

# Canada's health-care report card shows way forward

Politically mandated universal access to health care in Canada, while still favourably perceived in terms of quality, does not translate into universal perception of timely access to care, the prerequisite to effective patient-centred care.



Terrence Montague

Health care

For almost 20 years, consecutive Health Care in Canada (HCIC) surveys have provided data and analyses that constitute Canada's health-care report card. Overall, the reports suggest that, while legislators and administrators at all levels of the system fiddle, they do so as care services to Canadians burn.

Ask Canadians what is the top priority and they will tell you that timely access to care, whether primary, specialist, community-based or end-of-life, should be our chief concern. This makes sense because, if citizens lack access to care services, other components like collegiality, quality, or cost don't matter.

Access to health care is not getting better. It is getting worse, Canadians say. In 1998, only four per cent of the public expressed a general concern around wait times. However, by 2007 the general public's concern had risen to 20 per cent and it rose to 36 per cent in 2016. Moreover, timely access to health care is perceived to be getting worse in all regions of the country: the negative momentum being highest in British Columbia and lowest in the Prairie provinces.



Canada's federal Health Minister Jane Philpott, pictured in a Hill scrum. The Hill Times photograph by Jake Wright

The only other issues even approaching this level of concern were perceived shortages of physicians and lack of funding earlier in the century, both of which have receded to 13 per cent and seven per cent, respectively, in 2016.

In terms of access to specific care services and professionals, the concern extends to most aspects of care, including emergency departments, specialists, family physicians, nurse practitioners, palliative care, long term and mental health care and access to new medicines.

With regard to stakeholders' proposals to improve care access, the public's current top choices are increasing the enrolment in profes-

sional schools and fostering professionals to work in teams. Enhanced team care is strongly supported by most professionals, as are enabling nurses and pharmacists to expand their existing roles in diagnosis and treatment of patients.

In summary, politically mandated universal access to health care in Canada, while still favourably perceived in terms of quality, does not translate into universal perception of timely access to care, the prerequisite to effective patient-centred care. While viable suggestions for improvement of access have been proposed, Canadians are pessimistic about solving the issue in the near future, with an accompanying prediction of decrease in quality of care.

Those committed to improving health care for all Canadians need look no further than the survey data and analyses provided, at no cost, at <http://www.mcgill.ca/hcic-sssc/> to understand how Canadian doctors, nurses, pharmacists, associated health professionals and administrators, as well as ordinary citizens see our health-care system; and what they believe to be the key issues that need our attention foremost.

The 2016 HCIC Report Card also provides insights relating to other areas of concern, including differences in opinions between doctors and patients, and doctors and nurses, definition of key components of patient-centred care, issues related to end of life care—including hospice and palliative care and medically assisted death—degree and reasons why patients don't adhere to prescription regimens and what Canadians most want from their health care system going forward—with insightful comparisons of how perceptions are changing over time.

Things can be better is the mantra of the HCIC Report Card. The report card tells us what we need to improve first and how. We need to get started now.

Terrence Montague, CM, CD, MD, leads the Health Care in Canada Survey on behalf of multiple partners that include the Canadian Medical Association, the Canadian Nurses Association, the Canadian Cancer Society and some dozen others. He is a principal in CareNet Health Management and adjunct professor of medicine at the University of Alberta.

The Hill Times

# Transportation and smart cities: more bits and bytes, less steel and concrete

Federal transportation infrastructure spending can deliver more bang for buck by creating an ecosystem for the adoption of innovation and technology in Canada's cities.



Vivek Sakhrani

Cities & infrastructure

Getting urban mobility right—for people and goods—will be critical to attracting talent, investment and the competitiveness of cities of the future. To further this goal, the fall economic statement introduced the idea of a Canadian Smart City Challenge in 2017. How can federal efforts help write the rules of the game and incent innovation in promising technologies to make transportation in Canadian cities smarter?

**Cities are the future, and the future is here.**

More than 50 per cent of the

world's population lives in cities, and some expect the share of urban dwellers to exceed 60 per cent by 2030. Canada's latest census showed that over 80% of Canadians already live in urban areas.

Canada's National Research Council (NRC) convened a *Cities of the Future* summit in 2016, concluding that cities must increasingly rely on data for decision-making, and adapt to rapidly changing technologies such as automation in the transportation sector. Hardware sensors, software apps and information services are among the technologies that can make transportation in cities smarter, safer, and more efficient and cities should be proactive in harnessing their potential.

**Canadian cities should capitalize on three technology areas to be more dynamic and responsive to why, how, and when people and goods move.**

**Computer Vision (CV)** is a collection of approaches that enable computers to see and sense motion, vehicles, bicycles, and pedestrians.

Self-driving cars rely on computer vision technologies such as LIDAR, but embedding CV into city infrastructure adds a different kind of smarts. By combining CV with other sensors such as GPS or Bluetooth to sense traffic flows and then optimize traffic and signal operations, cities can make busy corridors and intersections safer for pedestrians and bikers, and better manage congestion by smoothing out the flow of cars and trucks.

**Cloud storage** is already being used for data amassed through most modern sensors like CV technologies. Cities no longer need to install and manage server farms and complex IT systems, and can instead access turnkey solutions and data-driven insights, now readily available in the marketplace. Cities can free up their resources to focus on transportation system performance—using cloud-based platforms and apps for matching demand for limited car-parking with available spaces, and loading zones and curb space for truck deliveries, for example.

**Augmented or mixed reality** combines the real and the virtual. Human senses are augmented with information feeds using specialized screens, glasses, and audio. Heads up displays providing safety alerts, proximity warning to drivers, or information

on nearby transit hubs and route information to transit system users on public displays or smart devices are a few examples.

**Federal policy and investments can enable transportation in smart cities**

Canada is well placed to pilot and integrate innovations in computer science, communications, and cognition to improve transportation in cities. Announced federal infrastructure investment plans—\$180-billion over the next 11 years—can be a catalyst to encourage the adoption of these and other Smart City technologies and innovations.

Three federal strategies can help cities build the right kind of Smart City sand box for leveraging these technologies:

**Open the data flood gates, and harness crowd creativity.** Use the cloud to create an open data ecosystem. Let individuals and firms be creative about how to make use of massive de-identified data in new applications and services.

**Focus on inter-operability and standards.** Work with technology experts, system operators, and vendors to understand platforms that cannot only do more with today's assets but are also adaptable for the future. Participate in the standards setting process to ensure

that the cities' needs in protecting the public interest are met.

**Procure services, not assets.** Avoid bets on specific technologies and large-scale one-off investments will become a sunk cost as technologies become obsolete. Pay for services that turn-key solution providers can upgrade and maintain.

The federal government can build these strategies into its investment plans; for example, by re-conceiving evaluation criteria for funding allocations and project prioritization to include how cities and projects plan to use technology and innovation. The federal government can also convene as part of its investment program, a forum for establishing a common set of open data architectures, technical standards, and model service agreements across provincial and municipal jurisdictions, to further incent innovation.

Vivek Sakhrani is a member of the self-styled and unappointed Advisory Council on Transportation Infrastructure Investment composed of independent subject matter experts from CPCS, a Canadian management consulting firm with strengths in transportation and related infrastructure strategy, data science, economic analysis and policy ([www.cpcs.ca](http://www.cpcs.ca)).

The Hill Times