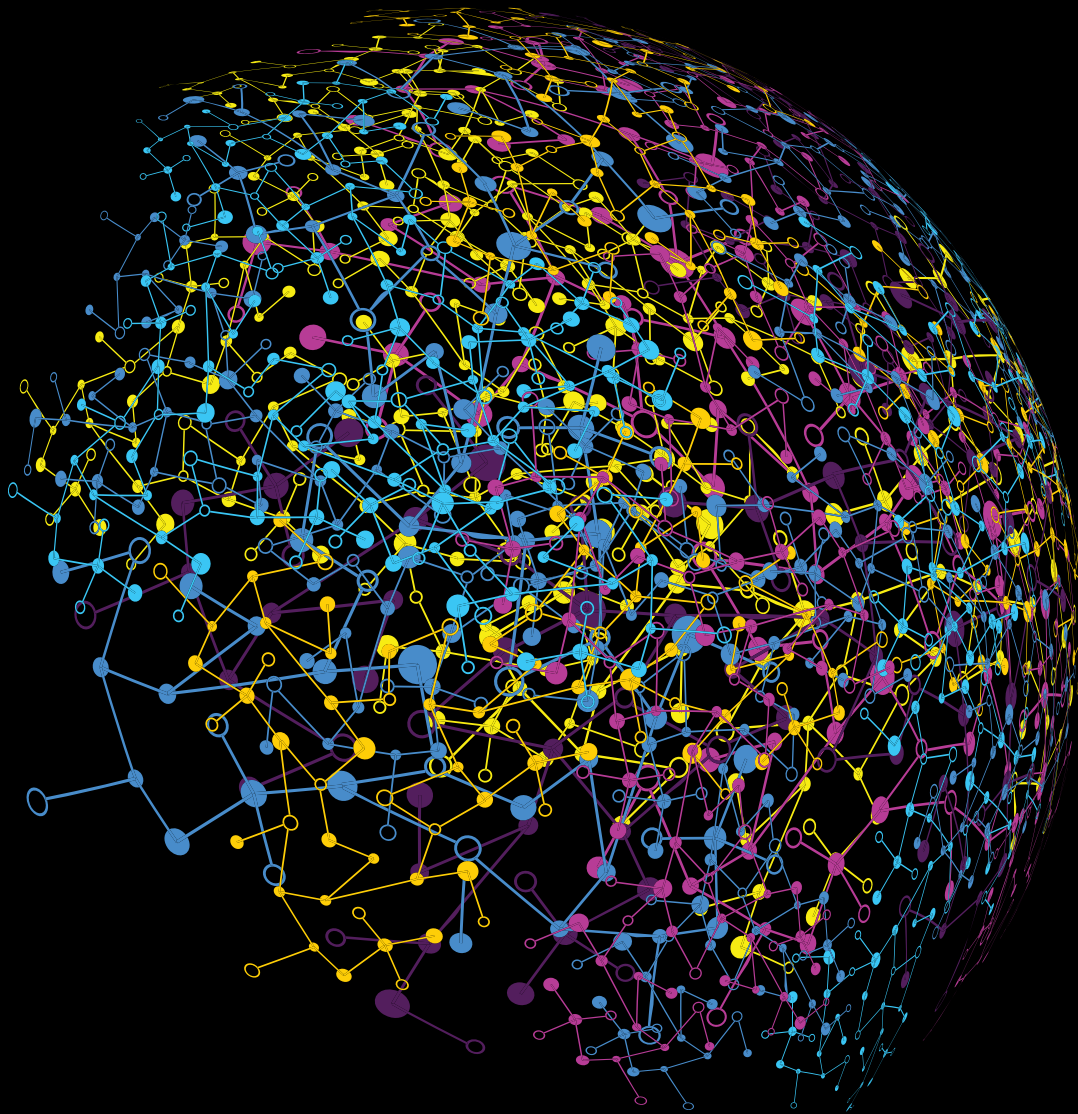


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## COVID-19

### Connecting Canadians

How COVID-19 has accelerated a holistic approach to health and well-being

**Just over 100 years ago, the 1918 Flu Pandemic changed the way people thought about health, for good. Prior to the disease, which was responsible for the deaths of approximately 2.5 to 5 percent of the global population, public health policies borrowed liberally from eugenics, blaming the poor for their own low quality of life. Although disadvantaged people suffered most, the disease's relative disregard for social class prompted a revolution toward socialized medicine and led to the creation of national health services in Europe, as well as a revamp of health policy around the world.**

Fast forward to today, and COVID-19, like past pandemics, changes citizens' understanding of health and well-being in ways that will last beyond the pandemic itself. Given physical distancing and stay-at-home measures, citizen experiences and expectations are evolving rapidly, as health care, once the sole domain of hospitals and clinicians, is now inexorably intertwined with every part of our lives, from education to grocery shopping. **The interplay of individual, community and political factors demands a holistic approach to health care enabled through the digital technologies that connect Canadians with information, and each other.**

We see three broad themes that characterizes how health care will evolve as the country transitions from response to recovery to building a prosperous future:

- An increasingly holistic approach to health and wellness, with an increased focus on social determinants, or drivers, of health

- Citizens becoming better educated and empowered to manage their own health
- A broader health care ecosystem that includes non-traditional health players

All these changes will be enabled by shifts in public policy and supported by innovations in data, that will allow us to understand the who, what, and how of the future, and the digital technologies that will enable us to scale information and experiences across geographies and populations. In alignment with Deloitte's COVID-19 Respond, Recover, and Thrive Framework, the aim is not only to help health care organizations but also citizens, their families, and communities, respond quickly, recover effectively, and thrive purposefully.



# A holistic approach to health

**Citizens are experiencing firsthand throughout this pandemic how social drivers contribute to health outcomes. The World Health Organization has stated that COVID-19 can cause more severe symptoms and complications in people with obesity-related conditions.<sup>1</sup> Seniors<sup>2</sup> and people with pre-existing conditions<sup>3</sup> are disproportionately affected by the health crisis, as are people living in lower-income neighbourhoods and areas with a greater concentration of immigrant and visible minorities.<sup>4</sup>** In particular, non-medical essential workers, who are more likely to come from socioeconomically disadvantaged groups, and include grocery clerks, personal support workers, and in-home caregivers, may be more at risk than those who are able to work from home. All these factors serve to widen health inequities and call attention to the distribution of the social drivers of disease.

Beyond physical health, COVID-19 is creating a mental health crisis due to prolonged isolation, anxiety, and uncertainty;<sup>5</sup> Canadians have experienced higher levels of depression and anxiety since the pandemic began.<sup>6</sup> Physical distancing measures are demonstrating how social connection contributes to physical health as well as mental and emotional well-being. Isolation can have significant impacts on health outcomes, with the long-term effects of loneliness being similar to those caused by smoking or obesity.<sup>7</sup> Indeed, studies show that people who do not feel connected to others are more likely to catch a cold, experience depression, develop heart disease, have lower cognitive function, and live a shorter life.

Factors such as housing, education, income, and food insecurity—which we refer to as the drivers of health—have long been understood to play an important role in the health and well-being of citizens. Their application in the design of population health interventions, however, has been more in the form of a consideration than a foundational premise.

With citizens recognizing that health goes far beyond the domain of hospitals and clinicians, the future of health will involve a holistic approach across a range of drivers of health.



# A culture of citizen empowerment

**Citizens are becoming better educated and more empowered to manage their own health. Such empowerment is an emerging trend, with 73 percent of Canadians reporting they are likely to speak up if they disagree with their doctor and 43 percent reporting using technology to measure fitness and health improvement goals (such as those linked to exercise, diet, weight, sleep).**<sup>8</sup> Although these trends were emerging before the pandemic, COVID-19 has empowered more citizens to take charge of their own health and wellness by using technology to overcome the constraints caused by social distancing. Fitness apps have seen a significant increase in users who want to track their activity and fitness goals,<sup>9</sup> meditation apps have seen an increase in downloads as COVID-19-related anxieties grow,<sup>10</sup> as have the use of video conferencing apps as citizens look to stay connected with their family, friends, and colleagues while maintaining physical distance.<sup>11</sup>

People aren't just taking care of their own health and well-being; they're looking out for their neighbours as well. Citizens are recognizing the role communities can play in health through COVID-19, a trend we expect to continue. Grassroots innovations are enabling community connectedness. For example, Toronto's CareMongering-TO community uses Facebook to connect people in need with neighbours who can help, and apps like GroceryHero pair first-line medical practitioners with neighbours who can assist them with grocery shopping, so they don't have to take additional risks by going into stores.

Stakeholders within the health ecosystem should be prepared for citizens to become more engaged in their health care and their community. Empowering citizens with resources and tools to manage their health with a holistic approach presents profound potential benefits for health care systems and the future of health.



# A broader health care ecosystem

**As citizens become more engaged in their health and well-being, and as COVID-19 impacts all facets of citizens' lives, there is recognition that health is not a health system problem alone. COVID-19 has underscored the strong case for collaboration between a broader range of sectors and services focused on health and well-being.<sup>12</sup>**

Non-traditional players such as churches, schools, employers, business leaders, financial services companies, retailers, and local organizations have a role to play in positively influencing health outcomes.

Many new partnerships have already emerged in response to the health crisis. For example, two Canadian tech giants, BlackBerry and Shopify, are joining forces to work with provincial and federal governments to deliver a contact-tracing app. Enabled through Bluetooth technology, users on the app can report if they have tested positive for COVID-19, and the app then notifies individuals who came into contact with them. In an effort to equip public safety professionals and protect public health, the Government of Canada launched the ArriveCAN mobile app for travellers to provide mandatory information upon entering the country. The mobile app generates a summary of a person's travel information that is used by Canada Border Services Officers and Quarantine Officers at ports of entry to support health screening protocols. The data obtained through the mobile application is also used by the Public Health Agency of Canada to administer and enforce legislation to keep Canadians safe and healthy. In another example, WellCan™, a free collection of digital resources and information to support the mental health of Canadians during COVID-19, was launched as the result of a collaboration between corporate partners Canada Life, Sun Life, Bell Canada/Bell Let's Talk and Morneau Shepell, along with community and public sector partners WE, Jack.org, Strongest Families Institute,

EHN Canada and Mental Health Commission of Canada<sup>1</sup>. Recently, twenty-five new corporate and community partners joined in support of WellCan™ to address the mental health challenges brought on by COVID-19 including CGI, The Globe and Mail, BMO Financial Group, RBC, Hydro One, Corus Entertainment, Starbucks Coffee Canada, Ontario Power Generation, CIBC, Sobeys, Revivre, and Humane Canada.

Recognizing that citizens are increasingly expecting a holistic approach to health and well-being, a broader range of industries and sectors, including transportation, employment, and nutrition, will need to be connected to the health ecosystem moving forward. Partnerships within an expanded health ecosystem present unique opportunities to learn from the experience of other players and sectors to use technology to develop innovative solutions that can be scaled to meet citizens' expectations. 'Non-traditional' partnerships, such as the Aetna Attain wellness program that uses the Apple Watch to encourage healthy behaviours in customers with real life rewards, will become the new norm.



# Moving forward: from responding, to recovery, and on to thriving

## Incorporating social drivers of health into the development of strategies to improve population health and well-being

As economies reopen and societies begin the process of recovery, we'll learn more about how the pandemic has impacted different population segments in unique ways. Navigating the recovery stage of the pandemic and rebuilding the economy will need to involve all parts of society. It'll be more important than ever to consider all the factors around health that allow individuals and families to regain health and economic stability and optimism. Boston-based Health Leads is an example of a leading organization that focuses on creating multi-sectoral partnerships between community

organizations, government agencies, and health authorities to reduce systemic barriers by working in new ways and reshaping how resources are deployed. Socially Determined is a healthcare analytics company focused entirely on the science and measurement of the social determinants of health (SDoH), and will help to fill a key void by quantifying the impacts of the drivers of health to inform solutions that support at-risk communities.



# Implementing data interoperability and the integration of health systems

**Growing adoption of digital solutions within the health sector, combined with an ever-increasing willingness of citizens to share personal health data, is creating a significant opportunity for a data-driven approach to monitoring and improving population health.** While foundational data collection capabilities are continuing to advance in silos, the next stage of maturity involves the integration of clinical and non-clinical datasets to make them interoperable and 'talk to each other', with the goal of improving health outcomes and promoting proactive health and well-being management.

During the recovery stage of the pandemic, organizations within the health sector that can successfully combine patient data with social drivers of health data will be central to uncovering insights that help focus population health programs and spending. For example, Chicago-based NowPow's comprehensive self-care referral platform allows for the capturing of demographic, outcome, and referral data, and can be integrated directly into a wide suite of systems to help organizations deliver 'whole person care.' Hospital information

system providers such as US-based EPIC are also helping to facilitate more seamless data exchange and interoperability. NoteWriter, the electronic template and reminder system in EPIC's platform, enables providers to enter information about barriers to care or hazards within the home, thereby capturing key inputs on drivers of health that can add a new dimension to support population health planning.



# Using digital and exponential technologies in alignment with citizen demand/expectations

**The paradigm shift from a system-driven care delivery model to a citizen-driven model had already begun to take shape prior to COVID-19, and will continue to play a significant role in how citizens approach and manage their health and well-being as we enter the recovery stage.** This shift is largely enabled by the advancements in technology that have revolutionized how and where care happens. The widespread use of smartphones—which are common even in lower income populations<sup>13</sup>—allows citizens to better engage with their own health, companies to better understand their customers, and governments and health authorities to better focus their efforts on improving population health.

The use of smartphones, wearables, and other digital health technologies creates vast amounts of data, which in turn enables care providers and organizations to understand and modify health behaviours as well as design scalable community-based health interventions to reach large population segments. As an example, Noom, a company that offers a weight management app designed by behavioural psychologists and nutritionists, combines user-inputted data with non-medical data sources and coaching to support

individuals in making sustainable lifestyle shifts to meet their weight-loss goals. Meanwhile, Curatio, a Canadian-based startup, is a mobile platform connecting patients with personalized support networks of people who share the same health conditions. Curatio also provides support, tools, and rewards to encourage participation and help patients achieve better health outcomes.





# Undertaking an ecosystem approach

**Governments should not just be a consumer of technology and innovation, but be driving and leading it, for the betterment of societies and citizens.** To do this, they will need to approach solutions very differently than before and engage in partnerships that achieve value for money, unlock value, and spur innovation. Against the backdrop of a struggling economy, enabling innovative, multi-sectoral approaches to health will be critical to meeting citizen and community expectations around the future of health in a cost-effective manner.

As the country recovers, the government will need to establish strategies that set the stage for collaboration and foster successful public-private partnerships targeted at providing accessible and equitable access to care, and keeping citizens and communities safe, healthy, and economically and socially active. This involves beginning with the end in mind, identifying existing assets, determining the relevant business models, and developing the business case that articulates value for all partners. It will also require governments to shift funding models from traditional hospitals and clinics to early-stage, community-based interventions focused on health and well-being.

COVID-19 offers a chance to approach health care differently and to apply lessons learned from past pandemics such as the 1918 Flu Pandemic. The more we can activate ecosystems and leverage drivers of health to improve the health and well-being of Canadians, the more effective we will be in transforming our medically focused health system.



# Contact

**Michael McFaul, CMC, ICD.D**  
**Partner, National Life Sciences  
and Health Care Leader**

mmcfaul@deloitte.ca  
+1 613 786 7504

# Acknowledgments

**Michelle Theroux**  
**Senior Manager, Life Sciences  
& Health Care Strategy & Innovation**

mtheroux@deloitte.ca

**Jennifer Nachshen**  
**Manager**

jnachshen@deloitte.ca

**Laura Horwood**  
**Consultant**

lhorwood@deloitte.ca

**Zain Allauddin**  
**Consultant**

zallauddin@deloitte.ca



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