

Realizing the Full Potential of Virtual Care in Ontario

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GLOSSARY

DIGITAL HEALTH LITERACY:

Refers to the ability to seek, find, understand, and appraise health information from electronic sources, and apply that knowledge to address or solve a health problem.¹

ECHO PANDEMIC:

Refers to a potential surge in mental illness and mental health issues because of COVID-19, as identified by mental health advocates.

INTERNET-BASED COGNITIVE BEHAVIOURAL THERAPY:

Refers to mental health services that are delivered through a digital platform.

INTEROPERABILITY:

Refers to the ability of two or more systems or components to exchange information and to effectively use the information that has been shared.²

PRESENTEEISM:

Describes employees who put aside a mental or physical health issue and go to work, which impacts their productivity and quality of work.

QUADRUPLE AIM:

Refers to an internationally recognized framework that encompasses an effective health care system. The four objectives within the quadruple aim are: better patient and caregiver experience; better patient and population health outcomes; better value and efficiency; and better provider experience.³

TELEMEDICINE:

Often used interchangeably with virtual care. However, telemedicine refers to a interaction with a physician by phone and is therefore just one component of the array of virtual care solutions that are available.

VIRTUAL CARE:

A broad term that encompasses the entirety of remote and technology-driven health care solutions that can take place between a patient and health care professional (i.e., interactions via video, telephone, secure messaging, and remote monitoring).⁴

EXECUTIVE SUMMARY

Although telemedicine sites have been in place for decades in Canada, virtual care has risen in prominence thanks to the COVID-19 pandemic. As in-person medical appointments became less feasible, virtual visits have enabled Ontarians to continue accessing quality care while not exposing themselves to the virus.

Pandemic restrictions, coupled with the Province's implementation of temporary billing codes, have accelerated the formal adoption of virtual care in Ontario. Given the demand for timely care, the many benefits associated with virtual care, general satisfaction with virtual visits, and continued government investment in digital health, virtual care is here to stay. Therefore, in order to appropriately and permanently integrate virtual care within the health care system, the Government of Ontario will need to consider urgent policy reforms, such as the creation of new billing codes, that allow for the effective delivery of virtual care in Ontario.

Recognizing the timeliness of this issue, the Ontario Chamber of Commerce's (OCC) Health Policy Council has developed recommendations to help the Province realize the full potential of virtual care, thereby ensuring virtual care is more accessible, equitable, integrated, and widely adopted throughout Ontario's health care system:

- 1. Develop a comprehensive framework for virtual care in Ontario.
- 2. Modify the existing fee code system to allow for the permanent delivery of virtual care, and provide physicians with training and knowledge supports to allow care to be delivered virtually.
- 3. Focus on equity to improve access to virtual care.
- 4. Support employers' continued investment in virtual care for their employees that expand beyond care delivered virtually through the health system.



INTRODUCTION

Even prior to the pandemic, Ontario's health care system faced numerous and longstanding pressures. From lengthy wait times to physician shortages to our aging population, COVID-19 further strained a system already grappling with the weight of many serious challenges. As containment measures were implemented, Ontarians began to self-isolate to prevent the spread of the virus. Most turned to virtual platforms for work, shopping, and interacting with family and friends, as in-person services were deemed high-risk. Health care was no exception.

According to Canada Health Infoway's September 2020 survey, 4% of health care visits with primary care physicians and specialists were conducted virtually before the pandemic - a number that jumped to 60% at the onset of COVID-19.5

As this report outlines, virtual care is not new. In Canada, telemedicine sites have been in place for decades, and the benefits experienced by patients, employers, and the system thanks to digital health solutions are well-documented.⁶ Moreover, a study commissioned by Medisys Health Group in 2018 suggests that support for virtual care was high even prior to COVID-19. Two-thirds of Canadians said they would use virtual care if it was offered through their benefits plan. Support was particularly strong among individuals with chronic conditions, parents, caregivers, and Millennials, who appreciate the convenience and flexibility associated with virtual care. However, the pandemic has been a turning

point, as more Ontarians seek out virtual alternatives for accessing physical and mental health supports.8 Realizing that virtual care solutions are increasingly being leveraged to minimize disruptions introduced by physical distancing measures, both the provincial and federal governments have accelerated the adoption of these options.

Recognizing the uncertainties surrounding when a vaccine will be ready and distributed, Ontarians will continue to rely on virtual care for the foreseeable future. But looking beyond the pandemic, the government has an opportunity to support the appropriate use of virtual care and recognize virtual care as a critical modality to deliver care. Virtual care is merely one modality in which care can be delivered, and should be viewed within a greater context of improving access to appropriate care for all Ontarians.

For commentary regarding the pressures facing Ontario's health care system, see: Ashley Challinor. 2016. Transformation Through Value and Innovation: Revitalizing Health Care in Ontario. OCC. https://occ.ca/wp-content/uploads/HTI March15-1.pdf.

VIRTUAL CARE IN CONTEXT

Canada was an early pioneer in the advancement of virtual care solutions. In the 1970s, Dr. Maxwell House was one of the first medical professionals to use telephone technology to provide patients in remote areas across Newfoundland with medical interactions.

Accordingly, virtual care - or, the ability to interact with a health care professional to diagnose and treat ailments remotely using any form of communications or information technology - has been available for decades in Canada.¹¹ In recent years, there has been a shift from telemedicine networks to software-based virtual care solutions.¹² Today, health care providers and patients can use their own computer, smartphone, or other device for a virtual medical appointment, and most patients do not have to leave their home.

PATIENT TO PHYSICIAN FORMS OF VIRTUAL CARE

VIRTUAL INTERACTIONS -

Connects patients with a health practitioner by phone, two-way video conferencing, and secure messaging.

REMOTE PATIENT MONITORING -

Allows health practitioners to collect, review, and monitor real-time health data (i.e., blood pressure, heart rate, oxygen levels, glucose monitoring or sensor-based glucose monitoring, and other vital signs) for patients in a residential or home setting.

PHYSICIAN TO PHYSICIAN USE OF TECHNOLOGY FOR THE DELIVERY OF CARE

PHYSICIAN-TO-PHYSICIAN COMMUNICATION -

Refers to the use of secure platforms that allow physicians and health care professionals to communicate, share information, and coordinate patient care.

STORE AND FORWARD TELEMEDICINE -

Allows health care professionals to send patient information (i.e., medical history, lab results, medical imaging, video and/or audio files) to another health care professional via a secure cloud-based platform.

Table 1¹³

At the same time, it is important to recognize that virtual care care is one component of care. Chronic disease management, mental health, and post-surgery follow-up are just some of the conditions that may be suitable for a virtual interaction. In contrast, vaccinations, certain screening tests, chest pain, and physical exams may not be suitable for virtual care. 14 Regardless of the technology available to them, physicians will always have a professional obligation to determine if virtual care is suitable for each patient.15

Moreover, while the use of virtual care increased substantially during the pandemic and satisfaction with these options is very high," it is important to note that Ontarians continue to value in-person care. When asked how they would like to access care after the pandemic is resolved, a survey conducted by Abacus Dataⁱⁱⁱ in May 2020 found 38 percent of Ontarians said they would use a virtual service, while 62 percent preferred an in-person appointment as their first point of contact with a physician. Regardless of whether they had complex or basic health care needs, most respondents preferred an in-person appointment as their first point of contact.¹⁶ Given the length of pandemic restrictions in Ontario, and the extended timeline to full vaccination of the public, further research may determine how long-lasting patient preferences may be, as virtual care becomes more commonplace and patients' overall comfort and trust in technology increases.

The Province of Ontario already has experience with deploying virtual care to support pandemic restrictions due to the SARS outbreak in 2003. At that time, the Ontario government announced the introduction of billing codes through a Ministerial Order. This allowed physicians to bill the Province for telephone interactions with patients in quarantine or where an in-person visit was not possible due to the state of emergency. Despite the ongoing discontent associated with long wait times for in-person visits, the one-year Ministerial Order was not extended, meaning the telemedicine billing codes eventually expired as the SARS outbreak was contained.

Yet, in the global health care economy, advancements in remote medical care technology accelerated and firms specializing in digital health solutions emerged. In spite of this innovation, the adoption of virtual care in the Ontario public health care system remained, as one physician describes it, "sluggish and available, almost exclusively, to those who could afford to pay for it out of pocket."17

In 2006, the Ontario Telemedicine Network (OTN) introduced virtual visits to help patients in remote locations access care. Accordingly, patients could have a virtual interaction in real time with a doctor or specialist hundreds or thousands of miles away through video conferencing. Patients would travel to a telemedicine site (usually a hospital or clinic) equipped with video conferencing hardware in their own community.¹⁸ With this technology, patients and caregivers could avoid travelling great distances to meet specialists in an urban centre.¹⁹

ii According to the survey conducted by Abacus Data on behalf of the Canadian Medical Association, 91 percent of Canadians were satisfied with their virtual care experience.

iii A survey conducted by Abacus Data on behalf of the Canadian Medical Association between May 14 and 17, 2020, with 1,800 Canadians. This survey found that 37 percent of Ontarians who needed advice from a doctor contacted their physician by phone, 29 percent used telehealth, videoconferencing, a virtual service, or text or email, eight percent went in-person, six percent went to a clinic, and five percent went to the ER.

iv Over 353,000 Ontarians accessed primary and mental health care through OTN in 2019.

By 2014, OTN launched a home video visit pilot project called OTNinvite. This pilot did not require physicians and patients to travel to an OTN site; instead, they could connect from their home or any location in Ontario by using their own electronic device. The pilot was deemed a success, and patients and providers were generally satisfied with the video visits. In 2019, the Virtual Care Working Group that was struck by the Ministry of Health and Ontario Medical Association (OMA) recommended that OTNinvite become permanent, with a phased rollout and gradual expansion of the various digital communications. In November 2020, OTNinvite became a permanent fixture in Ontario's health care system.²⁰

By November 2019, the Government of Ontario released the Digital First for Health Strategy. In the first phase of the strategy, the province committed \$3 million to compensate primary care practitioners and specialists for video visits. This funding was expected to facilitate around 55,000 more video visits in 2020. Under phase two, clinicians would have been able to use virtual care technologies that are not currently offered by OTN but met government standards. Phase three would have allowed visits via audio calls and secure messaging. The strategy was expected to be fully implemented by 2021-22.21 However, with the onset of the COVID-19 pandemic, the need to implement temporary billing codes to enable physicians to use telephone and video modalities through non-OTN technologies took precedence over the roll-out of the Province's strategy.

With the arrival of COVID-19 in Ontario, virtual care has once again risen in importance. Prior to the pandemic, most patients accessing OTN were from rural or Northern communities, and non-OTN platforms were not eligible for compensation by the Province. As advocates encouraged the government to create temporary OHIP billing codes to increase access to virtual care and prevent the spread of the virus, the Province responded swiftly, introducing such codes.²² This allowed physicians to use popular applications (i.e., Apple FaceTime, WhatsApp, Skype, Microsoft Teams, or Zoom) to reach patients virtually.

These temporary billing codes enabled the mass adoption of virtual care, which has been otherwise incremental in growth.²³ While these codes were welcomed by patients and physicians, they were a stopgap measure and have limitations. General practitioners can only choose from three billing codes that compensate physicians for short visits and assessments with patients. More specifically, these temporary codes allow physicians to provide: a minor or intermediate assessment by telephone or video; psychotherapy, psychiatric, or primary mental health care or counselling by telephone or video; and/or a specialist interaction by telephone or video. However, more complex services and interactions that are delivered virtually can only be billed using a temporary billing code that does not adequately compensate physicians. As outlined in our recommendations, a more permanent solution is needed that appropriately compensates physicians for virtual visits.

Ontario's Digital First for Health Strategy is based on four pillars: keeping patients as healthy as possible in their communities and out of hospital; ensuring patients receive care in the most appropriate setting; better integrating care providers to ensure patients spend less time waiting in hospitals when they are ready to be discharged; and building new hospital and long-term care beds while increasing community-based services across Ontario.

CANADA'S DIGITAL HEALTH SECTOR: TRANSFORMING HEALTH CARE

Ontario's life sciences sector is a significant economic driver in this province.²⁴ The sector is best described as a diverse ecosystem that includes firms in a number of industries, including drugs and pharmaceuticals; research, testing, and medical laboratories; medical cannabis; agricultural feedstock and chemicals; medical devices and equipment; and e-health and artificial intelligence. In 2017, Ontario was home to 6,140 life sciences companies, which supported almost 90,000 direct jobs. The sector also contributed \$27.4 billion in direct contributions to the GDP in 2016.²⁵

Within Ontario's life sciences sector are a number of innovative digital health firms. Recent analysis conducted by PwC Canada in partnership with CB Insights found that digital health - or the use of digital technology in the delivery of health care and design of medical products - has grown in popularity in the last decade. The pandemic has only fueled growth in digital health companies: Canada-based digital health start-ups raised over \$390 million in venture capital in 2020, almost double the amount of VC raised by similar start-ups in 2019. As PwC Canada explains, COVID-19 has not only increased demand for virtual care, but it has also brought about interest in other kinds of digital health solutions, such as machine learning algorithms that can predict disease and infection outbreaks.26

By acting on the recommendations in this report, the Province could further support the growth of digital health companies and relevant innovations. Given the salience of and demand for virtual care, this could in turn contribute to Ontario's post-pandemic economic recovery.



CHALLENGES TO ACCESSING TIMELY CARE

While the quality of Ontario's health care system is generally high, of there are challenges when it comes to accessing timely and appropriate care. Data from Health Quality Ontario reveals that seven percent of Ontarians do not have a family doctor, while only 40 percent of Ontarians were able to have a same-day or the next day appointment with their primary care provider.²⁷ This situation leads some Ontarians who do not have a family doctor to visit walk-in clinics or emergency rooms for routine and minor health issues and to access care outside of regular business hours.²⁸ Given the challenges associated with accessing care quickly and conveniently, almost 70 percent of Canadians postpone or avoid medical appointments altogether.²⁹ This can worsen conditions and increase future hospital visits.³⁰ Furthermore, access to care is particularly challenging for patients in rural, remote, Northern, and Indigenous communities who must travel to urban centres for appointments. It is also challenging for individuals with mobility issues, immunocompromised patient populations, and seniors. Family doctor shortages and the rise in chronic conditions are also driving the demand for virtual care solutions that brings care directly to a patient.³¹

vi According to the Conference Board of Canada's 2015 assessment on how the provinces and territories perform when it comes to health care, Ontario received a "B." British Columbia was the top performing province with an "A." In comparison to 29 other international jurisdictions, Ontario ranked seventh.



CASE STUDY: The University Health Network's eKidneyCare App

While most virtual care advocates note the benefits for patients, digital health solutions can also help primary care providers, specialists, and other health care professionals better collaborate and communicate with one another, thereby improving the patient experience.

In 2015, Toronto General Hospital's (TGH) Division of Nephrology Strategic Action Group developed a mobile app called eKidney-Care. The app allows patients with kidney disease to self-manage their condition by recording their blood pressure, tracking symptoms, managing medication use, and sending lab results to their nephrologist and primary care provider. If a patient's symptoms become critical, the app sends an email alerts to their care team and prompts the patient to make an appointment with their physician. The app also reminds patients to check their blood pressure and update their medication profile. By reviewing this information, a member of the patient's care team (i.e., their primary care provider, nephrologist, pharmacist, nurse, etc.) can identify potentially harmful drug interactions and suggest an appropriate alternative. The app is also unique in that it provides patients with immediate feedback through personalized messages from their care team. Taken together, the app empowers patients to manage their condition and engage in healthy behaviours, as well as allows patients to work in partnership with their entire care team.32

In 2018, the team at TGH launched a one-year pilot studyvii to determine whether an established online platform called eConsult was suitable for the management of patients with kidney disease. eConsult allows primary care providers and nephrologists to communicate and triage referrals virtually. During the pilot, researchers compared the eConsult platform with traditional referrals from primary care providers to determine whether the platform provided more timely access to a nephrologist. For patients who were referred to a nephrologist through eConsult, the median wait time was 15 hours. In comparison, the median wait time for patients who were referred by their primary care provider to a nephrologist for their first clinic appointment was 111 days (or almost four months).

The researchers concluded that digital health solutions can break down silos between primary care providers and specialists that often lead to delays in the diagnosis and treatment of patients with chronic conditions. By streamlining the interaction and referral process between physicians and nephrologists, the eConsult platform introduced an efficiency into this process and reduced the wait time associated with accessing kidney care. The app also facilitated better blood pressure control, medication adherence, and a decrease in medication errors for patients.³³ Based on these positive findings, the team hopes to expand the app so that patients with other chronic conditions and health teams outside of the University Health Network can take advantage of this application. The team is also working to improve the features within eKidneyCare. Beyond improving the provider experience by breaking down communication silos between health care providers, the team behind eKindneyCare believes that digital health solutions can support a more sustainable health care ecosystem in Ontario.



vii The pilot was conducted between January 8, 2018 to January 11, 2019, with 52 primary care physicians, 23 nephrologists, and 47 patients. A total of 259 traditional referrals and 105 eConsults were submitted during this period.

ENSURING EQUITABLE ACCESS TO VIRTUAL CARE SOLUTIONS

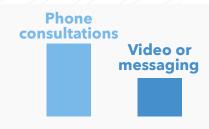
The increase in virtual medical interactions during the COVID-19 pandemic has rightly sparked concerns around equitable access to care. Many Ontarians in rural, remote, Northern, and Indigenous communities do not have reliable broadband internet and adequate bandwidth in comparison to those living in urban centres. Twelve percent of Ontariansviii (or 1.7 million individuals) live in communities without access to minimum internet service, which limits their ability to participate in today's digital economy³⁴ and access virtual care.³⁵ Secondly, many Canadians lack digital health literacy, which hinders their ability to access virtual care. A surveyix by Lumino Health indicates that more than half of Canadians (55 percent) do not know how to find virtual care services.³⁶ Finally, Ontario is home to over 622,000 Franco Ontarians, representing Canada's largest Francophone community outside of Quebec. The use of consumer products for virtual care interactions (i.e., applications not specifically designed for formal diagnostic purposes) may potentially disenfranchise those who do not speak English if the Province's service requirements are not enforced.

Given the uncertain COVID-19 vaccine deployment timeline, physicians and patients alike will continue to rely on virtual care. Ontario's policy framework must necessarily reflect this, not as temporary trend, but a permanent character of our health care system. Unlike the short-lived, stop-gap approach to virtual care implemented during the SARS epidemic, digital options should be entrenched in Ontario's health care system and investments to support that infrastructure should be made with equity considerations in mind.

viii The Northern Policy Institute estimates that almost 16 percent of northern Ontarians continue to experience bandwidth speeds below the Canadian Radio-television and Telecommunications Commission's (CRTC) target: at least 50 megabits per second and upload speeds of 10 megabits per second.

ix A survey conducted by Lumino Health between May 8 and 11, 2020, with 1,001 Canadians over the age of 18.

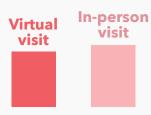
EXPERIENCES WITH THE HEALTH CARE SYSTEM AND VIRTUAL CARE DURING COVID-19



55% of respondents were satisfied with phone interactions, while 29% were satisfied with virtual visits by video or messaging



60% of health care visits were conducted virtually, with telephone interactions making up most of these visits



43% said they preferred a virtual visit for their next visit, while **48%** preferred an in-person visit

TOP REASONS FOR CHOOSING A VIRTUAL VISIT:

- Only option available to respondent
- To decrease exposure to infectious diseases
- Save travel time and associated costs



TOP REASONS FOR CHOOSING AN IN-PERSON VISIT:

- Virtual care not appropriate for respondent's health concern
- Quality of in-person visit perceived to be better than a virtual visit
- Virtual care did not meet respondent's needs



FOLLOWING A VIRTUAL VISIT, RESPONDENTS:



- Renewed a prescription
- Received a new prescription
- Received information that helped reduce their concerns
- Had a new lab or diagnostic test ordered

Table 2³⁷

BENEFITS TO THE HEALTH CARE SYSTEM

Virtual care is not merely convenient; by enabling easier and faster patient access to care, digital solutions have the potential to prevent small health issues from turning into serious ones. There are also specific benefits to managing chronic disease, tackling the backlog of treatments created by the pandemic, and treating mental health.

BENEFITS TO PATIENTS

- Timely access to physical and mental health care
- Better manage physical and mental health
- Improved adherence to treatment protocols
- Increased comfort and convenience
- Avoid hospital visits for those who are immunosuppressed
- Reduce time away from work
- Save on travel and transportation time and costs

BENEFITS TO THE HEALTH CARE SYSTEM

- Reduce wait times
- Improve access to care
- Decrease missed appointments
- Reduce unnecessary visits to specialists and the ER
- Reduce hospital admissions due to unmanaged conditions
- Reduce system costs
- Increase efficiencies
- Complement existing forms of care

BENEFITS TO EMPLOYERS

- Healthier workforce
- Reduce absenteeism
- Reduce presenteeism
- Increase productivity
- Improve employee engagement
- Help attract and retain talent
- Improve adherence to treatment protocols
- Increase employee wellness

Table 3³⁸

Chronic Disease Management and Virtual Care

As the number of patients with chronic conditions rises, virtual care could help reduce the subsequent rise in costs and alleviate capacity -constrained health systems. Chronic disease patients rely on the health care system twice as frequently as those without a chronic condition.³⁹ These patients attend regular appointments, complete frequent tests, and maintain complex treatment regimens. Virtual care allows patients with chronic conditions to manage their health at a time when in-person visits are less feasible. In addition, since technology brings care closer to the patient, this added convenience increases the likelihood that patients will take the steps needed to manage their health and, in doing so, improve health outcomes for these patients.40

However, recent data suggests that some Canadians with chronic diseases have been avoiding or not receiving in-person care during the COVID-19 pandemic. These patients have deferred medical care that they deem non-urgent due to concerns that in-person such an interactions with the health care system, like sitting in a waiting room for an appointment or undergoing a screening test, could expose them to the coronavirus.41

For people with diabetes, this situation presents real concerns. Diabetes Canada estimates that 10 percent of Ontarians live with Type 1 or Type 2 diabetes. Not only does diabetes cost Ontario's health care system an estimated \$1.6 billion each year, it also impacts individual Ontarians. In comparison to the general population, diabetics are over three times more likely to be hospitalized with cardiovascular disease, twelve times more likely to be hospitalized with end-stage renal disease, and 20 times more likely to be hospitalized for a non-traumatic lower limb amputation. Further, 30 percent of diabetics have clinically relevant depressive symptoms.⁴²

DIABETIC PATIENTS AND COVID-19

72% had a phone or video interaction with their health care provider (i.e., nurse, doctor, rehabilitation specialist, etc.) in the last three months

44% share their diabetes data digitally with their clinic

73% are worried about catching COVID-19

53% felt their virtual visit with a health care provider was as good as an in-person visit

40% are concerned about their mental health

30% reported anxiety, stress, depression, or anger, while

32% reported feeling lonely

Table 4⁴³

In June 2020, Diabetes Canada conducted a survey that examined how COVID-19 has impacted Canadians living with and/or caring for someone with diabetes.xi Table 4 summarizes findings from this survey. Given the uptick in virtual care among people with diabetes and the positive response, the survey suggests that virtual care could become an integral part of diabetes care, especially for follow-up visits and remote patient monitoring. By maintaining a healthy lifestyle, adhering to their treatment plan, and participating in regular check-ups, patients with chronic diseases can prevent their condition(s) from worsening, reduce hospital admissions, and, in the long run, reduce costs to the health care system.

^{*}Diabetes Canada estimates that by 2030, 12 percent of Ontarians will have Type 1 or Type 2 diabetes, which could cost the province's health care system \$2 billion per year in direct costs.

 $^{^{\}star i}$ A survey conducted by Diabetes Canada in June 2020, with 997 Canadians. Approximately half of respondents were from Ontario.

Tackling the Backlog of Care Due to COVID-19

Despite the introduction of temporary billing codes and more virtual care options, physicians have not been able to see as many patients as they did prior to the pandemic;xii 13.3 million fewer patient services were provided in Ontario between March and August 2020 in comparison to the same period in 2019.44 In addition, when it became clear that the coronavirus posed a public health threat and as cases began to rise, Ontario cancelled non-essential surgeries to reduce the spread of the virus and ensure hospitals had the capacity to respond to a surge in coronavirus patients. As a result, 148,364 non-emergency surgeries (i.e., knee replacement, hip replacement, cataract surgery) have been postponed, a situation that greatly impacts patients' quality of life.45

In a recent report, the Canadian Medical Association (CMA) notes that, although non-essential procedures have began to resume, a sizeable backlog of procedures remains, which places significant pressure on a system that is already stretched.⁴⁶ As of August 28, 2020, 33 percent of patients with cardiovascular conditions have been undiagnosed or untreated in Canada. The backlog sits at 30 percent for patients in need of diabetes therapy, 28 percent for oncology patients, and 28 percent for patients in need of respiratory therapy.⁴⁷ It is estimated that it would take 15 months to clear Ontario's backlog in surgeries.⁴⁸ To help address this backlog, the Government of Ontario committed to a \$283.7 million investment in its 2020 Budget.

As we write this report, Canada is deep in the second wave of the pandemic. The OMA, CMA, and other stakeholders previously noted that a resurgence of the pandemic and another pause on non-emergency services could worsen the backlog caused by COVID-19 and continue to magnify wait times for patients.⁴⁹ The full impact of this resurgence on the treatment backlog is not yet known. Regardless, until a vaccine for COVID-19 is widely in use among the public, it will continue to be difficult for patients to

receive care and physicians to catch-up on the millions of postponed patient services.50

In the meantime, virtual care can play an important role by reducing some of the backlog in patient services and the so-called "cost of contact" during the pandemic. Since virtual interactions do not require physicians to sanitize an exam room and equipment in-between patients, nor change personal protective equipment, the resources saved on these time-consuming - albeit critical - public health precautions could be used to care for more patients in a day. The pandemic has also raised awareness about how physical contact with the health care system can expose patients and physicians to disease. This situation has in turn raised questions about how the system could be redesigned to reduce the risk of infection, including limiting in-person medical interactions to those that are necessary and implementing virtual appointments when possible and appropriate.⁵¹ By allowing physicians to continue treating patients, virtual care is helping patients avoid the risks associated with in-person visits, as well as avoid long delays in accessing preventative medicine. By preventing minor health issues from becoming more serious ones, virtual care has the potential to mitigate future hospitalizations and costly interventions, as well as reduce the strain on an already overwhelmed health care system.⁵²

vii On September 25th, the Government of Ontario announced it will invest \$741 million to help clear the backlog of surgeries and build additional capacity in the health care system to help manage surges and outbreaks in COVID-19 cases.

Mental Health, Virtual Care, and COVID-19

Due to the impact of the pandemic, many Canadians are concerned about their health, employment, finances, and futures. Statistics Canada found that the share of Canadians reporting poor or fair mental health worsened between March and May 2020. Over half of the respondents indicated their mental health had declined as public health measures that were put in place to prevent the spread of the virus (i.e., physical distancing), resulting in feelings of social isolation for many.⁵³

HOW COVID-19 IS IMPACTING ONTARIANS' MENTAL HEALTH



67% of respondents were concerned about the mental health impact that COVID-19 is having on their family/friends



53% were concerned about their own mental health



Respondents were more likely to believe their **mental health had worsened** in comparison to their physical health at the start of the pandemic



23% report consuming more substances like alcohol, tobacco, or cannabis



70% were concerned that they would catch the virus or lose family/friends to COVID-19

Table 5⁵⁴

Against this backdrop, alcohol and cannabis consumption has also increased during the pandemic: almost 70 percent of Ontario respondentsxiii said their alcohol consumption had increased, while six percent said their cannabis consumption increased in March/ April.⁵⁵ Although these substances can temporarily relieve feelings of stress and anxiety, excessive consumption can weaken the body's immune system, making individuals susceptible to illnesses and infections like COVID-19.56 In 2017, substance use cost the Canadian economy nearly \$46 billion and, as the Canadian Centre on Substance Use and Addiction suggests, if substance use continues to rise with COVID-19, this situation may increase future costs for government.57

In addition, mental health advocates have expressed concerns about the mental health of certain workers and demographics. Essential workers - grocery, delivery, and others - have faced heavier workloads in much riskier work environments in the last ten months.⁵⁸ COVID-19 has also increased demand for health services. putting a strain on physicians and health care workers. According to an April poll, xiv almost half of health care workers said they needed psychological support, reporting feeling anxious, unsafe, overwhelmed, helpless, sleep-deprived, and discouraged.⁵⁹ Recognizing the second wave and the backlog of delayed care, the stresses placed on health care professionals will continue to be felt in the months and years ahead.60

Mental health advocates also note that the pandemic has made life more difficult for Canadians who were already vulnerable. A survey^{xv} conducted by Maru/Matchbox found that individuals who were struggling with their mental health before the pandemic were more likely to say their mental health has declined, as well as report depression, difficulties coping, suicidal thoughts, and self-harm. The Canadian Mental Health Association (CMHA) also

found that parents, women, racialized groups, individuals with low incomes, disabled individuals, and those who identify as LGBTQ+ are more likely to report pronounced mental health concerns.⁶¹ As the CMHA explains, this situation could put additional strain on Ontario's mental health system, requires special attention from policymakers, and a continued investment in mental health.62

According to the CMHA, the response from government has centred on virtual and app-based mental health supports, which are scalable and cost-effective. (Appendix I provides a summary of recent investments and initiatives undertaken by the federal and provincial government to increase mental health supports and virtual care.) The CMHA notes these announcements have generally focused on helping Canadians requiring low intensity supports for general mental health issues and without a history of mental illness. Canadians with pre-existing mental health concerns, health care and other essential workers, and COVID-19 survivors face serious mental health challenges and are at greater risk for developing severe mental health difficulties. Despite this gap, the CMHA believes that virtual mental health supports reduce barriers to mental health interactions, provide an opportunity to intervene much sooner in the continuum between mental health and mental illness, and could help prevent an 'echo pandemic' of mental health problems in the future. 63

xiii A study conducted by Nanos Research on behalf of the Canadian Centre on Substance Use and Addiction between March 30 and April, 2020, with 1,036 Canadians aged 18 and older.

xiv A survey conducted by Potloc and the Canadian Public Health Association between April 1 and 6, 2020, with 578 respondents across Canada.

xv A survey conducted by Maru/Matchbox on behalf of the Canadian Mental Health Association between May 14 and 29, 2020, with 3,000 Canadians over the age of 18.

At the same time, as some workers return to the office and others continue to work remotely, employers should keep employee mental health - as well as physical health - top of mind.⁶⁴ In a survey^{xvi} conducted by Morneau Shepell, 34 percent of respondents said their employer has been supporting employee mental health inconsistently, poorly, or very poorly during the pandemic. 65 Some respondents felt unsupported by their employers, underscoring the need for firms to proactively promote health plans and relevant resources, undertake campaigns to reduce the stigma associated with seeking mental health support, and demonstrate that they value mental health. 66 Not only does poor mental health impact individuals, it also negatively impacts employers and government in terms of higher health and disability costs and lower productivity and absences.⁶⁷

Accordingly, the private sector has an important to role to play in supporting Ontarians' mental health and, by promoting mental wellness today, employers can help curb mental illness in the future.⁶⁸ In 2017, the OCC released a toolkit entitled, Working Towards Mental Wellness: A Toolkit for Employers. xviii This resource was intended to encourage employers to invest in mentally healthy workplaces and provided Ontario businesses with relevant resources. By continuing to ensure that Ontarians have the supports needed to take control of their mental wellness during this unprecedented period, workers will be mentally and physically ready to work and contribute to economic recovery efforts.



xvi A survey conducted by Morneau Shepell between May 29 and June 9, 2020, with 3,000 respondents in Canada. xvii The OCC is in the process of updating its 2017 toolkit considering the impact that COVID-19 has had on Canadians' mental health.

EMPLOYER ATTITUDES TOWARDS VIRTUAL CARE

For employers, virtual options that build on virtual care for medically necessary care should be a desirable addition to their benefits package. First, virtual care and virtual options that expand beyond medically necessary care can improve productivity in the workplace. Recent data from Statistics Canada indicates that Ontarians missed seven days from work due to illness/disability in 2019.⁶⁹ Not only do workers take time off of work because they are sick, they also miss work to attend medical appointments and follow-ups.⁷⁰ Further, prior to the pandemic approximately two-thirds of Canadians suffering with mental health issues did not seek treatment. Whether this owed to the stigma surrounding mental health or difficulties accessing limited mental health supports, 500,000 Canadians missed work every week due to their mental health, resulting in \$6.3 billion in lost productivity.⁷¹ Thus, long wait times and time off work can be avoided. Not surprisingly, a 2018 study by Medisys Health Group found that 71 percent of Canadians said they would trade some of their health care benefits for access to expanding virtual options.⁷²

Secondly, as Canada's population ages and the number of Canadians with chronic conditions rises, this demographic trend will in turn increase health costs for employers. Accordingly, some employers choose to include virtual options in their health plans to build a healthier workforce and reduce costs.⁷³

Lastly, in the war for talent some employers recognize that virtual options can be part of a competitive benefits package both for current employees and potential new hires.⁷⁴ Seventy-two percent of Canadians who participated in an Ipsos survey^{xviii} in 2019 said they would perceive their employer more positively if they offered a virtual solution through their group benefits plan, especially for mental health services.⁷⁵ A 2019 survey^{xiix} conducted by Mercer also found that the broader the range of health and wellbeing resources an employer offered, the more workers felt supported by (and therefore loyal to) their employer. Twenty-six percent of employees said they were less likely to look for another job if their current employer promoted or sponsored digital health solutions. In addition, almost 40 percent of employers believed that digital health solutions would help with staff retention. While only nine percent of Canadian employers offered virtual care services as part of their benefits package in 2018,⁷⁶ Mercer's study suggests this number could rise given that 54 percent of Canadian employers who participated in their survey intended to make additional investments in the next five years.⁷⁷ It is possible that the pandemic may have also accelerated the adoption of virtual options in employee benefits packages.

xviii A survey conducted by Ipsos between May 7 and 10, 2019 on behalf of RBC Insurance, with 1,501 employed Canadians over the age of 18. xix A survey conducted by Mercer and Oliver Wyman in June 2019, with 16,564 workers and 1,300 C-suite and senior-level executives at organizations of all sizes in 13 countries. In total, 1,066 workers and 100 employers participated in the Canadian survey.

RECOMMENDATIONS

As discussed within this report, the rapid adoption of virtual care with the onset of COVID-19 has made a clear case for action from the Government of Ontario. The following section provides the Province with four recommendations that, once implemented, would allow for the implementation of broad, permanent virtual care solutions that support the quadruple aim of health care: improve the patient and caregiver experience; improve the health of Ontarians; ensure system sustainability; and improve the work life of health care providers.

1. Develop a comprehensive framework for virtual care in Ontario.

Virtual care has grown significantly since the Province released its *Digital First for Health Strategy* in November 2019 and COVID-19 was declared a pandemic in mid-March 2020. To build on previous work within this critical new context, the Government of Ontario should bring together relevant organizations, including health care providers, representatives from the private sector, and patient groups, to develop an actionable framework for virtual care in Ontario.

a. Work With the Private Sector to Develop the Tools and Platforms to Allow Medically Necessary Care to Be Delivered Virtually

Beyond tackling longstanding issues (i.e., patient privacy and security, data interoperability,** equitable access to care, etc.), and developing the resources that clinicians and patients need to use virtual care (i.e., permanent billing codes and digital health literacy), this joint-solutioning activity should identify means of developing appropriate private sector partnerships that the Province could pursue to advance virtual care. In August 2020, the Government of Ontario partnered with 3M Canada and the federal government to produce made-in-Ontario N95 respirators to ensure an adequate supply for health care workers. Similarly, COVID-19 has introduced a unique opportunity for the Province to work with Ontario-based digital health software and hardware development companies and, in so doing, meet the targets set out in its original strategy, create a robust domestic market for digital health tools and platforms, and retain innovative talent in Ontario.

2. Modify the existing fee code system to allow for the permanent delivery of virtual care, and provide physicians with training and knowledge supports to allow care to be delivered virtually.

With the onset of the coronavirus pandemic, Ontario doctors were advised against in-person patient care in non-essential situations, requiring a major shift to virtual care. As previously mentioned, physicians were given three temporary billing codes for video and telephone visits, including non-OTN consumer technology and platforms that are not designed for medical care, enabling physicians to charge the province for virtual appointments. Biven the uptick in virtual care usage during this period, the resurgence of the pandemic in a second wave, an uncertain timeline for a vaccine, and the on-going need to reduce unnecessary ER visits, a more permanent and comprehensive solution is needed. The Government of Ontario should use existing billing codes in the Schedule of Benefits to allow all physicians to provide any insured health care service that can be appropriately delivered by telephone, video, or secure messaging, as well as ensure physicians are appropriately compensated

^{**} For commentary on data interoperability and sharing standards in health care, see: Ontario Chamber of Commerce. 2020. 2020 Provincial Pre-Budget Submission. https://occ.ca/wp-content/uploads/Provincial-Pre-Budget-Submission-2020-Fall.pdf.



for virtual visits. Moreover, the cost to the province should be neutral. In other words, any service that can be performed virtually should be billed the same as an in-person visit.⁸⁰ In June 2020, Alberta committed to making its virtual billing codes permanent. Without similar steps in Ontario, these temporary codes will expire on March 14, 2021.⁸¹

Further, the Government of Ontario should work with relevant stakeholders to ensure health care providers are equipped with the supports (i.e., tools, educational materials, etc.) and knowledge needed to use and integrate virtual care solutions in their practice. For instance, OntarioMD has webinars and a comprehensive website dedicated to virtual care, while the Ontario Telemedicine Network has an online training centre. These types of resources should also be identified and widely distributed, thus providing clinicians with guidance on incorporating virtual care solutions into their workflow. Doing so would also address the fourth goal in the quadruple aim framework, which aims to improve the work life of health care workers.

3. Focus on equity to improve access to virtual care.

Given the importance of ensuring equitable access to virtual care solutions, there are three areas the Province should prioritize as part of its virtual care framework:

a. Prioritize High-Speed Internet as Critical to Health Care Delivery

Since an internet connection is necessary for many virtual care interactions, the lack of connectivity in some parts of the province limits access to ,and affects the quality of, health care for Ontarians. The Province should continue to recognize broadband infrastructure and cellular service as critical to the delivery of health care and virtual care in Ontario. The 2019 Broadband and Cellular Action Plan notes that access to high-speed internet allows businesses to increase their productivity, market their products/services, reach new and existing customers, and create additional jobs. However, the plan does not provide any details about how broadband infrastructure is (and will continue to be) critical to accessing virtual care.

The Province's announced \$680 million investment over four years will be critical to expanding broadband infrastructure in unserved and underserved communities. The additional \$750 million in the federal government's Universal Broadband Fund^{xxi} is also welcome news. Yet, this investment was originally announced in the federal government's 2019 Budget and little progress has been made towards spending those funds. Thus, the Province should encourage the Government of Canada to expedite these investments in rural and remote communities given the increasing demand for high-speed, reliable internet.

Bridging the broadband divide is critical to ensuring all Ontarians have equitable access to reliable and affordable internet connectivity, as it will help ensure that the expansion of virtual care options does not exacerbate inequities for patients in rural, remote, northern, and Indigenous communities.

The federal government's Universal Broadband Fund will connect 98 percent of Canadians to high-speed internet by 2026, with the goal of connecting all Canadians by 2030.

b. Allow All Modalities of Virtual Care to be Billable

In addition to access to high speed internet, virtual care requires access to technology, such as a home phone, mobile phone, computer, or tablet to connect a patient with a health care professional. While most Ontario households had a landline (65 percent), mobile phone (90 percent), or tablet (56 percent) in 2016-2017,⁸⁴ gaps in access persist. Not only should the expanded availability of virtual care continue permanently beyond COVID-19, but all modalities of virtual care should also be billable (i.e., telephone visits, video interactions, secure messaging, etc.) and viewed as equivalent and appropriately compensated.

Doing so would ensure that health care providers have choice in selecting a modality that aligns with their technological preferences and capabilities. It also ensures that physicians can reach all patients, particularly seniors, newcomers, low-income groups, and those in rural, remote, Northern, and Indigenous communities who are often unable to access video interactions due to broadband challenges. Without an array of modalities to choose from, certain patients could be disadvantaged.⁸⁵ By providing patients with range of technological options, this also increases access to care for patients.

c. Measure and Develop Digital Health Literacy Among Ontarians

The Government of Ontario should work with virtual care providers, health care professionals, and other relevant stakeholders to develop indicators and measure digital health literacy among Ontarians. ⁸⁶ Currently, there is no data available on digital health literacy. ⁸⁷ Capturing this data would help the province understand the limitations to virtual care uptake as well as measure the success of their digital health strategy. The Province should also work with stakeholders to develop a campaign that fills knowledge gaps by providing targeted messaging for certain demographics (i.e., seniors and caregivers) and basic information for the general population, such as what virtual care refers to, how virtual medical appointments work, what patients can expect during a virtual medical appointment, and how to prepare for a virtual appointment. Finally, the Province should create tools and resources that patients and caregivers can use to enhance their digital health literacy. ⁸⁸

4. Support employers' continued investment in virtual care for their employees that expand beyond care delivered virtually through the health system.

Both employers and employees value virtual care. Given the many benefits of, and broad appetite for, virtual care options, Ontario employers should explore virtual care solutions for their group benefits plan to improve access to health and mental health care outside of business hours, reduce time missed at work, improve overall health outcomes, and better attract and retain talent.

CONCLUSION

The recommendations identified in this report are meant to help the Province realize the full potential of virtual care, ensuring it becomes a permanent part of our health care system, and that all Ontarians can access timely and appropriate care, no matter their circumstances.

As previously noted, virtual care is not new. However, as COVID-19 public health directives advised physicians against face-to-face patient care in non-urgent situations, virtual care solutions became the norm seemingly overnight. 89 Virtual care has therefore allowed patients to access physical and mental health services during the pandemic despite public health restrictions. By empowering patients to manage their health while at home, virtual care has the potential to reduce the strain on primary care physicians and hospitals, lessen the backlog in care, and protect frontline workers from exposure to the virus.

Looking to the future, Ontario's health care system faces numerous pressures and growing costs. In addition to COVID-19, the province is experiencing a backlog in non-essential surgeries, a rise in chronic conditions, a potential echo pandemic due to mental health issues, and an aging population. Meanwhile, the landscape is changing with shifting patient expectations and the desire to access quality care quickly using modern technology. 90 Accordingly, policymakers must continue to introduce and improve solutions, like virtual care, that can help relieve pressure while ensuring patients have access to the care and services they need.

APPENDIX I

The following provides a summary of investments and initiatives undertaken by the Government of Canada and Government of Ontario in 2020 to advance virtual care options and invest in mental health supports:

- On April 2, the Government of Ontario announced it would provide up to \$12 million in emergency funding to expand online and virtual mental health supports, as well as \$2.6 million to hire psychologists and other mental health professionals to support the Ontario Provincial Police.91
- On May 3, to mark the start of Mental Health Week, the Government of Canada announced a \$240 million investment to support the creation of digital platforms and applications, improve access to virtual mental health supports, and expand capacity to deliver health care virtually.92
- On May 5, the Government of Ontario announced the expansion of free mental health supports to include MindBeacon's internet-based cognitive behavioural therapy. Ontarians can take advantage of free digital messaging, as well as readings and activities, with a registered therapist.93
- On September 23, the federal government's Speech from the Throne included a commitment to increase access to mental health resources.
- On September 30, the Government of Ontario released its \$2.8 billion COVID-19 Fall Preparedness Plan based on six pillars. The fourth pillar commits \$457.49 million to prepare for surges in COVID-19 cases, including expanding digital health and virtual care services.94
- On October 6, the Government of Ontario announced it will invest \$19.25 million into mental health supports for post-secondary students in 2020-2021, thereby strengthening community partnerships and increasing mental health workers and programs.95
- On October 7, the Government of Ontario announced it will provide an additional \$176 million in 2020 to help expand access for mental health and addictions supports during COVID-19.96
- On October 21, the Government of Ontario announced it will invest \$24.3 million to hire additional staff, increase access to counselling and therapy, create new programs to help manage stress, depression, anxiety, and address eating disorders and other challenges facing children and youth.⁹⁷

WORKS CITED

- 1 Canadian Medical Association, 2019, Virtual Care in Canada: Discussion Paper, https://www.cma.ca/sites/default/files/pdf/News/Virtual Care discussionpaper v2EN.pdf.
- 2 Moritz Lehne et al. "Why digital medicine depends on interoperability." August 20, 2019. Nature Research. https://www.nature.com/articles/s41746-019-0158-1.
- 3 Government of Ontario. "Chapter 2: The vision for health care in Ontario." June 24, 2019. https://www.ontario.ca/document/healthy-ontario-building-sustainable-health-care-system/chapter-2-visionhealth-care-ontario.
- 4 Care Innovations. "What is Virtual Healthcare, and How Does it Fit into Telehealth?" https://news.careinnovations.com/blog/what-is-virtual-healthcare-how-does-it-fit-into-telehealth.
- 5 Canada Health Infoway. Canadians' Health Care Experiences During COVID-19. September 2020 Edition. https://www.infoway-inforoute.ca/en/component/edocman/resources/reports/benefits-evaluation/3828-canadians-health-care-experiences-during-covid-19.
- 6 Canadian Partnership Against Cancer. 2019. Environmental Scan: Virtual Care in Canada. https://s22457.pcdn.co/wp-content/uploads/2019/09/Virtual-Care-Environmental-Scan-EN.pdf.
- 7 Medisys. 2019. Virtual Healthcare in Canada: The Solution at Our Fingertips. https://blog.medisys.ca/virtual-healthcare-in-canada.
- 8 Canadian Medical Association. COVID-19 Short-Term Considerations for the Canadian Medical Association: Executive Report. August 2020. https://www.cma.ca/sites/default/files/pdf/News/ covid-19-short-term-considerations-executive-report-e.pdf.
- 9 Canadian Medical Association. Virtual Care: Recommendations for Scaling Up Virtual Medical Services. Report of the Virtual Care Task Force. February 2020. https://www.cma.ca/sites/default/ files/pdf/virtual-care/ReportoftheVirtualCareTaskForce.pdf.
- 10 Ibid.
- 11 Ibid.
- 12 Canadian Partnership Against Cancer. 2019. Environmental Scan: Virtual Care in Canada. https://s22457.pcdn.co/wp-content/uploads/2019/09/Virtual-Care-Environmental-Scan-EN.pdf.
- 13 Medisys. "Different Types of Telemedicine." January 2, 2019. https://blog.medisys.ca/different-types-of-telemedicine#:~:text=Likely%20the%20most%20well-known,and%20the%20patient%20seeking%20 care; eVisit. "The Types of Telemedicine." https://evisit.com/resources/what-are-the-types-of-telemedicine/.
- 14 Canadian Medical Association. 2020. Virtual Care Playbook. https://www.cma.ca/sites/default/files/pdf/Virtual-Care-Playbook mar2020 E.pdf; eVisit. "What conditions can you treat via virtual care?" https://blog.evisit.com/virtual-care-blog/what-conditions-can-telehealth-be-used-for; Andrea Smith. "Which types of visits are perfect for virtual care?" Chiron Health. November 23, 2015. https:// chironhealth.com/blog/which-types-of-visits-are-perfect-for-virtual-care/.
- 15 College of Physicians and Surgeons of Ontario. "Advice to the profession: Telemedicine." https://www.cpso.on.ca/Physicians/Policies-Guidance/Policies/Telemedicine/Advice-to-the-Profession-Telemedicine.
- 16 Abacus Data. 2020. What Canadians Thank About Virtual Health Care? https://abacusdata.ca/wp-content/uploads/2020/06/CMA-Abacus-May-2020-Jun-4-ENv2.pdf.
- 17 Parminder Singh. "It's time for Ontario to get behind virtual health care for good." September 22, 2020. Toronto Star. https://www.thestar.com/opinion/contributors/2020/09/22/its-time-for-ontario-to-get-behind-virtual-health-care-for-good.html.
- 18 Paul Taylor. "COVID-19 is making virtual health care the new normal." April 16, 2020. Sunnybrook Hospital. http://health.sunnybrook.ca/navigator/covid-19-virtual-health-care-new-normal/.
- 19 Canadian Partnership Against Cancer. 2019. Environmental Scan: Virtual Care in Canada. https://s22457.pcdn.co/wp-content/uploads/2019/09/Virtual-Care-Environmental-Scan-EN.pdf.
- 20 Sohail Gandhi. "From Science Fiction to Science Fact: How Virtual Care Can Improve Health Care in Rural and Northern Ontario." Municipal World. June 2020. https://www.municipalworld. com/articles/from-science-fiction-to-science-fact/.
- 21 Government of Ontario. "Ontario Expanding Digital and Virtual Health Care." November 13, 2019. https://news.ontario.ca/en/release/54594/ontario-expanding-digital-and-virtual-health-care.
- 22 Ontario Medical Association. Ensuring Patient Care: Ontario Medical Association 2020-21 Ontario Pre-Budget Submission. October 16, 2020. https://www.oma.org/section/ontario's-doctors/ pre-budget-submission?type=topics.
- 23 Canadian Medical Association. COVID-19 Short-Term Considerations for the Canadian Medical Association: Executive Report. August 2020. https://www.cma.ca/sites/default/files/pdf/News/ covid-19-short-term-considerations-executive-report-e.pdf.
- 24 Ashley Challinor. 2016. Adopting our Advantage: Supporting a Thriving Health Science Sector in Ontario. Ontario Chamber of Commerce. http://occ.ca/wp-content/uploads/OCC-HTI-Adopting-Our-Advantage-Report.pdf.
- 25 Deloitte. 2019. Accelerating Prosperity: The Life Sciences Sector in Ontario. https://lifesciencesontario.ca/wp-content/uploads/2019/03/LSO-Economic-Study Final-Report 28FEB2019.pdf.
- 26 PwC Canada. "Canadian-based digital health startups stand to benefit in a post-COVID world according to PwC Canada and CB Insights." October 2, 2020. https://www.pwc.com/ca/en/media/ release/canadian-based-digital-health-startups-stand-to-benefit-in-a-post-covid-world.html.
- 27 Health Quality Ontario. "Primary Care Performance in Ontario." https://www.hgontario.ca/System-Performance/Primary-Care-Performance.
- 28 Telus Health. 2019. Virtual healthcare in Canada: The solution at our fingertips. https://f.hubspotusercontent40.net/hubfs/2346897/Virtual%20Care%20Industry%20Report 2020

- EN.pdf? hstc=197239536.dd500ed087e5e6f5ecdee5507cfa3e49.1598627966286.1598627966286.1598627966286.18 hssc=197239536.1.1598644864611& hsfp=786895513&hsCtaTracking=27ccf642-bd28-426b-b175-2686d867aac8%7Cb46cc21d-a679-4fea-898e-4c1e34fa95f8.
- 29 Ipsos. "Seven in Ten Canadians (68%) Have Skipped Seeing a Doctor Due to Long Wait Times, Timeliness, or Other Barriers." January 30, 2017. https://www.ipsos.com/en-ca/news-polls/seventen-canadians-skipped-seeing-doctor-due-long-wait-times.
- 30 Telus Health. 2019. Virtual healthcare in Canada: The solution at our fingertips. https://f.hubspotusercontent40.net/hubfs/2346897/Virtual%20Care%20Industry%20Report 2020 EN.pdf? hstc=197239536.dd500ed087e5e6f5ecdee5507cfa3e49.1598627966286.1598627966286.1598627966286.15 hstc=197239536.1.1598644864611& hstp=786895513&hsCtaTracking=27ccf642-bd28-426b-b175-2686d867aac8%7Cb46cc21d-a679-4fea-898e-4c1e34fa95f8.
- 31 Dialogue. 2019. The Ultimate Guide to Telemedicine for Canadian HR Leaders. https://www.dialogue.co/en/ultimateguide-telemedicine.
- 32 University Health Network, "Nephrology team pilots app for patients with kidney disease." July 7, 2015. https://www.uhn.ca/corporate/News/Pages/nephrology team pilots app for patients with kidney disease.aspx.
- 33 University Health Network. "Nephrology team pilots app for patients with kidney disease." July 7, 2015. https://www.uhn.ca/corporate/News/Pages/nephrology team pilots app for patients with kidney disease.aspx; S.W. Ong et al. "An Integrated Kidney Care eConsult Practice Model: Results from the iKinect Project." American Journal of Nephrology. October 2019. https://www.karger. com/Article/Abstract/502602.
- 34 Government of Ontario. Up to Speed: Ontario's Broadband and Cellular Action Plan. https://www.ontario.ca/page/speed-ontarios-broadband-and-cellular-action-plan
- 35 Sohail Gandhi. "From Science Fiction to Science Fact: How Virtual Care Can Improve Health Care in Rural and Northern Ontario." Municipal World. https://www.municipalworld.com/articles/ from-science-fiction-to-science-fact/.
- 36 SunLife. "Over half of all Canadians do not know how to find virtual care." June 18, 2020. https://www.sunlife.ca/en/about-us/newsroom/news-releases/announcement/over-half-of-all-canadians-donot-know-how-to-find-virtual-care/123434/.
- 37 Canada Health Infoway. Canadians' Health Care Experiences During COVID-19. September 2020 Edition. https://www.infoway-inforoute.ca/en/component/edocman/resources/reports/benefits-evaluation/3828-canadians-health-care-experiences-during-covid-19.
- 38 Canadian Partnership Against Cancer. 2019. Environmental Scan: Virtual Care in Canada. https://s22457.pcdn.co/wp-content/uploads/2019/09/Virtual-Care-Environmental-Scan-EN.pdf; Chambers Plan Employee Benefits. 2019. Expanding access to quality care across Canada with a virtual care solution. https://chambermaster.blob.core.windows.net/userfiles/Chambers/2016/CMS/Teladoc.pdf; Medisys. 2019. Virtual Healthcare in Canada: The Solution at Our Fingertips. https://blog.medisys.ca/virtual-healthcare-in-canada; Mercer Marsh Benefits. 2020. Health on Demand: Canada Report. https://www.mercer.ca/content/dam/mercer/attachments/north-america/canada/ca-2020-health-on-demand-canada-report.pdf.
- 39 Jennifer Fowkes et al. Virtual health: A look at the next frontier of care delivery, McKinsey & Company, June 2020. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/ virtual-health-a-look-at-the-next-frontier-of-care-delivery.
- 40 Jennifer Fowkes et al. Virtual health: A look at the next frontier of care delivery. McKinsey & Company. June 2020. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/ virtual-health-a-look-at-the-next-frontier-of-care-delivery; Oleg Bestsennyy et al. "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" McKinsey & Company. May 29, 2020. https://www. mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality.
- 41 Sacha Bhatia et al. "Cost of contact: redesigning healthcare in the age of COVID." BMJ Journals. July 2020. https://qualitysafety.bmj.com/content/ghc/early/2020/08/05/bmigs-2020-011624.full.pdf.
- 42 Diabetes Canada. Diabetes in Ontario: Backgrounder. https://www.diabetes.ca/DiabetesCanadaWebsite/media/Advocacy-and-Policy/Backgrounder/2020 Backgrounder Ontario English FINAL.pdf.
- 43 Diabetes Canada. June 2020. Results of Patient & Caregiver Survey. https://www.diabetes.ca/DiabetesCanadaWebsite/media/Campaigns/COVID-19%20and%20Diabetes/COVID-Survey-of-PWD-Results-Summary.pdf.
- 44 Ontario Medical Association. Ensuring Patient Care: Ontario Medical Association 2020-21 Ontario Pre-Budget Submission. October 16, 2020. https://www.oma.org/section/ontario's-doctors/ pre-budget-submission?type=topics.
- 46 Deloitte. Clearing the Backlog: The Cost to Return Wait Times to Pre-Pandemic Levels. October 2020. Canadian Medical Association. https://www.cma.ca/sites/default/files/pdf/Media-Releases/ Deloitte-Clearing-the-Backlog.pdf.
- 47 IQVIA (Canada). Webinar: COVID-19's Impact on the Canadian Life Sciences Industry and a Way Forward. September 28, 2020.
- 48 Jonathan Wang et al. Clearing the surgical backlog caused by COVID-19 in Ontario: a time series modelling study. November 2, 2020. Canadian Medical Association Journal. https://www. cmaj.ca/content/cmaj/192/44/E1347.full.pdf.
- 49 Canadian Medical Association. "More than \$1.3B needed to clear health care backlog caused by first wave of COVID-19: new report commissioned by CMA." October 26, 2020. https:// www.cma.ca/news/more-13b-needed-clear-health-care-backlog-caused-first-wave-covid-19-new-report-commissioned.
- 50 Ontario Medical Association. Ensuring Patient Care: Ontario Medical Association 2020-21 Ontario Pre-Budget Submission. October 16, 2020. https://www.oma.org/section/ontario/s-doctors/

pre-budget-submission?type=topics.

- 51 Sacha Bhatia et al. "Cost of contact: redesigning healthcare in the age of COVID." BMJ Journals. July 2020. https://gualitysafety.bmi.com/content/ghc/early/2020/08/05/bmigs-2020-011624.full.pdf.
- 52 Ontario Medical Association. Ensuring Patient Care: Ontario Medical Association 2020-21 Ontario Pre-Budget Submission. October 16, 2020. https://www.oma.org/section/ontario's-doctors/ pre-budget-submission?type=topics.
- 53 Statistics Canada. Mental Health of Canadians During the COVID-19 Pandemic. May 2020 and March and April 2020. https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m/11-627-m2020039-eng.pdf.
- 54 Canadian Mental Health Association. "New data shows majority of Ontarians believe mental health crisis will follow COVID-19 impact." May 11, 2020. https://ontario.cmha.ca/news/new-datashows-majority-of-ontarians-believe-mental-health-crisis-will-follow-covid-19-impact/.
- 55 Canadian Centre on Substance Use and Addiction. 2020. 25% of Canadians (aged 35-54) are drinking more while at home due to COVID-19 pandemic; cite lack of regular schedule, stress and boredom as main factors. https://www.ccsa.ca/sites/default/files/2020-04/CCSA-NANOS-Alcohol-Consumption-During-COVID-19-Report-2020-en.pdf.
- 56 Canadian Centre on Substance Use and Addiction. COVID-19, Alcohol and Cannabis Use. https://www.ccsa.ca/sites/default/files/2020-04/CCSA-COVID-19-Alcohol-Cannabis-Use-Report-2020-en.
- 57 Canadian Centre on Substance Use and Addiction. "Substance Use in Canada Costs Almost \$46 Billion a Year According to Latest Data." July 7, 2020. https://www.globenewswire.com/news-release/2020/07/07/2058630/0/en/Substance-Use-in-Canada-Costs-Almost-46-Billion-a-Year-According-to-Latest-Data.html.
- 58 Canadian Mental Health Association. Investing in focused areas of support to ensure long-term mental health recovery for Canadians. August 2020. https://cmha.ca/wp-content/uploads/2020/09/ EN CMHA01 2021PBS FINAL.pdf.
- 59 Steve McKinley. "Canadian health workers on COVID-19 front line say they need mental health support, poll indicates." April 16, 2020. https://policybase.cma.ca/en/viewer?file=%2fdocuments%2fBriefPDF%2fBR2021-01.pdf#search=virtual%20care&phrase=false.
- 60 Canadian Medical Association. COVID-19 Short-Term Considerations for the Canadian Medical Association: Executive Report. August 2020. https://www.cma.ca/sites/default/files/pdf/News/ covid-19-short-term-considerations-executive-report-e.pdf; Canadian Medical Association. Joint Letter Regarding Recommendations for Canada's long-term recovery plan. August 27, 2020. https:// policybase.cma.ca/en/viewer?file=%2fdocuments%2fBriefPDF%2fBR2021-01.pdf#search=virtual%20care&phrase=false.
- 61 Canadian Mental Health Association. "COVID-19 effects on the mental health of vulnerable populations." June 25, 2020. https://cmhastarttalking.ca/news/covid-19-effects-on-the-mental-healthof-vulnerable-populations/#.X25NhGhKiUk.
- 62 Canadian Mental Health Association. Policy Brief: COVID-19 and Mental Health: Heading off an Echo Pandemic. https://cmha.ca/wp-content/uploads/2020/06/EN COVID-19-Policy-Brief.pdf.
- 63 Ibid.
- 64 The Conference Board of Canada. "COVID-19's impact on mental health and returning to the workplace." May 26, 2020. https://www.conferenceboard.ca/insights/blogs/covid-19-s-impact-on-mental-health-and-returning-to-the-workplace.
- 65 Morneau Shepell. "Canadians' mental health linked to quality of employer support during COVID-19." July 6, 2020. https://morneaushepell.mediaroom.com/2020-07-06-Canadians-mental-healthlinked-to-quality-of-employer-support-during-COVID-19.
- 66 Morneau Shepell. The Mental Health Index report: Spotlight on the mental health impact of the COVID-19 pandemic. June 2020. https://www.morneaushepell.com/permafiles/92827/mental-health-index-report-canada-june-2020.pdf.
- 67 Morneau Shepell. "Canadians' mental health linked to quality of employer support during COVID-19." July 6, 2020. https://morneaushepell.mediaroom.com/2020-07-06-Canadians-mental-healthlinked-to-quality-of-employer-support-during-COVID-19.
- 68 The Conference Board of Canada. "COVID-19's impact on mental health and returning to the workplace." May 26, 2020. https://www.conferenceboard.ca/insights/blogs/covid-19-s-impact-on-mental-health-and-returning-to-the-workplace.
- 69 Statistics Canada. "Work absence of full-time employees by geography, annual." https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410019001&pickMembers%5B0%5D=2.1&pickMembers%5B1%5D=3.8.
- 70 Telus Health. "3 Ways Virtual Care Gives Employers a Competitive Advantage." July 23, 2019. https://plus.telushealth.co/blogs/health-benefits/en/3-ways-virtual-care-gives-employers-a-competitive-advantage/.
- 71 Brandie Weikle. "Workplace mental health programs deliver healthier bottom lines." November 7, 2019. CBC News. https://www.cbc.ca/news/business/workplace-mental-health-programs-delivergood-roi-1.5346872.
- 72 Medisys. 2019. Virtual Healthcare in Canada: The Solution at Our Fingertips. https://blog.medisys.ca/virtual-healthcare-in-canada.
- 73 Dialoque. 2019. The Ultimate Guide to Telemedicine for Canadian HR Leaders. https://www.dialogue.co/en/ultimateguide-telemedicine.
- 74 Medisys. 2019. Virtual Healthcare in Canada: The Solution at Our Fingertips. https://blog.medisys.ca/virtual-healthcare-in-canada.

- 75 Sean Simpson. "Younger Working Canadians More Likely to Value Virtual Healthcare and to Use it for Mental Health Services." January 21, 2020. Ipsos. https://www.ipsos.com/en-ca/newspolls/Younger-Working-Canadians-More-Likely-to-Value-Virtual-Healthcare-as-Employee-Benefit.
- 76 Telus Health. 2019. Virtual healthcare in Canada: The solution at our fingertips. https://f.hubspotusercontent40.net/hubfs/2346897/Virtual%20Care%20Industry%20Report 2020_ EN.pdf? hstc=197239536.dd500ed087e5e6f5ecdee5507cfa3e49.1598627966286.1598627966286.1598627966286.1.1598644864611& hstp=786895513&hsCtaTracking=27ccf642-bd28-426b-b175-2686d867aac8%7Cb46cc21d-a679-4fea-898e-4c1e34fa95f8.
- 77 Mercer. "New survey reveals workers in Canada want 'health on demand' digital solutions from their employer." February 4, 2020. https://www.mercer.ca/en/newsroom/health-on-demand.html.
- 78 Beth Macdonell. "Ontario doctors won't receive pay for virtual care services until mid-June, association says." April 17, 2020. CTV News. https://toronto.ctvnews.ca/ontario-doctors-won-t-receive-pay-for-virtual-care-services-until-mid-june-association-says-1.4900977.
- 79 Ontario Medical Association. Ensuring Patient Care: Ontario Medical Association 2020-21 Ontario Pre-Budget Submission. October 16, 2020. https://www.oma.org/section/ontario's-doctors/ pre-budget-submission?type=topics.
- 80 Canadian Medical Association. 2020. Virtual Care Playbook. https://www.cma.ca/sites/default/files/pdf/Virtual-Care-Playbook_mar2020_E.pdf.
- 81 Parminder Singh. "It's time for Ontario to get behind virtual health care for good." September 22, 2020. Toronto Star. https://www.thestar.com/opinion/contributors/2020/09/22/its-time-for-ontario-to-get-behind-virtual-health-care-for-good.html.
- 82 Parminder Singh. "It's time for Ontario to get behind virtual health care for good." September 22, 2020. Toronto Star. https://www.thestar.com/opinion/contributors/2020/09/22/its-time-forontario-to-get-behind-virtual-health-care-for-good.html. Ontario Medical Association. OMA's Ontario Health Teams White Paper: Early Learnings and Recommendations for the Evolution of OHTs. October 2020. https://content.oma.org/wp-content/uploads/private/OHTs-white-paper.pdf.
- 83 Sohail Gandhi. "From Science Fiction to Science Fact: How Virtual Care Can Improve Health Care in Rural and Northern Ontario." Municipal World. https://www.municipalworld.com/articles/ from-science-fiction-to-science-fact/.
- 84 Canadian Radio-television and Telecommunications Commission. 2019. Communications Monitoring Report 2018. https://crtc.gc.ca/pubs/cmr2018-en.pdf.
- 85 Ontario Medical Association. OMA's Ontario Health Teams White Paper: Early Learnings and Recommendations for the Evolution of OHTs. October 2020. https://content.oma.org/wp-content/ uploads/private/OHTs-white-paper.pdf.
- 86 Ibid.
- 87 Ibid.
- 88 Ibid.
- 89 Paul Taylor. "Will virtual health care be the new normal after COVID-19?" April 27, 2020. The Globe and Mail. https://www.theglobeandmail.com/life/health-and-fitness/article-will-virtual-healthcare-be-the-new-normal-after-covid-19/.
- 90 PwC. 2020. Making care mobile: Emerging delivery models. https://www.pwc.com/ca/en/healthcare/publications/pwc-virtualization-of-care-emerging-healthcare-delivery-models.pdf.
- 91 Government of Ontario. "Ontario Increasing Mental Health Support During COVID-19." April 2, 2020. https://news.ontario.ca/opo/en/2020/04/ontario-increasing-mental-health-support During COVID-19." April 2, 2020. https://news.ontario-increasing-mental-health-support During COVID-19. port-during-covid-19.html.
- 92 Prime Minister of Canada. "Prime Minister announces virtual care and mental health tools for Canadians." May 3, 2020. https://pm.gc.ca/en/news/news-releases/2020/05/03/prime-minister-announces-virtual-care-and-mental-health-tools.
- 93 Government of Ontario. "Ontario Expands Virtual Mental Health Services During COVID-19." May 5, 2020. https://news.ontario.ca/en/release/56847/ontario-expands-virtual-mental-health-ser-invices-during-covid-19.
- 94 Government of Ontario. "Ontario Investing \$741 Million to Reduce Surgeries Backlog and Expand Access to Care." September 25, 2020. https://news.ontario.ca/en/release/58557/ontario-investing-741-million-to-reduce-surgeries-backlog-and-expand-access-to-care.
- 95 Government of Ontario. "Ontario Increases Mental Health Funding for Postsecondary Students." October 6, 2020. https://news.ontario.ca/en/release/58688/ontario-increases-mental-health-funding-for-postsecondary-students.
- 96 Government of Ontario. "Ontario Building a Modern, Connected and Comprehensive Mental Health and Addictions System." October 7, 2020. https://news.ontario.ca/en/release/58717/ontario-building-a-modern-connected-and-comprehensive-mental-health-and-additions-system.
- 97 Government of Ontario. "Ontario Expanding Mental Health Services for Children and Youth." October 21, 2020. https://news.ontario.ca/en/release/58894/ontario-expanding-mental-health-services-for-children-and-youth.



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