Submission to Finance Canada

Consultation in advance of the 2022 Federal Budget

February 23, 2022

HealthCareCAN
Leading. Innovation. Together.

Recommendations:

Foster better integration between healthcare and health research and tap into the full innovative and economic potential of the sector.

1. Recognize academic health sciences centres as independent, stand-alone entities and drivers of economic growth and allow them to compete directly and on equal footing with other sectors for federal funding.

2. Make transformational investments in health research to protect Canadians from future health crises and capitalize on economic opportunities, starting with a minimum annual floor of two per cent of public spending on health ($3.7 billion) to be put toward fundamental research, strategic initiatives to tackle pressing social issues, and knowledge translation.

3. Re-invest in fundamental science through the Tri-Councils and move strategic science investments to the Canada Advanced Research Projects Agency (CARPA).

4. Facilitate the creation of health networks or hubs around research hospitals and healthcare organizations that bring together academia, industry, start-ups and incubators.

5. 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.

6. Establish a pan-Canadian data strategy for health research and create a pan-Canadian health research data repository to centralize health research data from across Canada.

Build a more inclusive, equitable, green and resilient health system that meets the needs of all Canadians.

7. Implement a national health workforce planning strategy to gather workforce data to tackle the shortage of health professionals and address the factors hindering recruitment and retention.

8. Modernize Canada's health infrastructure by increasing capital investments in healthcare to a minimum of 0.6 per cent of GDP, over the next five years, to better align with Canada's OECD counterparts.

9. Increase health transfers to provinces and territories to ensure consistent, long-term funding for healthcare that keeps pace with increasing costs.

Introduction

HealthCare*CAN* is the national voice of Canada's hospitals, healthcare organizations and health research institutes. As a pan-Canadian, non-partisan association, HealthCare*CAN* advocates for health research and innovation and for enhanced access to high-quality health services for Canadians.

As Canada moves out of the pandemic, it is vital that we use the lessons learned from COVID-19 to build a better health system. This submission outlines recommendations to help Canada emerge stronger, capitalizing on our strengths in healthcare, health research, and innovation to build a more inclusive, equitable, green and resilient health system as well as a knowledge-based economy that attracts top talent and global investments, and continues our proud history of making groundbreaking healthcare discoveries that benefit the world.

Detailed Recommendations

1 Recognize academic health sciences centres as independent, stand-alone entities and drivers of economic growth and allow them to compete directly and on equal footing with other sectors for federal funding.

HealthCare*CAN* welcomes the federal government's investments in health research and the biosciences over the past 18 months and is especially grateful for the Canada Research Continuity Emergency Fund that benefited many research institutes. However, both historically and during the pandemic, funding predominantly flowed to universities and private industry, not to academic healthcare organizations (AHOs) – namely healthcare delivery organizations and research institutes – that are at the centre of the health and biosciences ecosystem.

- AHOs work with researchers, universities, patients, governments and industry as innovation hubs that keep Canadians healthy and productive.
- Despite their pivotal role, AHOs do not have direct and equal access to federal research and innovation funding.
- In many cases, AHOs are required to apply for federal funding through their affiliated university, placing them at a disadvantage since the university, which has its own research priorities, ultimately decides which projects to put forward for consideration.
- Consequently, the full potential of AHOs, and the economic benefits of the vital work they do, are not being realized.
- If invested in correctly and at appropriate levels, the health and biosciences sector will ensure a competitive advantage for Canada, attract and retain top talent, secure global investments and build the knowledge-based economy of the future.

2 Make transformational investments in health research to protect Canadians from future health crises and capitalize on economic opportunities, starting with a minimum annual floor of two per cent of public spending on health ($3.7 billion) to be put toward fundamental research, strategic initiatives to tackle pressing social issues, and knowledge translation.

The pandemic showcased the benefits of investing in health research and innovation. Canadian researchers contributed significantly to the global fight against COVID-19, including by first profiling the body's immune response to the virus and developing the lipid nanoparticles to deliver mRNA to the body's cells – a breakthrough based on 40 years of research. As we emerge from the pandemic, significant, sustained investments in health research can raise Canada to new heights, allowing us to compete internationally as a leader in research and innovation, build the knowledge-based economy of the future, and find solutions to our most pressing health and social issues.

- The health and biosciences sector is one of the fastest growing in Canada, accounts for 3% of employment, and contributes $7.8 billion (0.45%) to Canada's annual GDP as part of the broader healthcare ecosystem (11% of Canada's GDP).[1]
- The sector creates spin-off companies, produces the next generation of highly qualified personnel, and builds a knowledge-based economy that attracts top talent and global investments.
- Canada sits near the bottom of G7 and OECD countries for overall research and development spending as a percentage GDP at 1.5%, compared to the U.S.'s 3% and the U.K.'s 1.8%.[2]
- The health research budgets of global competitors have outpaced Canada's, with COVID-19 spurring new investments in health research in the U.K. and U.S.

3 Re-invest in fundamental science through the Tri-Councils and move strategic science investments to the Canada Advanced Research Projects Agency (CARPA).

Fundamental science is essential to growing our innovation economy; without it, Canada will continue to fall behind its international counterparts. Yet, all the federal government's promises and commitments in the Throne Speech and mandate letters are directed at high-risk, high-reward and priority-driven research, not fundamental science.

- An increasing proportion of Canadian Institutes of Health Research (CIHR) funding grants and federal health research programs are directed at addressing gaps in knowledge related to specific federal objectives or priority areas, also known as strategic science.
- While this is important research, it limits the funding available for fundamental or basic science – curiosity-based research that addresses the questions "how," "what" and "why" to increase knowledge.
- Insufficient funding has put undue stress on researchers and their staff and students. It has resulted in lost opportunities for promising researchers who are being squeezed out of grant competitions, and research that is either delayed, not pursued or taken abroad.
- We need to ensure there exists a healthy pipeline of talent if we want research and innovation to benefit our health and the economy.
- CIHR, and the other federal funding agencies, must return to their roots of being the primary funder of fundamental science. All strategic or priority-driven science should be moved under the Canada Advanced Research Projects Agency (CARPA).
- Along with this change in focus there must be a significant infusion of funding to CIHR to make up for decades of minimal investment, and to ensure discoveries that result in longer lifespans, improved quality of life, higher economic productivity, and Canada's global competitiveness are supported and well-funded.

4 Facilitate the creation of health networks or hubs around research hospitals and healthcare organizations that bring together academia, industry, start-ups and incubators.

Research hospitals and healthcare organizations act as powerful innovation hubs within the health system and 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. Within research hospitals and healthcare organizations, multiple researchers, universities, patients, companies, and industry work together in a non-competitive context to drive new technologies and to commercialize promising products to improve patient care and the health of people across Canada.

- Despite the significant role research hospitals and healthcare organizations play in innovation, their acknowledgement and inclusion in federal innovation programs occurs sporadically depending on the government departments establishing these programs.
- Facilitating and supporting research hospital and healthcare organization networks or hubs must be a higher priority in the federal government's innovation agenda.
- A first step would be to ensure that at least one of the research hubs receiving funding in the inaugural competition of the Canada Biomedical Research Fund be led by a research hospital or healthcare organization.

5 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.

There is a critical shortage of physical lab space in Canada. Entrepreneurs, incubators, and start-ups continually reach out to Canada's research hospitals in the hopes that they can access their labs. Sadly, research hospitals cannot accommodate these requests. Fully leveraging the innovative and economic power of the health research and life sciences sector requires investments to build or renovate existing space to create purpose-built incubator space that contains dry and wet lab space.[i]

- Ideally, new lab space must be located at research hospitals or healthcare organizations as this is where health science is taking place, where new ideas are being conceived, and where end users – patients, caregivers, and clinicians – are located.
- The co-location of researchers, engineers, entrepreneurs, and businesses will lead to the organic development of relationships between the health system, academia, and the private sector while immersing the people developing innovations to be immersed in the health system where their innovations will eventually be deployed to improve patient outcomes.
- The close connections between these groups, and their proximity to the health system and patients, will also lead to better knowledge translation, so that research and the resulting innovations are implemented to improve outcomes, which in turn allows Canada to get even greater returns on investment for its health research dollars.

i Dry labs refer to labs that undertake applied or computational mathematical analyses via the creation of computer-generated models or simulations. Wet labs are where drugs, chemicals, and other types of biological matter are analyzed and tested using various liquids.

6 Establish a pan-Canadian data strategy for health research and create a pan-Canadian health research data repository to centralize health research data from across Canada.

There are many Canadian entities that capture and store an extraordinary amount of health data across the country. These include primary care providers, clinics, hospitals, public health units, and governments. This siloed, disconnected series of separate systems has left valuable health data inaccessible and unusable. While the pandemic has motivated the federal government to invest heavily in health data systems, no coordinated approach or strategy has been developed. This has a negative impact on health outcomes, hinders research, impairs public health decisions and increases health system costs.

- A high-performing interoperable, digital data system is a critical enabler in health and health research, yet researchers lack the tools to effectively share data and information across institutions and provincial and territorial divides.
- The Health and Biosciences Economic Strategy Table (HBEST) is one of several bodies that have called on government to create an interoperable health data system. It has proposed several sector-wide actions to unleash innovation, one of which is to create a national digital health strategy that features an interoperable digital health platform.
- The Public Health Agency of Canada's (PHAC) pan-Canadian Health Data Strategy Expert Advisory Group's second report identified interoperability across jurisdictions as the backbone of data in the health system.
- The current strategy of implementing digital health technology on a service basis is compromising individual care and population level health.
- We support the recommendations of both the HBEST and PHAC reports outlined above. Moving towards a national health data strategy that allows for interoperability between institutions, jurisdictions and governments will enrich the quality and availability of health data and research, and foster the partnerships and collaboration needed to drive innovation that will address Canada's most pressing health challenges.

7 Implement a national health workforce planning strategy to gather workforce data to tackle the shortage of health professionals and address the factors hindering recruitment and retention.

Healthcare professionals are the health system's greatest resource, but Canada does a poor job of health workforce planning – the consequences of which were acutely felt during the pandemic and continue to undermine the delivery of quality care. Having no national strategy makes it difficult to ensure that the right number and type of workers are in the right place at the right time. This has economic ramifications and perpetuates current inequities in the health system, including for workers who are mostly women, and in certain lower-income roles, disproportionately immigrants, newcomers, and racialized individuals.

- At the end of 2020, job vacancy rates in healthcare reached a record high of 100,300, up 56.9% from the previous year, demonstrating the severity of the shortage of healthcare workers in Canada.[3]
- The impacts of the pandemic, including increased stress and burnout, have led many healthcare workers to leave the sector, with many more saying they will leave once the pandemic ends. This will have enormous implications for access and quality of care.
- Canada's health workforce concerns, including workforce shortages and high rates of mental health concerns among healthcare workers, predate the pandemic and affect recruitment and retention.
- Establishing a national coordinating body to facilitate standardized data collection and strategic planning will help tackle Canada's current workforce shortages and improve working conditions.

8 Modernize Canada's health infrastructure by increasing capital investments in healthcare to a minimum of 0.6 per cent of GDP, over the next five years, to better align with Canada's OECD counterparts.

Canada's failure to maintain adequate capital investment in its healthcare facilities harms our environment, impacts patient care, and severely undermines our ability to sustain an innovative and technologically advanced healthcare system. The pandemic starkly revealed that Canada's outdated health infrastructure puts the health of Canadians at risk, including in long-term care where in many facilities it is nearly impossible to comply with infection, prevention and control protocols.

- Canada has the third-highest per capita greenhouse gas emissions from healthcare in the world, with healthcare accounting for approximately 4% of the country's total emissions.[4]
- Hospitals alone account for 21,228 carbon dioxide equivalents or 8% of greenhouse gas emissions of non-business or household emissions, and 538,031 terajoules or 11% of non-business, non-household energy use.[5]
- A contributing factor is the age of Canada's healthcare facilities, which are among the oldest public infrastructure in use today. Approximately 48% were built more than 50 years ago; in cities, nearly 70% are more than 50 years old.
- Over the last 20 years, Canadian capital investment in health infrastructure has fluctuated, with a noted decline in recent years despite overall healthcare spending increasing steadily over this same time.[6] This suggests capital investments are being sacrificed to fund operational expenses, and the reality is that the need to continue redirecting funds to the delivery of care will continue as Canada's population grows and ages.

Canada must also expedite efforts to implement digital health infrastructure and strengthen cybersecurity to streamline the health system, support virtual care, improve access, and facilitate the safe sharing of health information with practitioners and patients alike.

- COVID-19 both accelerated adoption and highlighted the many benefits of virtual care, like convenience, removal of certain barriers to access, and remote monitoring of patients. Virtual care is also well-liked by Canadians.

- In 2019, virtual care saved Canadians and the economy 11.5 million hours through people not having to take time off work to attend appointments in-person. It also resulted in a reduction of 120,000 metric tonnes of CO2 emissions.[7]
- If Canada could sustain virtual visits at 50% of primary care visits, it will result in projected annual savings of 103 million hours for Canadians and the economy and 325,000 metric tonnes of CO2 emissions.7
- With the increase of health sector cyber threats experienced during the pandemic, it is vital that cybersecurity be strengthened as part of the move toward increased digital infrastructure and virtual care.

9 Increase health transfers to provinces and territories to ensure consistent, long-term funding for healthcare that keeps pace with increasing costs.

COVID-19 exposed the fragility of our healthcare system and exacerbated long-standing system issues, like inadequate access to mental health services and the need to reimagine older adult care. It also aggravated surgery and procedure backlogs, and there are likely other long-term impacts that will emerge in the coming months and years. The pandemic also demonstrated that all levels of government can move quickly and work collaboratively to address pressing issues.

While additional one-time health transfers from the federal government during the pandemic are appreciated, as we emerge from the pandemic, additional sustained federal funding and government collaboration is needed to address existing gaps and build a health system that meets the current and future needs of Canadians, especially as our population ages.

- The Canada Health Transfer has not kept pace with increasing healthcare costs caused by inflation, population growth, population aging, population health status, and health system improvements.
- Over the next decade, COVID-19 will increase healthcare costs as Canada continues spending to mitigate the impacts of the virus, address backlogs and treat new health complications in COVID-19 patients. It is projected that healthcare spending will increase at an average annual rate of between 6.5% and 8.4% over the short-term and between 5.5% and 5.7% over the long-term.[8]
- Provinces and territories cannot realistically shoulder these costs on their own. Additional federal funding will be needed to address the health system gaps highlighted by the pandemic and the long-term impacts of COVID-19, on top of pre-existing trends that are increasing healthcare costs, like an aging population.

Conclusion

As we have learned during the pandemic, a healthy population and a healthy economy go hand in hand. Investing in an inclusive, equitable, green and resilient health system and harnessing the innovative and economic power of the health and biosciences sector – including AHOs – will ensure our economy thrives by creating jobs, stimulating local economies, attracting top talent and global investments, and positioning Canada as a leader in health research and innovation.

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