides which projects to put forward for consideration. This model reflects a misunderstanding of our sector and the health research ecosystem in Canada. Research institutes' applications to federal innovation programs should not be gated by the priorities of universities.

It also places research institutes at a disadvantage compared to industry which has direct access to these funding opportunities. Consequently, promising research does not move forward, and there are fewer opportunities for research conducted at research institutes to be translated into practice and commercialized.

### **Opportunity for action:**

- Ensure funding reaches the health sector by providing healthcare organizations, such as research institutes, hospitals, health authorities and long-term care facilities, with direct and equal access to federal funding programs.

## **Champion more diversity in research, including in rural, remote, and Indigenous communities**

Canada's research support system must better assist emerging health research institutes to promote rural, remote, and Indigenous participation in health research. This will support greater diversity among researchers and research questions. Achieving this primarily requires enhanced infrastructure outside of major centres and the recruitment of clinician-scientist roles in community organizations.

### **Opportunities for action:**

- Reserve a portion of funding for emerging research institutes to support the growth of research institutes in rural, remote, and Indigenous communities and research endeavours of researchers working in rural and remote settings and First Nations, Inuit, and Métis researchers.
- Develop funding programs specifically targeted to emerging research institutes, research being conducted in rural and remote communities, and research being conducted by First Nations, Inuit, and Métis researchers.

## **Establish pan-Canadian information technology infrastructure to support the pursuit of science across institutions and jurisdictions**

Connections and networks among Canada's health researchers are well-established, but researchers lack the tools to effectively communicate and share data and information across

Institutional and jurisdictional divides. This is true in all areas of health research and innovation and especially acute when it comes to clinical trials.

A pan-Canadian health data strategy that allows for interoperability between institutions, jurisdictions and governments will enrich the quality and availability of health data and research, foster the partnerships and collaboration needed to drive innovation that will address Canada's most pressing health challenges, and make Canada a more attractive place to conduct research.

### **Opportunities for action:**

- Implement a pan-Canadian health data strategy for health research, including to support improved coordination of research projects and clinical trials across the country.
- Create a pan-Canadian health research data repository to centralize health research data from across Canada and facilitate health research and innovation across institutions and jurisdictions.

## **Reimagine infrastructure funding programs to foster innovation, partnerships, and improved patient outcomes**

The strength of health research institutes lies in their ability to foster networks and relationships between researchers, academia, industry, innovators, start-ups, clinicians, and patients. The federal government must recognize research hospitals and healthcare organizations role as powerful innovation hubs within healthcare and the health research and life sciences sector. They sit at the centre of the health research and life sciences ecosystem, where pressing healthcare needs and the innovations to address these needs converge.

The federal research support system, including funding targeted toward infrastructure, must be reimaged to align with the needs of today's research ecosystem, including the critical need for physical lab space in Canada, and the way that health research is conducted in the 21<sup>st</sup> century, notably in research institutes embedded within the health system. Similarly, it must expand beyond covering initial purchase and set up costs, and cover maintenance and updates.

### **Opportunities for action:**

- Investment to build or renovate buildings to create much needed lab and incubator space that attracts and brings together researchers, universities and colleges, industry, innovators, and non-profit organizations. New lab space must be located at research hospitals as this is where health research is taking place, where new ideas are being conceived, and where end users – patients, caregivers, and clinicians – are located.

- Reinststate the Research Hospital Fund so health research institutes can build much-needed laboratory space on a long-term, sustainable basis.
- Expand Canadian Foundation for Innovation (CFI) to include long-term, sustainable funding to support equipment maintenance and updates.

## **Create a policy and regulatory environment that promotes partnership**

In recent years, new federal innovation and infrastructure programs have established criteria that restricts the formation of partnerships by identifying who are eligible partners. Often, research hospitals and healthcare organizations are not included as potential partners, despite the significant role research hospitals play in innovation.

Additionally, many federal and Tri-Council funding programs have restrictive stipulations that hinder partnerships. For example, there is the “Canada first” funding principle that only funds research that is conducted in Canada and stays in Canada. Similarly, Tri-council funding program criteria stipulate that grants are awarded to the researcher’s institution and not directly to the researcher, so unless researchers in community healthcare organization or emerging research institutes are affiliated with a university or have a university appointment, they cannot access funding despite the important community-based research they conduct.

Improving researchers’ ability to collaborate with domestic and international partners will foster important research partnerships that will result in significant benefits for Canada’s research ecosystem, health system, and economy, as well as the health of people across Canada.

### **Opportunity for action:**

- Make the criteria for federal and Tri-Council funding programs less restrictive and more flexible to foster partnerships between public, private, not-for-profit, and academic organizations, domestically and internationally. This will enable health research institutes and healthcare organizations that are deeply connected to their communities to work with various partners on health research and innovation that directly impact patients and health outcomes.

## **Make translation of health research into practice a priority of Canada’s federal research support system**

Canada needs to do a better job of translating health research into practice and leveraging research discoveries to solve urgent societal issues. CIHR funding does not support translation to the level that funding received through Innovation, Science and Economic Development (ISED) does. For example, the Alliance Grants administered by NSERC through ISED is a funding program that supports translation. As well, federal innovation programs such as the Strategic Innovation Fund (SIF) and the Strategic Science Fund do not have a dedicated line item for knowledge translation.

### **Opportunity for action:**

- Establish a branch within the federal research system to facilitate health research knowledge translation. Through dedicated funding, it would be responsible for setting the standards by which health research would move into practice to increase uptake of best practices and improve health outcomes.
- Enhance funding supports for clinician scientists as the next generation of health researchers while recognizing their distinction from university training programs and valuing their unique positioning and ability to connect research and discovery to patients and community care.
- Implement a robust mechanism for recruitment and retention to enhance Canada's ability to compete for top talent. The Canada Research Chairs (CRC) Program and the Canada Excellence Research Chairs (CERC) Program provide excellent examples but are constrained by level of funding.

## **About HealthCareCAN**

HealthCareCAN is the national voice of health research institutes, hospitals, and healthcare organizations across Canada. Our members are part of the more than 1,200 healthcare facilities that support over two million direct and indirect jobs, account for nearly 12% of Canada's GDP, and stimulate local economies through research and development, commercialization of discoveries, and infrastructure projects. HealthCareCAN membership is diverse and made up of a variety of organizations, including research institutes, hospitals, long-term care and home care providers, health authorities and health sector associations. These organizations are crucial in furthering our understanding of diseases, developing treatment solutions for patients, delivering high-quality care, and contributing to addressing the most pressing issues facing Canada.

## **Contact**

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## Appendix A

### Opening remarks delivered by Paul-Émile Cloutier, President and CEO of HealthCareCAN at October 21, 2022 meeting with Advisory Panel

Chair, panel members, thank you for the opportunity to meet with you today to discuss the important work you have been tasked with: advising the federal government on modernizing the federal system supporting research.

My name is Paul-Émile Cloutier, and I am the president and CEO of HealthCareCAN, the national voice for health research institutes, hospitals, and healthcare organizations across Canada. I am joined today by some of our member vice-presidents of research:

**Dr. David Hill**, Integrated Vice President, Research & Scientific Director, Lawson Health Research Institute, St. Joseph's Health Care & London Health Sciences Centre and a HealthCareCAN Board member and a co-chair of our Vice Presidents of Health Research Committee.

**Dr. Michael Czubryt**, Executive Director, Research, St. Boniface Hospital

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In preparation for this meeting, we convened our Vice Presidents of Health Research Committee to discuss the message we should bring to this panel today. Three key threads emerged from our discussion: Opportunity. Ambition. Urgency.

Canada is home to top research institutes and research talent, and punches above its weight; however, we have yet to realize the true potential of Canada's research sector, primarily due to the limited investment in research in the last decades as well as the lack of strategic thinking about the future of health research in Canada.

Funding issues – both in terms of the level of funding and the way federal bodies and programs administer funding – are at the foundation of the many challenges our sector is facing because difficulty accessing funding deeply affects the whole research ecosystem. If researchers cannot access funding to conduct promising research, to cover the full costs of research, to pay competitive salaries of laboratory staff and trainees that make research possible, or to purchase and maintain equipment, then talented researchers will leave Canada or will choose not to enter the field. Consequently, there are fewer opportunities for students, trainees, post-doctoral fellows, and early career researchers to gain experience and sharpen their skills. This in turn impacts Canada's talent pipeline and future research endeavours.

Furthermore, we cannot commercialize what we do not create. When researchers leave to pursue their work in another country, Canada loses out on the innovative and economic benefits of their research.

The issue that the panel will be dealing with concerns machinery of government, and I do not profess to be an expert in this area. However, this review of the federal research support system provides an opportunity to address the structural challenges that impede access to funding, and to make changes to the existing framework that will maximize the impact of Canadian scientific priorities and research dollars. It is an opportunity to break down barriers between the public sector, the private sector, and academia that make it difficult to foster partnerships and innovate together. It is an opportunity to strengthen the structures that already exist, such as the Tri-Council, and infuse greater accountability, collaboration, and governance into the federal research support system.

But simply restructuring the federal support system will not be enough. Canada must be ambitious and meet the moment. Countries around the world are drastically expanding their commitment to research, recognizing that it will be central to the knowledge-based economy of today and tomorrow. Canada needs to do the same. This involves boosting our level of investment and establishing long-term, sustainable funding, but also being more strategic in our pursuit of science, including creating a more cohesive, complementary, and coordinated federal support system for research. Canada has taken a fragmented and continuously evolving approach to strategic research that has not always been effective. Canada should have a harmonized approach to support strategic science in ways that can address essential societal issues, engage and support industry-led research and create research structures that maximize the impact of Canadian scientific priorities. More effective governance and accountability is needed in tandem with an effort to better leverage investigator-initiated discovery research. While this panel has a short timeline in which to complete its work, your work is a chance to start to articulate a longer-term, ambitious vision for research in Canada.

Finally, I would like to focus in on health research to illustrate the urgency with which we need to act. As I noted, our global peers are significantly restructuring and strengthening their health research support systems to better position themselves for the future and to compete internationally for talent and investment. To date, Canada has not done the same.

While the US and UK have clearly outlined their desired goals and consequently enhanced investments in health research in the last few years, Canada in its most recent budget did not provide an annual increase to CIHR's budget. This is especially concerning since insufficient funding is directed to investigator-led research in Canada, affecting our ability to compete with our international peers. Even in strategic priority areas identified by the federal government and where funding commitments have been made, Canadian investment lags our peer countries. If Canada does not act soon, we will fall even further behind.

It is vital that the federal support system for research aligns with the needs of the research ecosystem of today, and Canada's goals and ambitions for the future. We are not proposing a revolution but rather evolution. We need to simplify our scientific structures to focus on investigator-led research and strategic science. We are hopeful that this panel is starting Canada down this path, and HealthCareCAN looks forward to helping you shape the journey ahead.