A MACDONALD-LAURIER INSTITUTE PUBLICATION

Commentary

TRUE NORTH IN CANADIAN PUBLIC POLICY

FEBRUARY 2021

COVID-19: Masking a failed system?

Shawn Whatley

Introduction

With severe lockdowns in effect in many parts of the country, Canadians are told again and again that these measures are required to keep our health system from collapsing due to an influx of COVID-19 patients.

It's a potent message. And who can help but sympathize with the exhausted nurses and doctors watching too many patients die in the hardest hit regions?

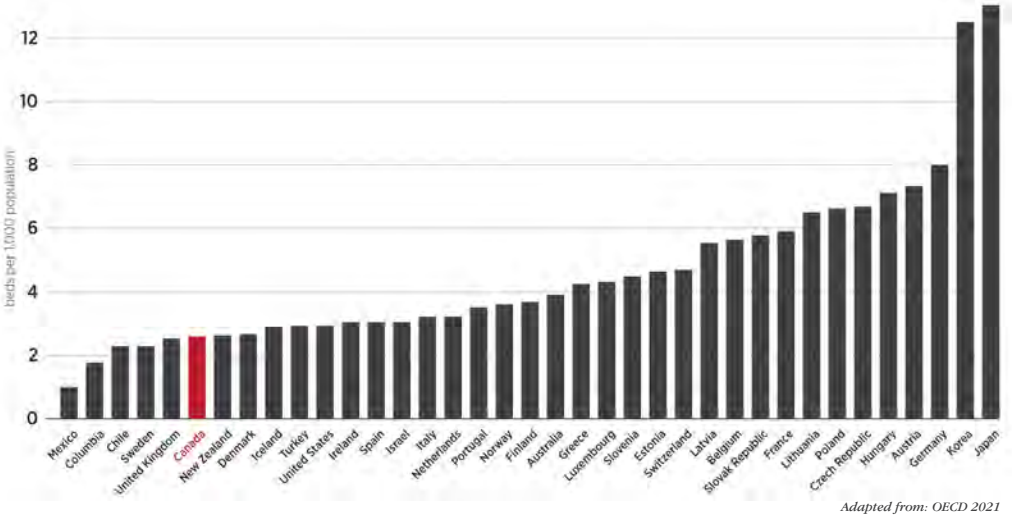
But what Canadians should be asking is why, 11 months into the pandemic and in the midst of a second wave everyone knew was coming, we are faced with a choice of locking down or having our hospitals overrun?

Had we used our time wisely, we would be having a much different debate about the necessity of locking down. We are still not talking about the right issues, and the wrong issues are the only ones the media seems to care about.

Lack of capacity

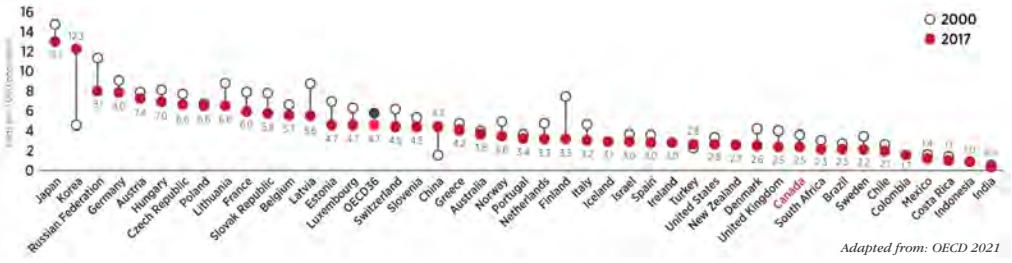
COVID-19 gave medicare the stress test we had long hoped to avoid. Before the pandemic, Canada had 2.5 hospital beds per 1000 population compared with 4.7 for the Organisation for Economic Co-operation and Development (OECD) average (Figure 1) – a figure that represents 53 percent of the OECD average. Importantly, like many other countries, Canada has also seen its number of hospital beds actually decrease in proportion to its population over the past two decades (Figure 2).

Figure 1: Hospital beds (total, per 1,000 inhabitants)



Adapted from: OECD 2021

Figure 2: Hospital beds, 2000 and 2017 (or nearest year)



Adapted from: OECD 2021

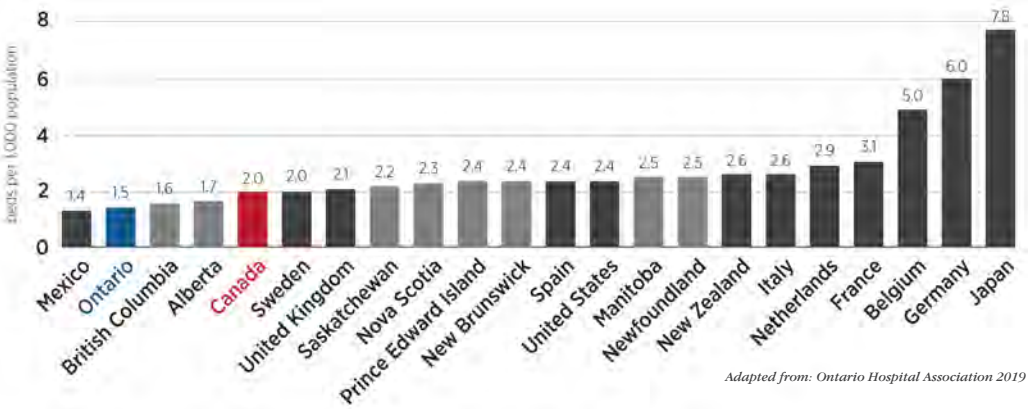
Ontario example

If we consider a broad definition of hospital beds, Ontario has 2.5 beds per 1000 and needs 68,000 beds overall to match the OECD average of 4.7 beds per 1000. (Of course, we might also aim higher and target France's bed numbers at 5.9, Germany 8.0, Korea 12.4, or even Japan's 13 per 1000.)

If we leave out rehab, mental health, and chronic care beds, and focus instead on just acute care hospital beds, we see that Ontario has an even lower

number than the Canadian average, equalling the same number of acute care beds as Mexico (Figure 3). Thus, Ontario alone needs 8685 beds to match the Canadian average of 2.0 acute beds per 1000.

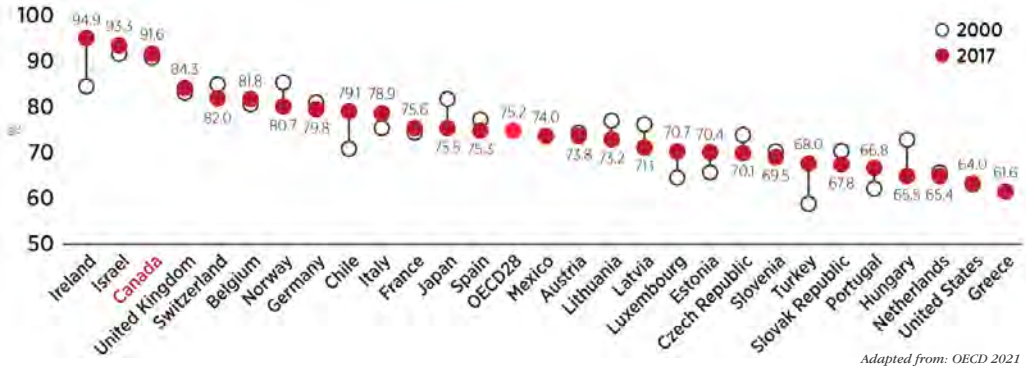
Figure 3: Acute hospital beds per 1,000 population (2015 – 2018), ON vs. other provinces and other countries (QC data not available)



Adapted from: Ontario Hospital Association 2019

Given low bed numbers, Canadian hospitals often overflow. Hospital acute care bed occupancy rates average over 90 percent capacity and routinely can become even higher. Headlines about patients in bathrooms and sunrooms appear each winter in Canada. By comparison, average OECD hospital occupancy usually hovered between 70-80 percent pre-COVID, ideal for patient flow (Figure 4).

Figure 4: Occupancy rate of curative (acute) care beds, 2000 and 2017 (or nearest year)



Adapted from: OECD 2021

No matter which set of hospital beds we focus on, Ontario has far fewer beds than other jurisdictions around the developed world. Despite this shortfall, Premier Ford added only 3100 in 2020 (with plans for 500 more announced in early 2021) (Denley 2021) – almost fifteen times less than needed to close

the gap to the OECD average.

But in fairness to Premier Ford, hospitalized COVID-19 patient totals have, so far, not hit 1600. This could change completely if new variants become dominant in Canada, resulting in higher rates of transmission, hospitalization, and ultimately deaths. However, as it stands today, if all the new beds in Ontario were one, giant COVID hospital, it would be less than half full. This is not to deny that hospitals in certain hard-hit regions may currently be overwhelmed. But we need to have a more accurate grasp of the current situation facing our hospitals province-wide.

How much would it cost and would Canadians be willing to pay?

Closing the bed gap might cost more than Canadians are willing to pay. Cost estimates would vary depending on whether new beds simply meant hiring nurses to staff unused hospital space, which currently exists, or if it meant building new beds from scratch.

Using data reported by the Financial Accountability Office of Ontario (2020), 1500 new acute care beds (including 500 critical care beds) will cost the Ontario government $341 million (including some funding for assessment centres). This works out to $227,333 per additional bed. Using the gap between the Canadian average of 2.5 beds per 1000 and the OECD average of 4.7, Canada would need 82,698 more beds: (4.7 beds/1000 – 2.5 beds/1000) x 37.59 million (2019) = 82,698 beds. At $227,333 per bed, this would cost Canada an additional $18.8 billion. This figure might be a bargain.

If we focus on the ongoing operational cost instead, the cost is much higher. The Canadian Institute for Health Information (2019) reported that Canada spent $264 billion on health care in 2019 with 26 percent of it going to hospitals ($70.2 billion). Given that Canada currently sits at 53 percent of the OECD average, we might expect to spend almost double what we spend now on hospitals and up to $210 billion if we tried to match German bed numbers (8.0 per 1000). Would Canadians support the extra taxes required to close the bed gap? Which level of government would collect the tax?

Capital and operational costs present significant barriers to building more beds. But even if we had the money, adding capacity to fix a pre-COVID deficit in the name of COVID seems confused, especially when many parts of the province are not overwhelmed with COVID. Furthermore, adding capacity to improve performance without addressing system function (dynamic efficiency) looks a bit like adding horses to a wagon that should have been swapped for a truck long ago.

Acute pain for a chronic condition

Overcrowding, hallway medicine, shortages in long-term care, world-famous wait times, technology shortages, and spiralling costs are just a few of the problems that warranted concern long before COVID. In hockey, ignoring risk is called skating with your head down. The result can be a thunderous body check from an opposing defenceman you never saw coming.

When COVID-19 stepped on the ice last spring, we panicked. COVID presented an unknown threat in the face of a well-known lack of health care capacity. We needed to flatten the curve and slow the spread in order to protect the health care system.

So, we cancelled surgeries, hauled retired ventilator machines out of storage, and added acute care beds to the system. The Canadian Medical Association (2020) put together ethical guidelines to guide the distribution of care given overwhelming demand for limited resources. Some doctors warned the elderly, just before intubation, that they would be extubated, if a younger patient showed up in need of a ventilator. Community physicians signed up to provide mercenary back-up, in the event of a flood of COVID patients needing ICU. Retired nurses and doctors offered to help in the expected deluge.

We now know much more about SARS-CoV-2 than we did last spring. Most observers estimate the median infection fatality rate to be around 0.68 percent (Meyerowitz-Katz and Merone 2020), though some place it even lower (see Ioannidis 2020). It also has a clear mortality profile. Approaches to testing and therapy, as well as vaccination programs, have transformed the risk. Squabbles over vaccine delivery and worries about the new B117 and other variants demand caution, especially given the extent to which higher transmission can lead to higher mortality. Having said that, no one complains about PPE shortages any longer, and supply chains remain strong for therapeutics and essential equipment.

Despite this, pandemic worst-case scenarios continue to capture most media attention. Worst-case scenarios about mental health, cancelled surgeries, or delayed treatment not so much. Worst-case scenarios about a system in a chronic state of crisis seem to not be of any interest at all. Declaring a state of emergency at this point is like running around the living room with pots long after we should have replaced our leaky roof.

Are there things we can do now? Yes, absolutely.

We could set up staff bubbles around long-term care homes, much like the NBA and NHL, if we wanted. Point of care testing now delivers COVID test results in minutes. We could have decanted all patients waiting to leave acute-care hospitals using patient hotels, a proven solution in other countries. It would have taken far less than 11 months to set them up and offered 10,000 beds pre-COVID (presumably more given current hotel occupancy). Field

hospitals also offer a proven solution given emergency demand in the more hard-hit areas. Brampton recently set one up, for example.

But what about a shortage of frontline care workers? Staff at the hardest-hit hospitals in Scarborough and Brampton are swamped and feeling desperate. But in most areas, frontline care workers face a shortage of work. Locum opportunities have dried up. Walk-in clinics are closed or seeing drastically reduced volumes. Physicians who used to work at multiple long-term care facilities can now work at only one. Surgical assistants have far fewer surgeries to assist. Community volumes are down as patients avoid going to their family doctor. So far, no one has felt the need to take retired doctors up on their offer to help. COVID assessment clinics have no trouble with staffing in most areas.

> *Staff at the hardest-hit hospitals in Scarborough and Brampton are swamped and feeling desperate.*

But instead of adding meaningful bed capacity to our system, doctors now practice dry runs on how to triage which patients should not get intubated, if we run out of beds (Shingler and Hendry 2021). If you are old or have other illnesses, you will be passed over for someone younger and without other illnesses. This grisly form of rationing brings to life the practical limits of Canadian health care. It undermines the very basis upon which medicare is supposed to stand. Medicare promises universal care regardless of ability to pay. This should mean that people get care when they need it most. If medicare cannot fulfill its promises at this most basic level, perhaps it requires a second look?

But instead of asking whether medicare has lived up to our dreams for it, we seem quick to pursue lockdown measures as a first resort rather than a last. Indeed, it remains to be seen to what extent mandatory stay-at-home orders and closing businesses have been truly effective in stopping the spread of COVID-19. And, even if fully effective, one still needs to recognize the potential harm that such measures may have among our population (Joffe 2020). Sadly, we would rather take that risk than make meaningful change to medicare itself.

Social workers have never been so busy dealing with the mental health crisis. The Canadian Federation of Independent Businesses reported this week that up to one in six small businesses contemplate permanent closure – many of these businesses are not known to spread COVID in the first place. Cancers are showing up more advanced in many cases.

Medicare 2.0

We should plan on COVID-19 never leaving. New strains are here, with more likely to follow. Instead of the flu season, we will likely have the flu and COVID season(s). Many predict that COVID will require annual vaccination much like influenza. Waving our hands about a system overburdened by COVID makes no sense. We have had months to address our lack of capacity and years to realize our system was failing.

But we have squandered the time we had, with no plan to make sure it does not evolve the same way for the rest of wave two or any subsequent waves. We need to stop talking about lockdowns and start talking about greatly increasing health care capacity and pursuing meaningful system change.

About the author

Dr. Shawn Whatley has wide-ranging knowledge and experience in the field of health care policy. He is a Munk Senior Fellow at the Macdonald-Laurier Institute and author of *No More Lethal Waits* and *When Politics Comes Before Patients: Why and How Canadian Medicare is Failing*.

Much of his early career was spent in leadership in emergency medicine (Chief then Medical Program Director), where he gained valuable insights into what was and was not working in the Canadian system. Shawn's work has also covered a broad swath of medicine and health, including serving as a coroner and work in a vein clinic, nuclear cardiac stress testing, clinical trials, and cardiac surgical assisting.

At present, he runs a small rural family practice and is a frequent commentator on health issues in Canada.

References

Bendavid, Eran, Christopher Oh, Jay Bhattacharya, John P. A. Ioannidis. 2021. "Assessing mandatory stay-at-home and business closure effects on the spread of COVID-19." *European Journal of Clinical Investigation*, February 1. Available at https://onlinelibrary.wiley.com/doi/10.1111/eci.13484.

Canadian Institute for Health Information. 2019. "Health spending in Canada reaches $264 billion. Canadian Institute for Health Information, October 31. Available at https://markets.businessinsider.com/news/stocks/health-spending-in-canada-reaches-264-billion-1028646239.

Canadian Medical Association. 2020. "Framework for Ethical Decision Making During the Coronavirus Pandemic." CMA Policy. Available at https://policybase.cma.ca/en/viewer?file=%2fdocuments%2fPolicypdf%2fPD20-03.pdf#search=&phrase=false.

Denley, Randall. 2021. "Why adding more and more beds still isn't fixing Ontario's COVID hospital crisis." *National Post*, January 21. Available at https://nationalpost.com/opinion/randall-denley-why-adding-more-and-more-beds-still-isnt-fixing-ontarios-covid-hospital-crisis.

Financial Accountability Office of Ontario. 2020. *Ontario Health Sector: A Preliminary Review of the Impact of the COVID-19 Outbreak on Hospital Capacity*. Financial Accountability Office of Ontario, April 28. Available at https://www.fao-on.org/en/Blog/Publications/health-2020.

Ioannidis John. 2020. "Infection fatality rate of COVID-19 inferred from seroprevalence data." *Bulletin World Health Organization*, In Press. Available at https://www.who.int/bulletin/online_first/BLT.20.265892.pdf.

Meyerowitz-Katz, Gideon, Lea Merone. 2020. "A systematic review and meta-analysis of published research data on COVID-19 infection fatality rates." *International Journal of Infectious Disease*, 101 (December), 138-148. Available at https://www.medrxiv.org/content/10.1101/2020.05.03.20089854v4.

Organisation for Economic Co-operation and Development (OECD). 2019. "Health at a Glance 2019 : OECD Indicators." OECD. Available at https://www.oecd-ilibrary.org/sites/0d67e02a-en/index.html?itemId=/content/component/0d67e02a-en.

———. 2021. Hospital beds (indicator). doi: 10.1787/0191328e-en.

Ontario Hospital Association. 2019. "Ontario Hospitals – Leaders in Efficiency." Ontario Hospital Association. Available at https://www.oha.com/Documents/Ontario%20Hospitals%20-%20Leaders%20in%20Efficiency.pdf.

Shingler, Benjamin, Leah Hendry. 2021. "Doctors conducting 'dry runs' to decide who gets access to critical care if hospitals exceed capacity." *CBC News*, January 15. Available at https://www.cbc.ca/news/canada/montreal/quebec-protocol-triage-covid-1.5873458.

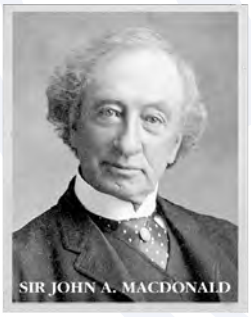
About the Macdonald-Laurier Institute

What Do We Do?

When you change how people think, you change what they want and how they act. That is why thought leadership is essential in every field. At MLI, we strip away the complexity that makes policy issues unintelligible and present them in a way that leads to action, to better quality policy decisions, to more effective government, and to a more focused pursuit of the national interest of all Canadians. MLI is the only non-partisan, independent national public policy think tank based in Ottawa that focuses on the full range of issues that fall under the jurisdiction of the federal government.

What Is in a Name?

The Macdonald-Laurier Institute exists not merely to burnish the splendid legacy of two towering figures in Canadian history – Sir John A. Macdonald and Sir Wilfrid Laurier – but to renew that legacy. A Tory and a Grit, an English speaker and a French speaker – these two men represent the very best of Canada's fine political tradition. As prime minister, each championed the values that led to Canada assuming her place as one of the world's leading democracies. We will continue to vigorously uphold these values, the cornerstones of our nation.


SIR JOHN A. MACDONALD


SIR WILFRID LAURIER

Working for a Better Canada

Good policy doesn't just happen; it requires good ideas, hard work, and being in the right place at the right time. In other words, it requires MLI. We pride ourselves on independence, and accept no funding from the government for our research. If you value our work and if you believe in the possibility of a better Canada, consider making a tax-deductible donation. The Macdonald-Laurier Institute is a registered charity.

Our Issues

The Institute undertakes an impressive program of thought leadership on public policy. Some of the issues we have tackled recently include:

- Aboriginal people and the management of our natural resources;
- Making Canada's justice system more fair and efficient;
- Defending Canada's innovators and creators;
- Controlling government debt at all levels;
- Advancing Canada's interests abroad;
- Ottawa's regulation of foreign investment; and
- How to fix Canadian health care.

constructive important forward-thinking excellent insightful high-quality active

Celebrating 10 years

WHAT PEOPLE ARE SAYING ABOUT **MLI**

The Right Honourable Paul Martin

I want to congratulate the **Macdonald-Laurier Institute** for 10 years of excellent service to Canada. The Institute's commitment to public policy innovation has put them on the cutting edge of many of the country's most pressing policy debates. The Institute works in a persistent and constructive way to present new and insightful ideas about how to best achieve Canada's potential and to produce a better and more just country. Canada is better for the forward-thinking, research-based perspectives that the **Macdonald-Laurier Institute** brings to our most critical issues.

The Honourable Jody Wilson-Raybould

The **Macdonald-Laurier Institute** has been active in the field of Indigenous public policy, building a fine tradition of working with Indigenous organizations, promoting Indigenous thinkers and encouraging innovative, Indigenous-led solutions to the challenges of 21st century Canada. I congratulate **MLI** on its 10 productive and constructive years and look forward to continuing to learn more about the Institute's fine work in the field.

The Honourable Irwin Cotler

May I congratulate **MLI** for a decade of exemplary leadership on national and international issues. Through high-quality research and analysis, **MLI** has made a significant contribution to Canadian public discourse and policy development. With the global resurgence of authoritarianism and illiberal populism, such work is as timely as it is important. I wish you continued success in the years to come.

The Honourable Pierre Poilievre

The **Macdonald-Laurier Institute** has produced countless works of scholarship that solve today's problems with the wisdom of our political ancestors. If we listen to the **Institute**'s advice, we can fulfill Laurier's dream of a country where freedom is its nationality.

MACDONALD-LAURIER INSTITUTE

MLI
TRUE NORTH
IN CANADIAN PUBLIC POLICY

323 Chapel Street, Suite 300,
Ottawa, Ontario K1N 7Z2
613-482-8327 • info@macdonaldlaurier.ca

@MLInstitute
facebook.com/MacdonaldLaurierInstitute
youtube.com/MLInstitute
linkedin.com/company/macdonald-laurier-institute