

Virtual Care in Canada



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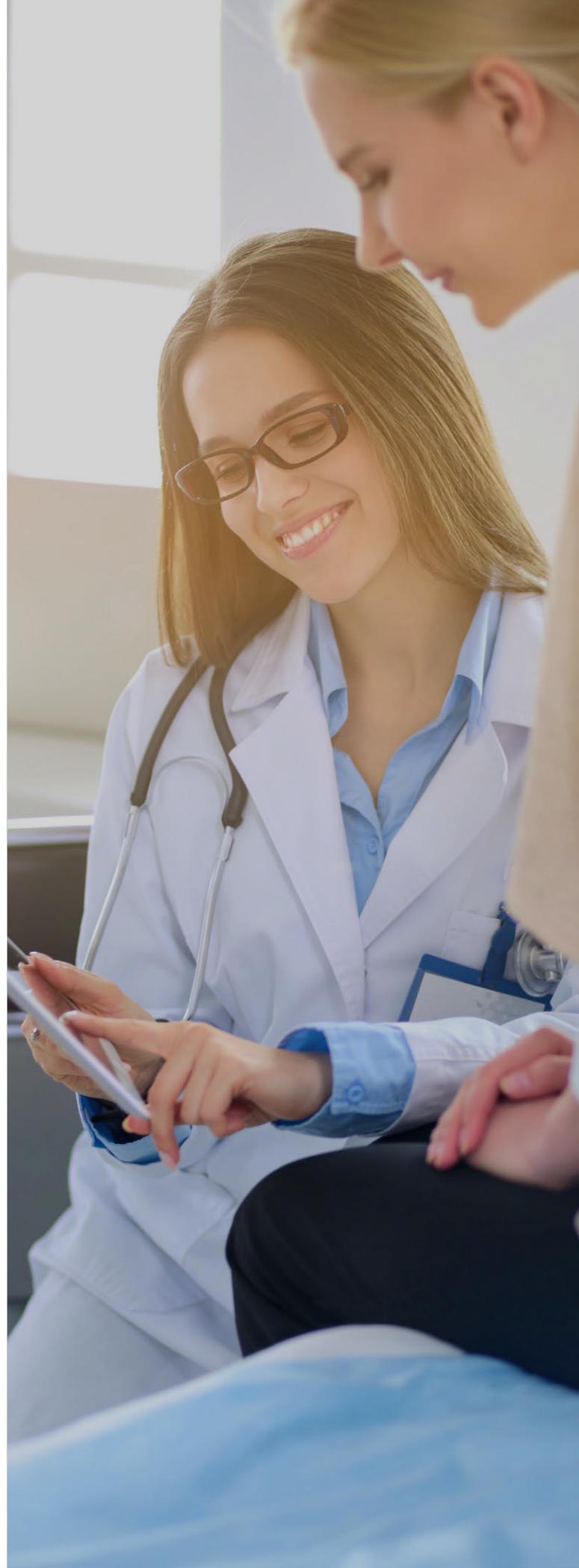


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Introduction

Providing all Canadians, across a federated health system, with equitable access to cancer care remains a challenge given the large distances between health care delivery centres and the fact that the population is concentrated in the southern part of the country. As the number of Canadians diagnosed with cancer increases, new models of care delivery that improve access, earlier diagnoses and sustainability are needed.

The Canadian Partnership Against Cancer (the Partnership) is the steward of the Canadian Strategy for Cancer Control (the Strategy). The recently refreshed second version of the Strategy (2019-2029) articulates that technology needs to play a more prominent role in accelerating the improvement of cancer outcomes for Canadians. More specifically, the Strategy calls for the provision of care closer to home. Newer care delivery models such as virtual care have the potential to offer solutions to availability challenges, as well as other unmet needs like diagnosing cancers earlier and improving the patient experience.

In order to understand where key opportunities exist within the Canadian cancer system to improve outcomes through the increased use of virtual care, the Partnership has undertaken this environmental scan on the current state of virtual care in Canada. To best understand the Canadian virtual care ecosystem, this scan explored virtual care use in both the public system and through private/commercial offerings.

This document contains a synthesis of findings from academic and grey literature, conference presentations, health system strategies and eighteen interviews with stakeholders directly involved in deploying or delivering virtual care on the frontlines. Demonstrations with fourteen virtual care platform providers and an eConsult solution were also completed to provide insight into available functionality and user experience. A separate Executive Summary document is also available as a précis of this report.



Defining Virtual Care

For the purposes of this environmental scan, virtual care was defined as:

“The use of technology to facilitate a visit between a patient and a care provider who are at two different locations, either through video, audio or text messaging.”

Virtual care can also facilitate provider-to-provider interactions, however this scan focuses on interactions between patient and provider.

The following technologies often complement virtual care, but for the purposes of this environmental scan are not considered “virtual care” technologies:

- General health and wellness apps
- Health monitoring devices
- Remote patient monitoring
- Artificial intelligence-driven assessment/diagnosis/triage tools
- Patient portals
- Electronic medical records
- eReferrals and eConsults

Objectives of Our Scan

The following objectives guided the environmental scan of virtual care:

- Investigate how virtual care is being used in Canada
- Identify virtual care’s benefits, enablers, opportunities and barriers
- Discover and review software that enables virtual care
- Identify opportunities for how virtual care may contribute to the priorities and actions of the refreshed Canadian Strategy for Cancer Control

Point of Interest

eConsults are becoming an important service of several telemedicine networks. eConsults support family physicians in receiving insights from specialists through technology.

In 2018, 14,459 people received access to specialist advice through the Champlain BASE™ eConsult service. For 6,173 people (43%) a referral was originally contemplated, but was avoided at this stage due to the timely advice received (median response of 1.1 days).^[1]

Methodology

In completing the environmental scan, several approaches were used to collect insights on virtual care in Canada including secondary research, stakeholder interviews, and commercial platform reviews.

Secondary Research

Secondary research activities were conducted between January and May of 2019. This included reviewing academic and grey literature, conference presentation materials, health system strategies, and other resources on the state of virtual care in Canada. Sources of information included academic institutions, governments, medical associations, governing bodies, healthcare organizations, news agencies, and commercial virtual care platform providers.

Interviews

Contributing to the environmental scan were **18 key informant interviews**. An effort was made to collect a variety of perspectives by ensuring diverse regional representation as well as perspectives from urban and rural/remote communities. Interviewees ranged from policy stakeholders to frontline care providers.

A discussion was also held with Canada Health Infoway who provided additional resources to support this scan.

Platform Reviews

To gain an understanding of the virtual care platforms available to Canadian healthcare providers, several solutions in the commercial market were reviewed. To better understand the capabilities and usability of these technologies, **14 provider-driven demonstrations** of software platforms were completed.

Summary of Findings

Virtual Care

Virtual care is among the many rapidly evolving health technology solutions which are reshaping the delivery of healthcare in Canada. Virtual care provides patients with the ability to consult with a healthcare provider through digital means. This can include live video, audio conferencing, and both synchronous or asynchronous messaging.

Prioritization of Virtual Care

Across Canada, Health Ministries and Health Authorities are prioritizing further utilization of virtual care in their strategic plans. Below are a few of several examples:

- The Office of Virtual Health at British Columbia's Provincial Health Services Authority was mandated in 2017 to expand and enhance virtual health. The Office's work resulted in their first virtual health policy which included an expectation that patients will receive as good or better care virtually than in person. Among their current priorities is establishing more "anywhere-to-anywhere" virtual health visits.^[2]
- Alberta Health Services' (AHS) Virtual Care Program connects patients to care providers using virtual technologies

wherever they are in the province. In their 2017-2020 Business Plan, AHS named the development of "virtual, technology-based, solutions with a focus on vulnerable and rural populations" as a priority that will contribute to financial health and value for money.^[3]

- The Nova Scotia Telehealth Network underwent a restructuring between 2016 and 2018. This led to a Virtual Care Policy to support the growth of Virtual Care in the province. To better reflect this, the organization rebranded to Virtual Care.^[4]
- In Ontario, the Premier's Council on Improving Health Care and Ending Hallway Medicine released its initial report in January 2019. The report extolled the possibilities of virtual care and the opportunities to innovate in care delivery, "particularly in the use of virtual care, apps, and ensuring patients can access their own health data."^[5]
- In Québec, the Réseaux Universitaires Intégrés de Santé McGill identified telehealth as a key area of growth. Their goal is to provide the population with better accessibility and continuity in specialized services.^[6]

Acknowledging the need to increase adoption of virtual care, several national organizations and associations announced the launch of a new task force focused on virtual care. For more insight, please refer to the section titled *Medical Organizations Support Increased Adoption*.

Delivery of Virtual Care in Canada

Historically, most of Canada's virtual care has been delivered within the public system between rural/remote patients and specialists. In reviewing virtual care in several provinces, the McMaster Health Forum discovered that the emphasis and/or the primary qualifier for using public virtual care services was to meet the health needs of those in northern, rural, remote or other hard-to-reach communities. This was true in each province reviewed except Ontario, where the main eligibility criteria for these services is based on those "most likely to derive benefit from the services."^[7]

Primary Care

Delivery of primary care through publicly-funded virtual visits is near non-existent in Canada. Only British Columbia covers primary care visits for all residents through public health insurance, though Ontario makes virtual visits between a patient and his/her family physician available in several of its Local Health Integration Networks.

With a growing demand for non-emergency primary and/or episodic care to be delivered virtually, Canada has seen the emergence of a growing private virtual clinic market. These services offer Canadians access to healthcare providers

from the comfort of their own homes.

Specialist Care

The majority of Canada's virtual care is delivered between patients and specialists through jurisdictional telemedicine/telehealth networks using "room-based" or "hardware-based" virtual care. Traditionally, both patients and providers must visit a telemedicine room to connect with each other using high-end video conferencing hardware.

As "software-based" virtual care platforms, which allow providers to use their own devices to deliver virtual care become more pervasive, telemedicine networks are, to varying degrees, piloting or adopting these solutions.

These programs have successfully saved rural/remote patients stress, travel time, and travel expenditures. These appointments are covered under public health insurance programs.

Critical Care

Virtual care technologies, through telemedicine networks, are also being used to support smaller hospitals in accessing expert providers at trauma centres to support the delivery of care to critically ill patients. In addition to saving lives, these programs can also prevent the need for expensive medical transfers when they are not necessary.

The North East Local Health Integration Network and Health Sciences North launched Canada's first Virtual Critical Care program in 2014.^[8]

The Benefits of Virtual Care

Among the many potential benefits of virtual care, the technology is acknowledged as being well-positioned to increase availability of easy-to-access care, provide an improved patient experience, and help with the long-term sustainability of our health system.

During interviews for this scan, the majority of virtual care benefits identified were directly attributed to providing patient-focused care. These benefits included saving patients the costs, time and stress associated with travelling both for patients and their families. Stakeholders also described how patients found comfort in staying in their home or community for care and how virtual care could support improved outcomes for patients.

Those on the frontlines of care spoke of the gratitude shared by patients and families who used virtual care to stay closer to home for specialist appointments, whether that be a specialist 6 hours away or 1 hour away. Interviewees also explained that virtual care has prevented the elderly in long-term care residences, many of whom are very ill, from having to rely on their family members to take time away from work to bring them hours away for a 15-minute follow-up visit in a distant city.

Virtual care offers an opportunity to support patients in accessing same language physicians where one is not locally available.

Interviewees also discussed how virtual care can benefit the health system through cost savings, providing new solutions to temporary staffing shortages and after-hours care, reducing wait times and saving providers time.

Similar findings were identified in a recent environmental scan issued by Canada Health Infoway where representatives from 15 jurisdictions were asked about their objectives in delivering digital and virtual care. The following table lists the top 5 responses from those interviews:

STATED OBJECTIVE	# OF RESPONDENTS (OUT OF 15)
Improve access to care	12
Keep patients at home / reduce travel	7
Help manage cost of care	7
Improve patient satisfaction / experience	6
Improve health outcomes	6

Source: Canada Health Infoway – ACCESS Virtual Jurisdictional Findings (2019)

The same report also outlined several objectives which may be applicable in other jurisdictions including, among others, sustainability, enabling care options regardless of geography, utilizing capacity more effectively, offering anywhere-to-anywhere care, and expanding virtual care choices.

Tables 1 through 3 provide supplementary information regarding the benefits of virtual care.

Table 1: *How virtual care can contribute to increased access to care*

Challenge	Background Insights	Examples of How Virtual Care is Contributing Today
<p>Increase Access to Care in Underserved Communities</p>	<ul style="list-style-type: none"> Nationally, 19% of the population lives in rural areas. However, only 8% of family physicians and 2% of specialists practice in rural areas^[9] OntarioMD, a subsidiary of the Ontario Medical Association, supports the province’s more than 15,000 physicians in using digital health tools. The group acknowledges that virtual visits have begun to improve access for patients in rural, northern and underserved communities^[10] 	<ul style="list-style-type: none"> Telemedicine networks provide virtual visits with specialists Telemedicine networks provide virtual visits between clinicians (general practitioners and specialists) Some private virtual clinics offer access to dermatologists, psychologists and allied health professionals
<p>Increase Access to Family Physicians</p>	<ul style="list-style-type: none"> In 2016, Statistics Canada found that 15.8% of the population was without a primary care provider, and among Indigenous Peoples 19.2% were without a primary care provider^[11] Small communities do not have walk-in clinics or emergency departments 	<ul style="list-style-type: none"> In BC virtual visits with a primary care provider are covered under public insurance In some areas of Ontario, residents can virtually visit with their family physician Private virtual clinics offer paid access to practitioners for non-emergency primary and/or episodic care
<p>Provide 24/7 Availability for Care</p>	<ul style="list-style-type: none"> Outpatient clinics and health teams may have mandates to provide patients with 24/7 access to a practitioner, though several struggle to staff evenings and weekends In 2018, the Ontario Medical Association identified virtual care as a possible solution to the problem of coordinating after hours coverage for patients^[12] 	<ul style="list-style-type: none"> Virtual care can supplement clinics with 24/7 practitioner availability (several private virtual care providers are discussing opportunities with clinics to supplement their teams with virtual practitioners to offer after hours support)

Table 2: *Aspects of the patient experience improved by virtual care*

Challenge	Background Insights	Examples of How Virtual Care is Contributing Today
Reduce Travel Time and Associated Costs	<ul style="list-style-type: none"> Each year, patients travel millions of kilometres to visit with distant care providers: <ul style="list-style-type: none"> -In 2018/19, patients using the Ontario Telemedicine Network avoided over 280 million kilometres of travel^[13] -In 2017, eHealth Saskatchewan’s telehealth services saved patients over 6 million kilometres of travel^[14] 	<ul style="list-style-type: none"> Telemedicine networks provide virtual visits with specialists to reduce the travel burden of patients Telemedicine networks are often accessible within long-term care facilities Several telemedicine studies indicate that patients value the time and costs savings of virtual visits
Reduce Wait Times	<ul style="list-style-type: none"> According to the Commonwealth Fund, Canadians wait on average more than 7 days to see their family doctors, and more than half wait longer than 4 weeks to see a specialist^[15] eConsult and Teledermatology provided by OTN offer support directly to the General Practitioner and provide support in managing potential referrals. Both services provide a consult within 3 days, and in many instances (40%) avoid the need for a lengthy wait for an in-person referral^[16] 	<ul style="list-style-type: none"> Virtual care can offer shorter wait times for appointments with specialists Private virtual clinics can offer on-demand access to general practitioners and/or nurse practitioners for non-emergency primary or episodic care preventing unnecessary visits to Emergency Rooms
Better Support Family Members	<ul style="list-style-type: none"> Family members often travel with ill relatives to distant appointments, often taking time off work to do so 	<ul style="list-style-type: none"> Virtual visits can prevent family members from having to take time off work to travel with their loved ones to distant in-person visits Some virtual care platforms enable multiple participant visits, allowing distant family members to join in on virtual visits
Increase Access to Mental Health Supports when Needed	<ul style="list-style-type: none"> In any given year, 1 in 5 Canadians will personally experience a mental health problem or illness^[17] Risk Analytica estimated that the economic impact of mental health in 2011 was \$48.6 billion and over the subsequent 30 years would add up to \$2.5 trillion^[18] 	<ul style="list-style-type: none"> Telemedicine networks offer access to mental health care providers and programs Several private virtual clinics offer access to mental health care providers

Table 3: *How virtual care can improve health system sustainability*

Challenge	Background Insights	Examples of How Virtual Care is Contributing Today
Manage the Rapidly Growing Use of the Health System	<ul style="list-style-type: none"> Statistics Canada predicts the country will see the number of Canadians aged 65 or older increase from 1 in 8 in 2003-2007 to 1 in 4 by 2028-2032^[19] With a growing and a rapidly aging population, predictions are that cancer diagnoses will increase by 79% when comparing 2028 to 2032 against data from 2003 to 2007^[20] 	<ul style="list-style-type: none"> Virtual care can offer shorter wait lists to see specialists Virtual care can avoid inappropriate uses of more expensive services such as emergency departments and hospital admissions by providing better access to a more appropriate level of service Family Physicians may be able to see more patients using virtual care (less interaction time than face-to-face visits), especially for prescription refill requests completed by text message
Address Practitioner Shortages	<ul style="list-style-type: none"> Canada's 17 medical schools have seen flat enrolment for years^[21] The inability to staff hospitals with physicians for rounds has threatened or contributed to the closure of small rural hospitals The Association of Faculties of Medicine of Canada advocates for the use of telemedicine to support rural areas that have difficulty recruiting and retaining primary care physicians and other healthcare professionals^[22] 	<ul style="list-style-type: none"> Telemedicine networks offer remote/rural communities access to specialists from urban centres Telerounding (connecting patients in hospitals with remote physicians through virtual care technologies) can be utilized in small understaffed hospitals Virtual critical care provides expert emergency support in northern and remote communities
Manage Increasing Costs of Care Delivery	<ul style="list-style-type: none"> The Canadian Institute for Health Information estimated healthcare expenditures in the country would exceed \$253 billion in 2018^[23] An economic study on cancer expenditures identified a rise in cost from \$2.9 billion in 2005 to \$7.5 billion in 2012^[24] Telemedicine is an efficient way to deliver healthcare in Ontario by reducing costs. Examples include:^[25] <ul style="list-style-type: none"> - reducing staff mileage expenditures (\$200k a year in one forensics outreach program) - saving \$21 million in long term costs for stroke patients receiving tissue plasminogen activator through Telestroke - saving over \$100 million in patient travel costs Virtual critical care programs saved Ontario \$2.8 million in unnecessary medical transports in 2017/2018^[26] 	<ul style="list-style-type: none"> Virtual visits reduce travel grants and travel reimbursements Virtual visits reduce unnecessary uses of the health system (emergency rooms, admissions to hospitals, visits with specialists when not warranted) Virtual critical care programs save unnecessary and expensive medical transfers A study comparing primary care virtual visits to in-person visits in British Columbia showed the potential for cost savings^[27]

Canada's Virtual Care Ecosystem

Across the country, patients have been video visiting with specialists for years. However, these visits have traditionally required patients to travel to a telemedicine site. Doing so qualifies the visits to be covered under jurisdictional public health insurance plans. Although patients need to leave their homes for these visits, these programs have been successful, and have saved patients in remote and rural areas from having to travel great distances to see specialists in distant urban centres.

As technology advances, more emphasis is being placed on solutions which can keep patients in their homes for these visits through software that can be used on their own devices.

There is also an increasing demand for primary and/or episodic care to be delivered virtually to Canadians in their homes. Fueled by employers and insurance companies, Canada has a rapidly growing commercial virtual clinic industry.

Today, Canada's virtual care ecosystem is composed of three leading delivery models including the jurisdictional telemedicine networks, commercial software platforms that enable virtual care within clinical settings, and private virtual care clinics.

Telemedicine Network Example

The Ontario Telemedicine Network is one of the world's largest telemedicine networks. Throughout their 2018/19 year OTN provided:

2,847

Room-based systems in
healthcare facilities

8,617

PC-based
video accounts

1,045,389

Patient
consultations

75,077

Video visits served to
a patient's home

Source: Ontario Telemedicine Network

The Public System: Telemedicine Networks

Provinces, Territories and several First Nations organizations maintain their own telemedicine/telehealth networks for secure virtual visits. These networks have primarily been used to connect patients in remote areas with specialists in distant urban centres. In doing so, patients visit a telemedicine site to conduct a virtual visit with a specialist. Visits at telemedicine sites are covered through public health insurance programs.

These networks have been developed using videoconferencing hardware purchased from global device manufacturers such as Polycom, Cisco and Philips. In many regions, these technologies will soon need to be replaced with newer technology.

Additional Insights

In addition to providing virtual care capabilities, several telemedicine networks also provide services which facilitate group counselling/education sessions, eConsults, eReferrals, and remote patient monitoring.

Moving Towards Software-Based Virtual Care

As new technologies become available, telemedicine networks are beginning to take advantage of software-based virtual care solutions, which enable “anywhere-to-anywhere” virtual care.

These solutions enable physicians to use their existing devices instead of relying on video conferencing hardware located in a telemedicine room. In some cases, patients can also use their own devices, making home-based virtual visits a reality.

Provider Compensation

In 2018, the McMaster Health Forum researched virtual care definitions and compensation models in New Brunswick, Québec, Ontario, Manitoba, Saskatchewan and Alberta. They identified that all of the provinces studied had designated telehealth billing codes using fee-for-service remuneration. Ontario and Alberta also paid additional premiums for virtual visits that could be added on fee-for-service billing codes.^[28] Physicians on salary-based remuneration are generally not compensated additionally.

Virtual Care Platforms

Software-based commercial solutions are available to the Canadian market and are becoming more pervasive. These products enable healthcare providers, in both the public system and private sector, with virtual care capabilities including setting up their own virtual clinics.

Many of these solutions are cloud-based platforms which can support patients in connecting with their care providers through web browsers and/or downloadable mobile Apps.

Though each platform offers its own unique set of capabilities, most allow care providers to manage a patient roster, schedule appointments and/or manage a virtual waiting room, and conduct virtual visits with patients through video, audio and/or text messaging. Practitioners can typically access uploaded photos/videos from patients, provide patients with digital resources, issue prescriptions and issue requisitions.

Use of software-based virtual care platforms in the public system for specialist and family physician visits is increasing as jurisdictional telemedicine networks begin using the technologies. Several of these solutions are actively being used in mental health, homecare and among allied health professionals already.



Most Common Features:

- Virtual waiting room
- Appointment booking
- Video, audio and/or text-based “virtual visits”
- Uploading photos/videos
- Access to visit history and accompanying notes
- Issuing/Receiving prescriptions and requisitions

Example Platforms:

AlayaCare

Akira

Cloud DX Connected Health Kits

InputHealth

iUGO Care

Livecare

Medeo

Maple

NexJ

Novari eVisit

OnCall

Think Research VirtualCare

More than Virtual Care

Several of Canada's virtual care products are coupled with other digital health technologies as part of a broader healthcare solution, which may include technologies such as:

- remote patient monitoring
- customizable clinical forms (intake)
- artificial intelligence-driven diagnostics tools
- integration with electronic medical record platforms
- clinical and patient-specific analytics tools
- patient portals

Several of these platforms can be white-labelled, meaning they can be styled to the unique brand of the operating health system, network, facility or clinic.

Virtual Care Pilots

Canadian-made virtual care products are behind several virtual care pilots and trials across Canada including those supporting virtual visits with primary care providers, follow-ups with specialists and telerounding in hospitals.

Some of these solutions also offer remote patient monitoring (RPM) technologies, which have been used to support pilots for those with chronic conditions such as Chronic Obstructive Pulmonary Disease and Diabetes.

** For more insights on virtual care pilots, please see Appendix B - Sample Virtual Care Pilots.*

Business Model

Most virtual care platforms are cloud-based, software-as-a-service solutions, which are licenced to healthcare organizations for a monthly subscription based on the number of healthcare providers using the platform and the tools utilized.

** For more insights on virtual care platforms, please see Appendix C - Virtual Care Platform Capabilities.*

Private Virtual Clinics

Canadians can access both scheduled and on-demand non-emergency care virtually through privately-paid virtual clinics or services. These services are conveniently accessed through either a web-based portal and/or a mobile App.

Virtual clinics can offer 24/7 access to general practitioners and nurse practitioners. Some services also provide virtual access to some specialists such as dermatologists and psychologists, as well as allied health professionals. Coverage areas of these clinics vary based on the jurisdictional licensing of their practitioners.

Each virtual clinic is unique in the health services they provide. However, most treat commonly-diagnosed conditions including infections, skin conditions, allergies, migraines, colds and flus. Several also provide support for chronic care conditions and mental health support.

Practitioners in many of these clinics can provide medical advice, issue e-prescriptions, create lab and diagnostic requisitions, and create referrals to a specialist. Care providers may also recommend the patient see his/her family physician for physical examination.

These companies must have liability insurance to cover malpractice.

The Canadian Medical Protective Association provides coverage for telemedicine.^[29]



Most Common Non-Emergency Services Provided:

- Acute care
- Chronic care
- Sexual health
- Mental health
- Medical advice
- Prescriptions and lab requisitions

Example Services:

Akira

Babylon by TELUS Health

Dialogue

EQ Care

GOeVisit

Maple

Medisys On-Demand Virtual Care

Wello

Additional Insights into Private Virtual Clinics

Canada's first virtual clinic serviced British Columbians and was launched in 2013.^[30] This was after the province announced primary care virtual visits would be covered under their Medical Services Plan.

Starting in 2016, Canada saw several new multi-jurisdictional virtual clinics launched. These companies primarily target employers and insurance providers who offer these services as an employment benefit, as well as a recruitment and retention tool. As a result, hundreds of Canadian employers have enrolled in these services. This has provided hundreds-of-thousands of Canadians with access to these services while driving the growth of these virtual care providers.

In 2017, Great-West Life partnered with Dialogue to become the first national insurer to provide virtual healthcare services; they began in Quebec and Ontario.^[31] Sun Life Financial became the first insurer to offer consumers a national virtual care referral network by partnering with Akira, EQ Care and Maple in 2018.^[32] In May of 2019, Manulife announced a partnership with Akira to provide its customers, millions of Canadians across the country, with access to a virtual care provider.^[33]

An estimated 9% of Canadian employers were offering employees access to virtual healthcare in 2018.^[34]

Teladoc, described as a global leader in virtual care, announced it was expanding its portfolio to the Canadian market in March of 2019. Teladoc serves more than 20 million patients and offers solutions in 130 countries.^[35]

Business Model

In generating revenue, these services typically charge insurance companies, employers or Canadians a monthly subscription fee based on the number of users (e.g., in a family or number of employees of a company), though several also offer an option to pay-per-visit.

Many private virtual clinics are pairing up with pharmacies to offer patients convenience in obtaining prescriptions and renewals from practitioners while at the pharmacy.

Practitioner Compensation

Care professionals of these services are paid directly by their company and are typically paid through salary, per visit, or by the hour based on their agreements with their employer (virtual clinic).

Several of these services offer providers flexibility in their working hours and the ability to work from any space that allows for patient confidentiality.

Usage Trends

Though adoption of virtual care in Canada is increasing, many experts believe that use of the technology has been constrained.

A 2019 Canadian Health Infoway digital and virtual care environment scan concludes:

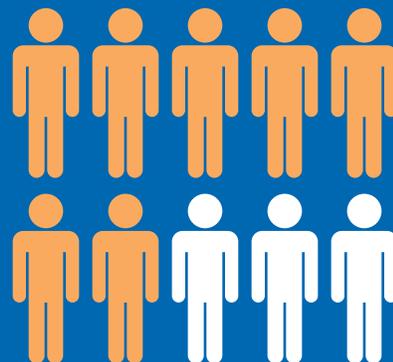
“Generally, virtual care delivery is still at a nascent phase in Canada with some jurisdictions being more advanced than others but no jurisdiction fully leveraging what is available across the full continuum of care and at a jurisdiction-wide level”.

A 2018 Ipsos survey discovered that British Columbia and Ontario had the most citizens with a virtual care experience. In those provinces, 12% and 10% respectively of those surveyed had experienced a virtual visit with a care provider. The rest of Canada lagged behind, with an average of 5% of respondents having experienced a virtual visit.^[36]

Use of virtual care is increasing. According to Canada Health Infoway’s 2018-2019 Annual Report, there were more than one million telehealth consultations in 2018, a 500 percent increase since 2010.^[37]

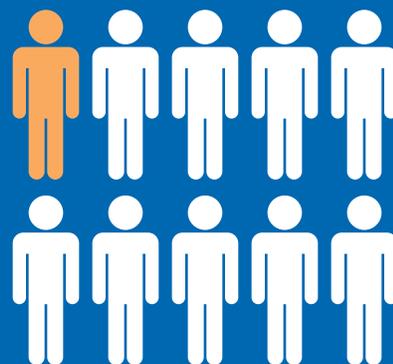
Kaiser Permanente in the United States was conducting 52% of its 110 million patient-physician encounters through smart phones, videoconferencing, kiosks and other technologies by the end of 2016.^[38]

* To find out more about how virtual care is used in other countries, please see Appendix D - Virtual Care Around the Globe.



7 in 10 would take advantage of virtual visits

Source: Canadian Medical Association, *Shaping the Future of Health and Medicine (2018)*



Less than 1 in 10 have had a virtual visit

Source: Canadian Medical Association, *Shaping the Future of Health and Medicine (2018)*

Growing Demand Among Canadians

Canadians are ready for virtual care. In a 2018 survey on behalf of the Canadian Medical Association, Ipsos discovered that 7 in 10 Canadians would take advantage of virtual visits, though less than 1 in 10 Canadians had experienced a virtual visit.^[39]

Another 2018 survey, conducted by Canada Health Infoway involving 2,406 adult Canadians, discovered that 41% of respondents would like to interact by video with a healthcare provider. Further, 74% of respondents desired the use of technology for routine touchpoints such as prescription renewals.^[40]

In Ontario, a 2017 Ipsos survey found that 49% of Ontarians would be interested in seeing a licensed Ontario physician online for symptom diagnosis and to receive prescriptions.^[41]

Demand for virtual health among Canadians can also be seen through the growth of private virtual clinics. Benefits Canada estimated that 9% of employers were offering private virtual healthcare to their employees in 2018.^[42] Through these services, hundreds-of-thousands of Canadians have access to practitioners from the comfort of their own homes using their own devices.

“Every generation presents a new challenge to our health care system, but with the Google Generation, health care is about convenience and timeliness, and the current system does not provide for that”

— Dr. Laurent Marcoux, former President, Canadian Medical Association^[43]

Few Virtual Care Providers

In their 2018 Canadian Physician Survey, Canada Health Infoway discovered that only 4% of primary care physicians offer their patients virtual visits through video, and 5% use an online tool to allow patients to request prescription renewals. The same study found that 9% of responding specialists offered virtual visits.^[44]

Despite these low numbers, 36% of physicians responding to a 2018 Canadian Medical Association survey on national licensure said they would likely take advantage of a national license to practice virtual care with patients in other provinces and territories.^[45]

Public System: Adoption of Virtual Care Modalities in Several Jurisdictions

As part of an environmental scan on virtual care, Canada Health Infoway documented their findings associated with the virtual care delivery modalities offered by several jurisdictions. As shown in the table below, adoption of the traditional hardware-based virtual care technologies (telemedicine sites/rooms) in these jurisdictions is well established. However, adoption of newer virtual care modalities is fragmented and in early phases, sporadic or non-existent.

CURRENT MODALITIES	P: Provincial T: Territorial R: Regional Pi: Pilot										
	BC	YT	AB	NWT	SK	MB	MB FN	NU	ON	ON FN	NB
Hardware-based VC	P	R	P	R	P	P	R	T	P	R	P
Software-based VC	R	RPi	R		RPi	Pi			P	R	P
Software-based VC to Home	R	RPi	RPi		RPi				R	R	P
Secure Asynchronous Messaging	R					P	P		R		

Source: Canada Health Infoway – ACCESS Virtual Jurisdictional Findings (2019)

Additional Insights:

Among other conclusions, Canada Health Infoway’s virtual care environmental scan report concluded that improved user experience and support of telemedicine systems would increase adoption.

Primary Care Usage

In speaking with representatives from commercial virtual care service providers, several explained that the conditions they treat most commonly are those associated with mental health, especially anxiety, and those associated with sexual health including contraception and sexually transmitted diseases.

These findings are consistent with a study of primary care virtual visits in British Columbia which discovered that:^[46]

- A larger proportion of patients with virtual visits sought care for a “mental disorder” compared to the general population (14.86% vs. 8.5%)
- Virtual visits were also used more frequently for “supplementary factors” which included requests for contraception and contraception advice (11.8% vs. 2.5%)

High Adoption in Mental Health and Addictions

In the publicly-funded health system, mental health care providers are actively using virtual care to support increased access and availability of care.

In Alberta, the Mental Health Virtual Health program provides consultations, case reviews, and treatment.

In Ontario, OTN supports over 300,000

mental health and addiction events per year. These services provide stigma-free access to needed medical services that may otherwise not be accessible throughout Ontario.^[47]

In a study of primary virtual care billings in British Columbia from September 2013 to October 2015, the most common medical concerns treated were anxiety, depression, and contraception.^[48]

In Nova Scotia, mental health and addictions is one of the most heavily-utilized virtual care programs. This was one of the contributing factors in choosing the mental health and addictions program at IWK Health Centre for the Nova Scotia Health Authority’s Medeo Pilot. During an interview for this scan, Keltie Jamieson of the NSHA explained that virtual care provides an opportunity for care where care never existed before. As an example, those with agoraphobia can be supported and treated through virtual visits.^[49]

Beyond publicly-funded programs in mental health, many of the commercial virtual clinics see a significant volume of mental health visits. Several vendors noted that more than a third of their virtual visits support the mental health needs of their patients.

Point of Interest:

Several mental health care providers are salaried as opposed to being compensated by the fee-for-service model. Other allied health providers in mental health also bill patients directly for their services.

Case Study:

Western Hospital Telerounding

In Prince Edward Island, virtual care was used as a unique solution to a very serious staffing issue, one that put a 27-bed hospital at risk of closure. For more than two years the hospital suffered with recruitment issues after physician retirements. Physicians in the community were overworked and the hospital was relying on locum physicians from outside their coverage area, which was not sustainable.

Out of desperation, the hospital turned to virtual care in the hopes it could support the hospital through telerounding. After investigating models in the United States, which were unable to meet the security, privacy and compliance requirements of Canada and Prince Edward Island, Paul Young, Administrator of Western Hospital, discovered Maple through a CBC interview. Maple provides virtual care services to Canadians. To support the project, Maple developed a customized version of their software to support the telerounding needs of the hospital.

As a first of its kind initiative in Canada, the hospital was challenged with hurdles of privacy concerns, legal reviews, organizational readiness, physician compensation, jurisdictional licensing, and access to patient medical records among other challenges.

Despite these hurdles, and with the support of Maple, the pilot launched after 90 days of planning. The program was such a success that the service was extended, and the hospital avoided closure. Results of the pilot will be available later in 2019.

“The patient experience is very important to us, and we have been amazed by how receptive our patients have been and by their positive feedback throughout the telerounding pilot..”^[50]

— Paul Young
Administrator of Western Hospital

Virtual Care and Cancer

For years, Canadian cancer patients, primarily in rural and remote areas, have been able to travel to the nearest telemedicine site for virtual visits with their distant specialists. In 2015, Oncology was one of a handful of clinical service areas that was established and offered by all jurisdictional telemedicine networks across the country.^[51]

In Ontario, the Ontario Telemedicine Network provides sample resources for program development. This includes a sample workflow diagram from the Juravinski Cancer Centre and a sample referral form from Odette Cancer Centre. These resources are available at: <https://otn.ca/providers/organizations/evisit>

In Saskatchewan, Oncology was the specialty that had used telemedicine the most, with 5,600 patients being seen virtually in 2016-2017.^[52]

Virtual Care Pilots

As technologies advance, pilots and trials for in-home virtual visits for cancer patients have been launched or conducted. The following table provides insights on three of those pilots:

VIRTUAL CARE PILOT, STUDY OR PROGRAM	ORGANIZATION	DESCRIPTION	BEGAN
Cancer Patients Receiving Specialized Care at Home Virtually	Provincial Health Services Authority, BC Cancer-Victoria	A demonstration project supporting cancer patients in meeting with their oncologists virtually for follow-up appointments. The project's goals were to enable patients to remain in the comfort of their homes for follow-up visits, reduce patient time, costs and inconvenience associated with travel, and establish self-scheduling flexibility for the program.	2018
Virtual Care Pilot Using Medeo	Nova Scotia Health Authority	Patients from NSHA's Cancer Care and IWK's Mental Health and Addictions programs participated in follow-up visits with providers. Among key questions to be evaluated was whether providing virtual visits was a viable option for these patients.	2017
Telemedicine Clinic for Prostate Cancer Patients	Grand River Regional Cancer Centre	Using OTN's technology, prostate cancer patients taking oral chemotherapy virtually meet with a pharmacist and nurse for appointments traditionally done on-site. The trial intends to compare patient satisfaction of these patients against the satisfaction of a group of control patients receiving conventional care.	2016

Insights from BC's PHSA and BC Cancer

To support this environmental scan, representatives from both British Columbia's Provincial Health Services Authority and BC Cancer were interviewed about their virtual health programs.

BC Cancer currently conducts 12,000 virtual sessions each year using room-based virtual care. For some, this means travelling long-distances to the nearest telehealth site. Out of a desire to service cancer patients in their homes, BC Cancer-Victoria launched a demonstration project in January of 2018.

The program, which saw 8 oncologists virtually visit with more than 100 patients in their homes, was targeted at follow-up appointments (replacing visits conducted at telemedicine sites). Patient enrollment in the program was at the discretion of the treating physician.

After generating positive results among patients and providers, BC Cancer is actively looking to scale their program to all oncologists on Vancouver Island. The majority of oncologists are interested in providing virtual visits to their patients. The organization is also considering expanding virtual health to other regional BC Cancer centres.

The first wave of the project utilized Skype for Business, though the organization has identified the need to trial with a virtual care technology tailored more to clinical needs.

BC Cancer also has a requirement that patients starting chemotherapy attend an educational session focused on the treatment. As such, the organization is planning a demonstration project using a one-to-many virtual care solution with the intention of offering a virtual session as an alternative to these in-person sessions.

Results from PHSA & BC Cancer-Victoria's Demonstration

75%

of patients chose VH-Visits because it saved them travel

86%

of patients experienced savings on bus fares or gas

87%

VH-visit success rate (excluding cancellations and no shows)

9/10

the average overall experience with VH-Visits score indicating high satisfaction

Perspectives on Virtual Care

Results from Canadian pilots indicate a high level of satisfaction with virtual care among patients and care providers.

Patients Value Virtual Care

Studies have shown that patients find value in the convenience, time and cost savings provided by virtual care. They also rate their virtual care experiences highly in terms of helpfulness and quality of care.

OTN launched its eVisit Primary Care pilot in 2017. By March of 2019, the completed pilot tracked more than 16,000 virtual visits. Key evaluation highlights from the pilot included that 98% of participants, regardless of age, gender or health issue, felt their virtual visit(s) were the same or better than in-person care. Asynchronous messaging was used in more than 90% of the encounters, which was found to be convenient for both patients and providers.^[53]

A 2016 Canada Health Infoway survey of patients in BC discovered that 91% of respondents found their virtual visit(s) very helpful or somewhat helpful.^[54] Consistent results were found in Nova Scotia, with 89% of patients in the Medeo Study indicating their follow-up appointments were as useful as a face-to-face visit.^[55]



of patients who had a virtual visit found it very helpful or somewhat helpful

Source: Canada Health Infoway, Virtual Visits in BC (2016)



of patients find their follow-up appointments as useful as a face-to-face visit

Source: NSHA Medeo Study (2018)



of patients would use virtual care again

Source: Ontario Telemedicine Network, eVisit Primary Care Pilot (2019)



of physicians found virtual visits as useful as face-to-face consultations

Source: NSHA Medeo Study (2018)

Providers Find Virtual Care Useful

Studies have also shown that care providers who have offered virtual care find virtual visits useful and understand the benefits for their patients.

In Ontario, 72% of providers who participated in OTN's eVisit Primary Care Pilot, within the Waterloo-Wellington Local Health Integration Network, rated their virtual visits as the same or better than an in-person visit. In fact, 28.6% of providers rated their virtual visit better than an in-person visit.^[56]

Healthcare providers participating in the Nova Scotia Health Authorities' Medeo Pilot were also surveyed about their experiences with virtual visits. When asked about their level of agreement to the statement "Medeo was highly effective for this virtual visit", 92% of the respondents said they strongly agreed or agreed with the statement. When asked about their agreement with the statement "This virtual visit was as useful as face-to-face counselling", 62% agreed or strongly agreed.^[57]

Canada Health Infoway also found that physicians in BC felt virtual visits are comparable in encounter time to a face-

to-face visits.^[58]

On the frontlines of healthcare, providers see the positive impacts of virtual care on patients. Laura Scroccaro, who works with long-term care residents at St. Joseph's Health Centre Guelph, explained that virtual consults with specialists are advantageous to patients who can stay at the facility to meet with specialists. Not only does the solution keep residents at home, but it also avoids the need for family members to take significant time off work to travel to larger centres with their loved ones.^[59]

Beyond Canada, Deloitte's 2018 Surveys of United States Health Care Consumers and Physicians discovered that physicians felt virtual care supports patient-centricity in the delivery of healthcare. Further, 66% of physician respondents felt it improved access to care for patients, and 52% felt virtual care improved patient satisfaction in their care.^[60]

One of the key findings of the Maple pilot for telerounding at Western Hospital in Prince Edward Island was that there was a significant reduction in the time it took to complete rounds of 14-16 patients when using telerounding. A traditional round would take between 6 and 8 hours whereas telerounds were often completed within 2 hours or less.^[61]



1 in 3 physicians felt virtual visits were better than in-person visits

Source: Waterloo Wellington Local Health Integration Network and eHealth Centre of Excellence, 2019 eHealth Conference

Medical Organizations Support Increased Adoption

Acknowledging the need to increase adoption of virtual care to improve access and quality of care for patients coast-to-coast, several national organizations announced the establishment of a task force in March of 2019.

The task force includes the Canadian Medical Association, the Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada. In their joint press release, they explained that the “task force will identify what regulatory changes are required for physicians to deliver care to patients within and across provincial/territorial boundaries while also addressing its administrative challenges. In addition, the task force will explore how health information can be effectively captured and available to both physicians and patients”.^[62]

In June 2019, the Newfoundland and Labrador Medical Association launched their Virtual Care Strategy. Their five-year vision for physicians is that they will be “practicing in an integrated and supported environment where the patient and the physician can determine whether a virtual or in-person interaction is best.”^[63]

In Ontario, Dr. Rick Tytus stated in his Ontario Medical Association President-Elect statement, “It is crucial that the OMA

is an active stakeholder in determining how concepts such as Big Data and Virtual Care will be implemented.”^[64]

Potential Challenges

Those in healthcare understand the many benefits virtual care offers, however there are some perceived challenges including:

1. The risk patients will replace physical encounters with family physicians with “more convenient” virtual care as their primary source of care

Canada Health Infoway interviewed British Columbian physicians for a study on virtual visits. These physicians noted that virtual visits should complement primary care and should not replace in-person visits as the “core relationship” between a patient and his/her family physician.

In its recently published guidelines on digital interventions for health system strengthening, the World Health Organization recommends complementing face-to-face client-provider interactions with telemedicine rather than replacing it.^[65]

2. The risks and impacts of further fragmenting patient records and the impacts on quality of care

During an interview for this scan, Dr. Kimberlyn McGrail, a Faculty member at the University of British Columbia’s Centre for Health Services and Policy Research, explained that private virtual clinics bring new opportunities but if they are not properly managed through policy, they

can become disconnected from the rest of the health system.^[66] If this occurs, it will make it even more difficult to achieve the very challenging ‘one patient, one record’ initiatives being contemplated across the country.

In a CBC article regarding private virtual care, Aude Motulsky, a research scientist at the University of Montreal Hospital Research Centre and a professor at the School of Public Health, argued that having access to medical records is essential to high quality of care, especially for chronic care patients.^[67] With virtual care clinics, physicians often rely solely on the insights and history provided by patients as they may not have access to patient records.

The difficulties of reflecting clinical notes from virtual visits back into patient records was also noted as a concern in discussing virtual care with the Nova Scotia Health Authority’s Virtual Care team.

3. The challenge private virtual clinics pose to Canada’s publicly-funded system of healthcare

There are those in healthcare who view private virtual health services as a risk to Canada’s single-payer system. Dr. R. Sacha Bhatia and William Falk argue that lack of modernization around healthcare “threatens to undermine support for our publicly-funded Canadian system. When virtual care (and its convenience) is available privately for a credit card payment, but not with our public system, we risk creating a second tier of

healthcare based on technology.”^[68]

Dr. McGrail also explained during her interview that if more public funding is not made available for virtual primary care delivery, we run the risk of losing our commitment to universal healthcare through private virtual services.^[69]

In an interview with CBC News, Natalie Mehra, the Executive Director of the Ontario Health Coalition, argues that private virtual clinics/services violate the principle “that healthcare should be accessible to everybody on equal terms and conditions.”^[70]

Implementation Considerations

Across Canada, mass adoption of virtual care has been constrained by several barriers including challenges in policy/regulation, technology, organizational readiness and individual adoption.

In summarizing 13 of the 18 stakeholder interviews for this scan, several barriers were discussed, the most common being:

STATED BARRIER (RISK)	# OF RESPONDENTS (OUT OF 13)
Lack of system integration/ interoperability	9
Compensation for providers	6
Human resourcing and scheduling (clerical burden)	6
Technology issues (connectivity, video/audio quality)	5
Technical aptitude of providers	6
Privacy concerns	4
Provider buy-in	4

Among other barriers uncovered through these conversations were the lack of Canadian models/standards for delivery of virtual care, the technical inabilities of patients, unfriendly technologies, changes in workflow, a lack of funding to support mass adoption, social and financial inequality, and general awareness of virtual care.

Similar themes were also identified among the 15 stakeholders interviewed for the ACCESS Virtual Jurisdictional Findings report, as outlined in the table below:

STATED BARRIER (RISK)	# OF RESPONDENTS (OUT OF 15)
Lack of interoperability/ standardization	7
Connectivity	7
Bandwidth	6
Human resource challenges (including scope of practice and lack of any/appropriate HR)	6
Funding/Economic	6
Remuneration for physicians (within and cross-jurisdictionally)	6
Policy (models that better support virtual care)	5

Source: Canada Health Infoway – ACCESS Virtual Jurisdictional Findings (2019)

Summary of Barriers and Facilitators

To support organizations in overcoming policy/regulatory, technological, organizational and individual barriers in deploying virtual care, several facilitators were identified through this environmental scan. For in depth findings relating to virtual care barriers in Canada, please refer to *Appendix E - Barriers and Facilitators*.

Policy/Regulatory

BARRIERS	FACILITATORS
<ul style="list-style-type: none"> • Lack of centralized and coordinated decision making • Lack of national standards • Jurisdictional licensing • Provider compensation models • Budgetary • Privacy legislation 	<ul style="list-style-type: none"> • Increase collaboration and sharing of best practices across jurisdictions • Establish national licensure • Start with “salaried” physicians

Point of Interest

In 2018, Canadian family physicians were surveyed on factors to support them in integrating electronic communications in their practice. 50% responded that having an alternative fee schedule would facilitate virtual care e-services, while 28% felt an alternative payment model would be supportive. Comparing the same question for specialists, 43% felt an alternative payment fee schedule would facilitate the advancement of virtual care, while 23% felt an alternative payment model would be supportive.^[7]

Technological

BARRIERS	FACILITATORS
<ul style="list-style-type: none"> • Access to patient records (integrating back to EMRs and HMISs) • Internet connectivity and bandwidth in remote and rural areas • Data security and privacy 	<ul style="list-style-type: none"> • Build virtual care into EMR/HMIS platforms • Select virtual care platforms which integrate into EMR/HMIS platforms • Copy/paste from virtual care platform into EMR/HMIS

* Stakeholders interviewed for this environmental scan also provided insights on factors which influenced the selection of their virtual care technologies. For these insights, please refer to Table 4.

Organizational

BARRIERS	FACILITATORS
<ul style="list-style-type: none"> • Readiness • Existing clinical workflows • Scheduling • Space for virtual care equipment • Patient awareness 	<ul style="list-style-type: none"> • Involve all stakeholders in planning to deploy virtual care (and use project managers) • Build virtual care into existing workflows to support buy-in • Establish a centralized mechanism for scheduling of virtual visits • Educate patients before their first experience (what to expect)

“The planning and engagement process is extremely important. We spent a lot of time engaging clinical programs and hospital stakeholders to determine where and how virtual care could be leveraged. This helped us create the scope of the initial implementation.”

— Tyler Aird, Senior Project Analyst, Digital Solutions, St. Joseph’s Healthcare Hamilton

Individual

The following table outlines individual barriers and facilitators at the system level. Before implementing virtual care solutions, it would also be imperative for jurisdictions to gather patient perspectives.

BARRIERS	FACILITATORS
<ul style="list-style-type: none"> • Additional work responsibilities (especially for clerical or coordinating staff) • Awareness and willingness of practitioners 	<ul style="list-style-type: none"> • Invest in Virtual Care Coordinators • Educate, using evidence-based insights • Leverage clinical champions for peer influence

Additional Insights

The Provincial Health Services Authority in British Columbia has established a model to support clinicians/organizations in deploying virtual health.

Table 4: *Factors identified through interviews which influenced virtual care technology/platform selection*

Area of Consideration	Contributors or Factors
Project Considerations	<ul style="list-style-type: none"> • Obtaining feedback from other organizations (who already offer virtual care) • Researching platforms and technologies • Referencing models in other countries (United States)
Patient Considerations	<ul style="list-style-type: none"> • Establishing and relying on patient and family advisory committees for insights around their needs
Operational Considerations	<ul style="list-style-type: none"> • Strategically fitting the solution into existing clinical processes and workflow • Ensuring privacy legislation and securing confidential patient health information obligations are met • Engaging all relevant internal stakeholders
Technology Consideration	<ul style="list-style-type: none"> • Selecting platforms with a clinical focus or which could be embedded within a platform with a clinical focus such as an EMR (not generic video conferencing solutions) • The ability/inability to integrate with or embed within existing software systems (electronic medical records / hospital management information systems, scheduling software, patient portals, single sign-on, etc.) • Considering or re-using technical solutions already available for use by the organization (using solutions provided by telemedicine networks and/or using platforms for which licencing was already in place) • Conducting Privacy Impact Assessments
Vendor/Platform Considerations	<ul style="list-style-type: none"> • Partnering with vendors who had a willingness to participate in pilots/studies • Minimizing the cost of the solution(s)

Key Opportunities for Cancer Care

In 2018, the Canadian Partnership Against Cancer published *Living with Cancer: A Report on the Patient Experience*. The document describes the Canadian cancer care experience from the patient perspective. The report draws on several sources including a Canada-wide study of 13,000 cancer survivors.^[72]

Among the report's many findings are several challenges in the Canadian health system which directly impact the experience of patients. Patients felt:

- Wait times for diagnosis are too long
- Care needs to be available closer to home
- Supportive care is needed to address patients' unmet emotional needs
- Transition back to primary care needs to be more seamless

Virtual care is well-positioned to support meeting each of these health system challenges.

Quality of Life Benefits to Patients

In addition to improving the patient's experience within the health system, virtual care can also improve the quality of life for cancer patients by realizing the following benefits:

- Comfort and convenience of being at home
- Avoidance of visits to hospitals for those who are immunosuppressed
- Lower risk of falling for frail and/or elderly
- Ease of family members joining visit(s) (with patient or in another location)
- Reduced time off work for patients and families to attend appointments
- Reduced travel/parking costs and time incurred for appointments (especially for those in rural and remote communities)

Where Virtual Care May Fit

- Receive education / counselling on treatment closer to home
- Get treatment at home for appropriate cases (e.g., oral chemotherapy)
- Participate in follow-up visits from home
- Care team monitors patient symptoms and side effects from home
- *Improved access to mental health care for patients and family members*

- Ability to have care team collaborate real-time to develop surveillance or end of life treatment
- *Improved access to mental health care for patients and family members*

Survivorship / End of Life

Treatment

Diagnosis / Pre-treatment

- Decreased wait times to see specialists (assumes more involvement from primary care provider during diagnostic phase)
- Integrated care team provides real time input into treatment plan with patient and family
- *Improved access to mental health care for patients and family members*

- Primary care providers interact virtually with specialists and streamline diagnostic workup for patients
- *Improved access to mental health care for patients and family members*

Diagnostic Phase

- Get access to primary care when cancer suspicion arises

Pre Diagnosis

- Receive counselling on cancer risk reduction and available screening programs

Prevention

Conclusion

The recently refreshed 2019-2029 Canadian Strategy for Cancer Control calls for equitable access to cancer care for all Canadians, care closer to home, earlier diagnosis and improved patient experience. Newer care delivery models such as virtual care have the potential to address all these priorities. The benefits of virtual care are well-acknowledged and even promoted among those in healthcare, from policy makers to frontline providers. Despite these benefits, adoption of virtual care across Canada is fragmented, both by jurisdiction as well as in purpose.

Most of the virtual care in Canada is delivered through jurisdictional telemedicine networks, where patients have traditionally visited a telemedicine site, equipped with videoconferencing hardware, to meet with a specialist in a distant location. Over the past several years, new software-based virtual care solutions have come to market. These technologies allow care providers and even patients to use their own devices to participate in a virtual visit. With these solutions emerging, jurisdictional telemedicine networks are gradually moving towards “anywhere-to-anywhere” virtual care.

Feedback from patients and care providers indicates that both groups acknowledge the value, convenience, cost savings and high quality of care delivered

through the virtual care experience. Demand for virtual care amongst patients is high and exceeds supply.

Several policy, technology, organizational and individual barriers need to be overcome to support increased adoption of virtual care by physicians nationally. As facilitators to adoption emerge, so do clinical champions, success stories and best practices. Several virtual care pilots have also been successful, indicating positive results for patients and providers.

Virtual care has the potential to positively impact access to care, the patient experience and sustainability of our healthcare system. In turn, there are several opportunities to further integrate virtual delivery of care into a cancer patient’s experience. Because cancer intersects with many parts of the health system, e.g., specialty, acute, primary, community and home care, cancer patients may be among the greatest beneficiaries of this innovation.

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