



RE-ENVISIONING ELDER CARE AND LIVING

A pre-budget submission for the role of the federal government in supporting innovation in Long-Term Care (LTC) during and post COVID-19, protecting our vulnerable and providing global solutions that will generate economic opportunity.

Bruyère 

RECOMMENDATION 1

Establish a supercluster focused on innovating products and services for older adults, particularly those in LTC settings.

RECOMMENDATION 2

Invest in research, innovation, and commercialization capacity across Canadian health care research centres with expertise in LTC, including \$9 million for Bruyère's [InnovAging platform](#).

RECOMMENDATION 3

Designate and fund a federal body with responsibility for independently evaluating and scaling up viable interventions for LTC.

RECOMMENDATION 4

Establish wraparound infrastructure investments for new provincial LTC builds that create spaces and programs for innovators and researchers focused on aging.

RECOMMENDATION 5

Enable new approaches to training programs for the next generation of workers to develop and use technology for assisting older Canadians.

RECOMMENDATION 6

Establish an aging lens and an all-of-government approach to prioritizing policy and programmatic development to better respond to the needs of our aging population.

Introduction

Canada has a tangible and potentially enormous competitive advantage in the development of products and services for older adults. Developing transformational products and service models for our rapidly aging population will be a major determinant of both the quality of life of aging Canadians, and the economic prosperity of our country into the future. With COVID-19 laying bare the vulnerabilities of our country's care of the elderly, the pressure for rapid improvement is building within the Canadian public.

Bruyère is pioneering innovations in services and products for Canada's older adults. We are a multi-site academic health care organization, specializing in rehabilitation, aging, and memory. We are a unique health care delivery organization in that we are not only a hospital and a LTC centre, but we are also a housing provider for vulnerable seniors. This continuum of care and living environments, in addition to our unique R&D programs, have given us deep insights into both the vast potential of made-in-Canada innovations targeting the elderly, and the gaps that are preventing these innovations from effectively entering the marketplace. The recommendations respectfully presented in this submission have emerged directly from our institution's position on the front lines of Canadian care of the elderly, and are aimed squarely at a dramatic expansion of Canadian capacity to develop and commercialize innovation for our aging population.

We are thankful for the opportunity to provide a submission to the 2021 pre-budget consultations on innovative solutions for the LTC sector that will address vulnerabilities seen during the COVID-19 pandemic and help to restart the Canadian economy.

Context

Canada has one of the most powerful capital-backed economic engines for products and services that serve older adults in the world; *our public health system*. This [\\$264 billion](#) platform has traditionally been viewed as a cost-driver, rather than a source of economic growth and prosperity. For too long, the opportunity in this sector has been overlooked due to the inherent challenges with our public system that have been perceived as “simply too hard” to capitalize upon. The COVID-19 crisis, however, has been a clarion call to action. Over [80% of all COVID-19 related deaths in Canada happened in LTC facilities and retirement homes](#). At the time of this writing, 8,953 Canadians have died from COVID-19; 96% of those deaths were people over the age of 60. **The disproportionate impacts of the pandemic on older adults is the canary in the coal mine for Canada’s vulnerabilities as an aging nation.**

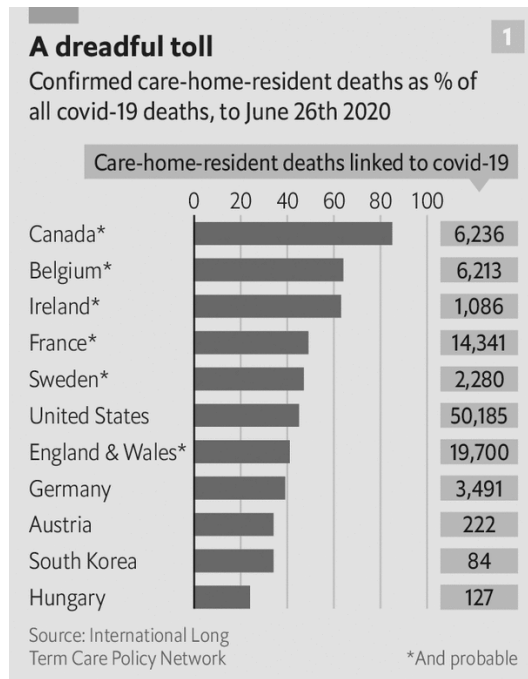


Figure 1 - [Source: The Economist \(2020\)](#)

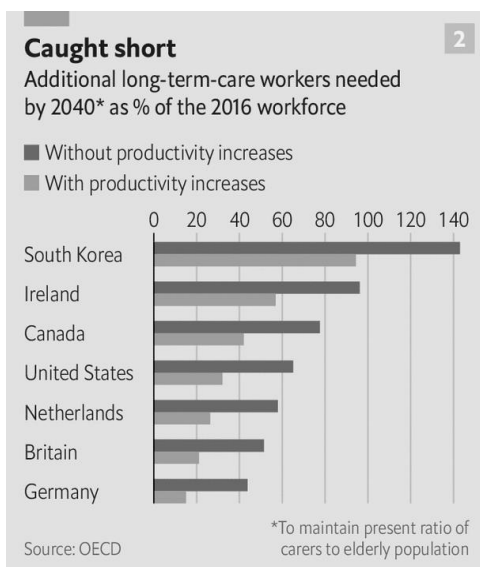


Figure 2 - Source: *The Economist* (2020)

Silver economy is the system of production, distribution, and consumption of goods and services aimed at using the purchasing potential of older and aging people and satisfying their consumption, living, and health needs.

Figure 3 - Definition of Silver Economy

Gap – No Designated Federal Body

As identified in the COVID-19 interim report by the *Senate*: “there are numerous innovative and potentially effective interventions in LTC for seniors in Canada, but [...] there is no designated federal body with responsibility for independently evaluating and scaling up these interventions.” Persistent under-investment in the products and services that serve older adults, particularly LTC, directly contributed to the mortality of those impacted by COVID-19. Canada’s population is only getting older.

Seismic Shift in Demographics

In 2012, [one in seven Canadians was a senior](#) and, as a whole, accounted for nearly [half of all public sector](#) health care costs in that year. By 2036, [one in four Canadians](#) will be 65 years or older. To meet this demand with our current status quo, Canada will require [454,000 new LTC care spaces](#), costing \$64 billion. This is in addition to already ballooning health care costs. Canada is not alone in these challenges. By the end of the century, [there will be 2.4 billion older adults over the age of 65 globally](#). It will be a brave, old world.

Global Competition and Economic Impacts

Countries like [Germany](#) and [France](#) are already responding to the opportunity of the global silver economy, but they too have been slow to pivot industries. According to the *Global Coalition on Aging*, [only 15% of businesses have developed a plan for the aging population](#), despite seniors’ spending power of over \$15 trillion. A [macroeconomic simulation study](#) by the International Labour Organization in 45 countries shows that **increasing investments in the care economy would result in a total of 475 million jobs by 2030**; that is 269 million new direct and indirect jobs, compared to the number of jobs in 2015.

The Call to Action

The Government of Canada can help bring clarity to the opportunities brought on by global aging, and spur activity in this sector. Whether it is for: **a)** taking care of Canada's own, ensuring that our elderly are supported in independent and long-term living environments; **b)** curbing our unsustainable health care costs; or **c)** capitalizing on the [trillion dollar and growing global market](#) for products and services that serve older adults, **Canada should establish robust policy and program packages that marshal the country's talent and resources around this seismic demographic shift.**

Where to Focus, First

As a hospital, LTC and housing provider, Bruyère knows that elderly living environments are most successful when there is a continuum of available options. The vast majority of aging Canadians want to age at home. LTC should be reserved for only our most vulnerable. A concerted strategy to keep people home longer will curb rising and unsustainable costs, and it will also keep older adults safer (and much happier), all while creating new markets based on the immense spending power of this population base. Imagine older adults having access to diagnostic equipment, sensors, and telemedicine technologies throughout their homes—bringing the safety benefits of a LTC home, without depriving them of their dignity or putting them at risk? Canada could lead this revolution in care delivery, health and housing technology.

However, the country needs a new approach for realizing latent innovations emerging from the country's robust research apparatus and getting them into the hands of Canadians and global health care delivery verticals. For example, Bruyère researchers have successfully developed a sophisticated sensor system that has been proven to assist caregivers with managing dementia; improving the caregivers sleep and keeping persons with cognitive decline safe. They have also invented a 2D pressure-mat that helps with fluid management, gently waking up a person to use the bathroom before it becomes urgent; a situation that often results in falls. Another example is *Project Big Life*, a series of evidence-based risk calculators that can predict life expectancy, heart and stroke risks, and end of life care needs. Pairing sensor and Internet-of-Things technologies with risk calculators and other artificial intelligence tools would allow the Canadian health system to keep people living at home, longer; out of LTC. However, all these innovations require industry support to refine, scale and implement. The primary vehicle where this is supposed to happen is within institutional technology transfer programs, which have largely been challenged to commercialize health technology research. This is due to a number of reasons, chief among them that clinical researchers typically are not, and do not want to be company founders; *they want to be clinical researchers.*

Health and home care by very nature necessitate a deep understanding of the issues: robust evaluations, clinical trials, health care pilots, etc., all privileges outsiders of health and home care systems simply do not have access to. *Without research, health care innovations are not trusted. Without technology transfer, health care innovations are not adopted. Without industry, health and home care innovations cannot be scaled.* If Canada wants to draw out its latent innovations and have them locally adopted and globally scaled, it will require tailored policies and programs that get at the intersection of these domains.

Bruyère's Recommendations

In 2019, Bruyère submitted a pre-budget submission stating: ["from a national perspective, being prepared for this demographic shift will be the difference between experiencing it as a global economic opportunity or a national crisis."](#) While the recommendations in that submission are still valid, COVID-19 has renewed **the need for significant research and innovation efforts specifically related to LTC.** Canada must do better. While LTC is largely a provincial matter, investing in R&D, innovation, and commercialization support is squarely in the jurisdiction of the federal government, and will dramatically support economic recovery efforts. As such, our full recommendations can be summarized as follows:

RECOMMENDATION 1

Establish a supercluster focused on innovating products and services for older adults, particularly those in LTC settings.

OUTCOME: Provide Canadian companies with a significant and lasting competitive advantage in a key emerging sub-sector: senior care and assisted-living technologies; a multitrillion dollar market.

RECOMMENDATION 2

Invest in research, innovation, and commercialization capacity across Canadian health care research centres with expertise in LTC, including \$9 million for Bruyère's [InnovAging platform](#).

OUTCOME: Direct job growth in industry R&D and indirect job growth as a result of increased industry R&D, including new job categories related to technologies supporting the aging population.

RECOMMENDATION 3

Designate and fund a federal body with responsibility for independently evaluating and scaling up viable interventions for LTC.

OUTCOME: Formalize and validate a safe and effective market pull function for Canadian health care providers, while signaling to investors to capitalize on the growing age-tech markets in Canada and abroad.

RECOMMENDATION 4

Establish wraparound infrastructure investments for new provincial LTC builds that create spaces and programs for innovators and researchers focused on aging.

OUTCOME: Embed research and innovation in provincially funded LTC builds to ensure state-of-the-art delivery and sustained improvements for Canada's aging population.

RECOMMENDATION 5

Enable new approaches to training programs for the next generation of workers to develop and use technology for assisting older Canadians.

OUTCOME: Significant job growth in post-secondary or professional designation jobs for Canadians.

RECOMMENDATION 6

Establish an aging lens and an all-of-government approach to prioritizing policy and programmatic development to better respond to the needs of our aging population.

OUTCOME: When the Government of Canada committed to using GBA+ to advance gender equality in Canada, it yielded significant progress in the advancement of women both in government and Canadian society. With the demographic shift, accessibility and pace of technological advancements, capacity of our health care system, Canada needs an aging lens to help prioritize, innovate, and redesign how our nation approaches and responds to aging.

COVID-19 has revealed vulnerabilities within Canadian communities. It clearly exposed that we need to do better in honouring our elders. Whether it is a second wave, another pandemic in the future, or the realities of living on a planet where over a quarter of the population is in their senior years, Canada should create the conditions to not be just resilient, but to thrive. These aforementioned recommendations are an excellent start for positioning Canada as a global leader in health technologies, and products and services for older adults.

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