

Green Healthcare:

THE MISSING PIECE IN CANADA'S CLIMATE RESPONSE



HealthCareCAN's Submission to the Standing
Committee on Finance for Pre-Budget
Consultations in Advance of the 2020 Budget

August 2, 2019



HealthCareCAN recommends that the federal government:

- 1** Ensure a level playing field by **allowing hospitals and health organizations to be eligible to compete directly for federal funding programs**, such as green infrastructure and innovation (as recommended by FINA in 2018).
- 2** Grow investments in science to **cover the full cost of research and enable Canada's research hospitals and health organizations to generate new insights**, including the health impacts of climate change.
- 3** Invest in digital health and data platforms in **Canada's research hospitals and health organizations** to improve patient care and support climate mitigation efforts.

Buildings on the cover:

Left photo - **Bridgepoint Hospital, Sinai Health System**, designed to be environmentally-friendly and sustainable, and is certified under the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System.

Right photo - **Sechelt Hospital, Vancouver Coastal Health**, designed to help improve patient care and minimize the site's carbon footprint. The hospital's land was a gift from the Shíshálh First Nations people, and the design process included extensive consultations with their Elders.

Green Healthcare: The Missing Piece in Canada's Climate Response

In support of this year's pre-budget theme *Climate Emergency: The Required Transition to a Low Carbon Economy*, this submission from HealthCareCAN – the national voice of hospitals and health organizations across Canada – offers recommendations that address carbon reduction, climate change mitigation and adaptation, economic growth, and the health of Canadians.

HealthCareCAN commends the emphasis on carbon reduction in the pre-budget consultations for Budget 2020. The impacts of climate change are sweeping and diverse, ranging from an unprecedented increase in the number and scale of natural disasters to the pervasive increase in infectious diseases. These changes deeply implicate Canada's health organizations and HealthCareCAN members will be instrumental in resolving them, provided they have the support of the federal government.

Accumulated deferred
maintenance in Canadian
hospitals:
\$15B

Canadian Hospitals
consume
11%
of total public energy

and account for
5%
of Canada's greenhouse
gas footprint

Hospitals and the Environment

By the nature of their operations, hospitals have significant chemical, waste, energy, water, transportation, food, pharmaceutical and physical plant requirements that collectively take a substantial toll on our environment. What's more, hospitals operate 24 hours a day, 7 days a week, 365 days a year, often at or above capacity. The result is that hospitals are the most energy-intensive public facilities in Canada, consuming approximately 11% of total public energy and accounting collectively for more than 5% of Canada's greenhouse gas footprint.^{i, ii} Yet hospitals are broadly ineligible for federal infrastructure grants, including those specifically engineered to curb Canada's carbon emissions.

Disaster mitigation and resilience is also a concern for Canada's hospitals. Canada's hospital system must continue to operate during disaster scenarios, meaning hospitals must be built and maintained in ways that allow them to be resilient in the face of fire, floods, severe storms or other natural disasters. Hospitals are critical infrastructure – they are essential to the health, safety, security and economic well-being of Canadians.

HealthCareCAN proposes three recommendations that support Canada's efforts to curb carbon emissions and contribute to our obligations under the Paris Climate Agreement. But these are underpinned by an important observation: *Canada's policymaking process does not currently acknowledge the contribution that hospitals and health organizations can play in achieving national objectives.* Given the Standing Committee on Finance's focus on climate change and the environment, and given the vast potential for hospitals and health organizations to make progress in these domains, it is time for a change in outlook.

If government wants to address the climate emergency, hospital and health organizations must be made key partners in the sustainable development, green infrastructure and climate change agendas.

ADDRESSING PROGRAM ELIGIBILITY

Aging physical and technological infrastructure is a key risk factor for Canada's health sector. Much of Canada's current hospital infrastructure has aged beyond its useful life, relying on dated facilities that are neither climate resilient, nor energy efficient. Health care facilities are among the oldest public infrastructure in use today with approximately 48% being over 50 years old.ⁱⁱⁱ The picture is worse in cities, where 69% of health care facilities are more than 50 years old.^{iv}

Unfortunately, Canada's hospitals and health organizations are excluded from most federal infrastructure funding programs, such as the Knowledge Infrastructure Program, the Building Canada Fund and the Disaster Mitigation and Adaptation Fund. This exclusion is starkly demonstrated in the recently negotiated Infrastructure Bilateral Agreements between the federal government and Canada's provinces and territories, which states: "Investments in health and education facilities are not eligible for contribution funding under this Agreement, except as otherwise specified in Schedule A.5 (Rural and Northern Communities Infrastructure)."

Further, when hospitals and health organizations are eligible to compete for funds (e.g., the 2016 Post-Secondary Institutions Strategic Investment Fund or the Canada Foundation for Innovation), they are required to seek sign-off from an affiliated university. This situation sets up a notable conflict-of-interest. Under this arrangement it is common for worthy hospital applications to not receive approval. Health organizations and universities are independent legal entities and funding applications by health organizations should not be gated by universities.

This has significant implications for the ability of Canada's hospitals and health organizations to pursue green energy projects. Canadian hospitals are constantly forced into the position of deferring much-needed maintenance in order to ensure high-quality, frontline care for patients due to budget constraints. Estimates value the accumulated deferred maintenance in Canada's hospitals at \$15 billion (range \$4-\$28 billion).^v A survey of HealthCareCAN members identified several hundred shovel-ready infrastructure projects, of which 70% represented retrofits and repairs to old buildings including repair, maintenance or deployment of green technologies, but these projects will not proceed without additional funding supports. We cannot ask hospitals and health organizations to

upgrade, retrofit or repair in ways that could reduce their carbon emissions when they often do not have the fiscal means to perform even basic maintenance.

There are precedents for federal investments in hospital infrastructure. The 1948-1970 Hospital Construction Grant Program and the 1966 Health Resources Fund are widely considered to be the financial engine that built the current hospital infrastructure. Today, that infrastructure is crumbling and the federal government has a prominent role to play in its renewal.

Beyond supporting the health of Canadians, investing in health infrastructure is also a boon to Canada's economy by:



CREATING JOBS



STIMULATING LOCAL, PROVINCIAL AND TERRITORIAL ECONOMIES



GROWING OUR GDP



BUILDING CLEANER, GREENER, MORE EFFICIENT FACILITIES



CATALYZING INNOVATION IN HEALTHCARE DELIVERY



IMPROVING OUR CAPACITY FOR PATIENT-CENTRED CARE



ATTRACTING TALENT IN BOTH RESEARCH AND PATIENT CARE

Environmental stewardship requires that we diminish the environmental footprint of the health sector as we strive to improve public health. Achieving this will mean granting Canada's hospitals and health organizations the same considerations as other sectors like transportation, education or manufacturing. In 2018, FINA recommended the federal government *ensure a level playing field by allowing hospitals and health organizations to be eligible to compete directly for federal funding programs, such as green infrastructure and innovation.* If the government is serious in addressing the impacts of climate change, we ask that you reiterate your recommendation in 2020.

SUPPORTING THE FULL COST OF RESEARCH

The World Health Organization calls climate change the greatest threat to human health in the 21st century. This threat is expressed in many ways, among them: heat-related illness; spread of vector-borne diseases; exacerbation of allergy symptoms due to higher pollen levels brought on by warmer temperatures; rise in frequency and severity of asthma attacks from increased air pollution, and the growing prevalence of stress-related disorders or other mental health illnesses associated with displacement.^{vi}

HealthCareCAN commends the government on HealthADAPT, a multi-year program managed by Health Canada providing \$3 million in funding over three years for 10 climate change and health-adaption capacity-building projects across Canada.^{vii} Investments like these make it possible to assess the implications of climate change for the health of our communities. But this is not enough.

Canada is lagging in basic research addressing the relationship between climate and health. A 2018 search of the Canadian Research Information System showed that since 2009 only 55 of 28,752 (or just 0.2%) of CIHR grants included 'climate change' in the abstract.^{viii} The truth of the matter is that government policy discourages this line of inquiry.

Conducting research – whether fundamental, applied or climate-related – includes significant indirect costs. Federal funding currently covers between 18%-21% of the indirect costs of conducting research; a glaring contrast to the 40%-60% provided to our American counterparts. Consequently, research hospitals must rely on foundations, philanthropy and other fundraising to cover the funding gap. This in turn impedes the ability to carry out research, including studies that link climate change and health. Canada's research capacity will continue to suffer as long as federal funding programs do not address the full cost of research.

With this in mind, HealthCareCAN strongly recommends that the federal government *grow investments in science to cover the full cost of research enabling Canada's research hospitals to generate new insights, including the health impacts of climate change.* This will enhance Canada's overall health research capacity and help ensure hospitals and health organizations can fulfill critical priorities, such as investing in green infrastructure builds and retrofits.

CAPITALIZING ON DIGITAL HEALTH & DATA PLATFORMS

The digital age offers bright prospects for delivering on the promise of Canada's health system while lowering carbon emissions and improving climate resilience, specifically:

- Digital health solutions can *improve the surveillance of vector-borne infectious diseases* propelled by climate change such as Lyme disease or West Nile virus.
- Remote technologies *allow for care at a distance*, lowering transport-related emissions and improving capacity in rural areas or during natural disasters.
- Networked health data platforms can help *expand our knowledge of the relationship between climate and health systems*, allowing us to better adapt to extreme heat, wildfires, flooding, or other harsh weather events.

Full deployment of digital solutions in health has been greatly hindered in part by the restricted movement of health data. Far too often data remains "siloed" in one institution or jurisdiction, severely limiting the ability of researchers, clinicians and patients to optimize its use in the service of research, training and care. Mobilizing our health data will benefit patients, clinicians and researchers.

This fact is supported by the findings of Canada's Health and Biosciences Economic Strategy Table, which has proposed that harnessing digital health technologies be a primary focus for the health and life sciences ecosystem. Specifically, the Strategy Table posits that Canada needs to move forward on three critical elements – an interoperable digital health platform, harmonized data and privacy frameworks, and a single, electronic medical record for Canadians.^{ix} These measures have extremely practical implications, but they rely on dedicated investments on a national scale. Given their key roles in innovation, research and patient care, Canada's hospitals and health organizations are the natural place to develop these elements.

It is time for government to take the next step. HealthCareCAN recommends that Canada *invest in digital health and data platforms in Canada's research hospitals and health organizations to improve patient care and support climate mitigation efforts.*

IN SUMMARY

Hospitals and health organizations are poised to play a critical role in meeting Canada's national objectives, including our response to climate change. In fact, green healthcare is a major missing piece in Canada's efforts to mitigate and adapt to climate change. HealthCareCAN's submission offers three recommendations to set us on the right course; namely:

1. Ensure a level playing field by allowing hospitals and health organizations to be eligible to compete directly for federal funding programs, such as green infrastructure and innovation.
2. Grow investments in science to cover the full cost of research enabling Canada's research hospitals to generate new insights, including the health impacts of climate change.
3. Invest in digital health and data platforms in Canada's research hospitals and health organizations to improve patient care and support climate mitigation efforts.

ENDNOTES

- i. [Green is Green: Improving the Health, Economic and Environmental Impact, Resilience and Sustainability of Canada's Hospitals through Green Infrastructure](#), 2016.
- ii. Pichler, P., Jaccard, I., Weisz, U. & Weisz, H. (2019). [International comparison of health care carbon footprints](#).
- iii. [Canadian Infrastructure Report Card: Informing the Future](#), p. 109.
- iv. Ibid.
- v. [Deferred Hospital Maintenance in Canada: There's more to a 'building' than building it](#), 2015.
- vi. McGregor, M., Bryan, S., Brasher, P., & Howard, C. (2018). [Why is Canada so behind in research on climate change and health?](#)
- vii. Government of Canada. (2019) [Climate Change and Health Adaption Capacity Building Program \(HealthADAPT\)](#)
- viii. Ibid.
- ix. [Report from Canada's Economic Strategy Tables: Health and Biosciences](#)