



EVIDENCE SYNTHESIS

A REVIEW OF POLICIES AND BARRIERS THAT INFLUENCE
THE USE OF VIRTUAL HEALTH IN PRIMARY CARE

OCTOBER 2020

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Acknowledgments

The AGE-WELL National Innovation Hub, APPTA wishes to acknowledge and thank the many individuals and organizations who contributed to the development of this report.

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How to cite this document

AGE-WELL National Innovation Hub. A Review of Policies and Barriers that Influence the Use of Virtual Health in Primary Care. 2020. Fredericton, NB: AGE-WELL National Innovation Hub, APPTA Inc.



EVIDENCE BRIEF

A Review of Policies and Barriers that Influence the Use of Virtual Health in Primary Care

Background:

The practice of ‘virtual’ medicine has been discussed as a solution to increase access to health care services while also combatting the significant wait times currently in place for acute and long-term care settings. In a survey conducted by the Canadian Medical Association (CMA), individuals primarily accessed health care services or information in person at their family doctor’s office (61%), in a clinic (31%), or by going to the emergency room (ER) (16%). The number of ER visits was higher for individuals who had complex needs (30%) or did not have a family doctor (21%)ⁱ. Further, as a response to the COVID-19 pandemic, the survey captures the shift in the delivery of health care using information and communication technologies to access care or health information. Telephone usage increased to 34% (from 12%) among respondents to access their doctor, a trend that was likely influenced by physical distancing guidelines. The reliance on the acute care system for health care needs that can be managed at home with primary care remains a major concern, especially since virtual health services have demonstrated equivalent outcomes, satisfaction rates and lower costs than in person visitsⁱⁱ.

Telemedicine is generally described as the provision of health care through information and communication technology (ICTs) when patient and provider cannot be in physical contact.

This review aims to understand the factors that influence the usage of virtual health in primary care. For the purposes of this review, we explored virtual health usage in the provision of primary

care services led by family physicians. This included remote monitoring, phone calls, video-based visits, text messaging, EMR usage, etc.

We conducted a document analysis to establish an understanding of the policy landscape governing telemedicine practices among physicians in Canada. To identify documents that included insights about possible barriers for patients and providers to use virtual care options, we searched several academic databases using broad search terms to capture the various definitions of virtual care across jurisdictions. We included articles focused on virtual offerings of primary care services (i.e. consultations, follow-up visits, EMR usage), while articles regarding secondary or tertiary health services were excluded. Given our targeted focus to identify barriers to uptake of virtual health, articles that focus on virtual health more broadly were also excluded.

Overview of standards of practice for telemedicine

Regulatory bodies of physicians and surgeons in jurisdictions across the country set out standards or policies for the practice of medicine. This includes standards on the practice of medicine through digital or virtual means, referred to as 'telemedicine'. Telemedicine is recognized and defined as a method of providing care to patients where physical contact is not possible. One commonality among policies is that practitioners must hold a permit to practice telemedicine in the jurisdiction. Most jurisdictions mention that when physicians provide telemedicine services to patients in a different jurisdiction, they must comply with the standards set out by the jurisdiction in which the patient resides, which may also include following that jurisdiction's billing schedule. This may influence practitioners' decisions to take on out-of-province patients.

While standards of practice for telemedicine among jurisdictions have many similarities, there are particular elements that differ. New Brunswick (NB), for example, outlines their regulation on a case-by-case basis to be assessed by the council of the College of Physicians and Surgeons NB.

Alberta, for their part, set out some additional requirements for out-of-province physicians providing telemedicine to residents by limiting visits to five times per year or in the event of emergency assessment or treatment of a patient. Further, only one college (Saskatchewan) offers a telemedicine license for practicing only in Saskatchewan. All other provinces and territories outline that licensed physicians are held to the same standards of practice when providing telemedicine as they are when providing in person care. The CMA surveyed Canadian physicians and found that while there is interest in being licensed to practice in other jurisdictions, three major obstacles exist with regards to the licensing process: complexity, length, and costⁱⁱⁱ. The table in Appendix A provides a summary of some key practice guidelines set out by the colleges of physicians and surgeons in Canadian jurisdictions as well as how telemedicine is defined by that jurisdiction.

Barriers:

Barriers to Virtual Health

In addition to the complexities in standards and payment models for telemedicine services, there are many barriers to the implementation of the practice itself. These barriers include staff resistance, lack of equipment, lack of infrastructure (Internet), availability of training and information technology (IT) support, and preference towards traditional health service provision. Further, it must be acknowledged that while there are barriers to the implementation and continued use of telemedicine services in primary care, a significant ongoing issue that may exacerbate these challenges is the shortage of health practitioners to provide primary care services in Canada^{iv}. The following section explores identified barriers at both the practitioner and patient levels.

Barriers for Physicians

Some studies describe a key barrier to telemedicine being a lack of *physician buy-in*, which is driven by extra time requirements, costs and remuneration that does not explicitly incorporate telemedicine^{v vi vii}. While often said to

be a time efficient option, providers indicated there are extra time requirements in setting up telemedicine visits or consultations. In terms of cost-effectiveness, there is also *extra equipment* necessary that would be at the expense of their practice, as well as the lack of *remuneration* specifically for telemedicine visits through provincial and territorial public health insurance programs. Further, there are few models that include telemedicine services in publicly funded health systems. There are still discrepancies across the country for what is allowed for compensation, as current models are focused primarily on remunerating in-office visits^{viii}. Therefore, when identifying telemedicine as an option to explore to lessen the burden on the health care system, policymakers and regulators must ensure that it lessens the burden on practitioners and patients as well.

“It needs to be cost-effective for the doctor”

– Participant, Moffatt & Eley (2011)

Barriers for Patients

Virtual practices have been considered as an up and coming solution, specifically in the context of supporting an aging population. While research shows positive outcomes for patients using virtual interventions, the challenges of implementation and experience or attitudes of the target user need to be better understood. More specifically, a scoping review highlights mixed results as to whether use of ICTs, both in everyday life and in a care service context, has positive or negative effects on the quality of life outcomes of older adults. Some articles indicate positive associations with computer or mobile phone usage and independence and control over one’s life. Other articles have identified a perceived increase in pressure to conform and use technologies in order to avoid stigma associated with aging^{ix}. More specific challenges from the patient perspective in regard to telemedicine is lack of access. Not only is there a lack of reliable Internet service in rural and remote communities^x, there is also a lack of opportunity to use telemedicine services for

appointments with their family physicians. Canada Health Infoway reports that only 4% of family physicians offer electronic booking, 24% offer email communications, and 4% offer video visits^{xi}. Patients who wish to use virtual options may be able to enter the private sector, if they can afford it, by connecting with physicians on a variety of platforms with a pay-per-visit model, ranging from \$49 to \$79 per visit for primary care consultations, and up to \$249.99 per visit for specialties like dermatology. These services allow for convenient and quick access to consultations, however, continue to pose barriers for individuals who cannot afford to pay for services^{xii}. While studies did not focus on low income, homeless, persons living with disabilities or chronic conditions, or other vulnerable or marginalized groups, it is possible they are differentially disadvantaged by barriers such as poor infrastructure and/or interfaces, high costs of devices, or lack of access to support.

Movements in Support of Virtual Health

A discussion paper released by the CMA^{xiii} in 2019 identified two key drivers for the emerging interest in virtual health: (1) a need for timely access to healthcare paired with an aging population and shortage of workers, and (2) consumer, or patient, demand based on an Ipsos survey. The major barriers identified in the virtual health space were lack of sufficient payment models, licensure challenges, and lack of interoperability across all points of the health care system. This work helped with the formation of a task force for virtual care.

” A fundamental aim of the work of the VCTF was to make sure that patient, family and caregiver expectations, experience and equity as well as patient safety are a priority in the development of an environment that supports the delivery of virtual care.”

The Virtual Care Task Force (VCTF) was established with the aim of identifying key recommendations for the provision of virtual care in Canada by addressing the barriers identified above. The task force focused itself around four main working groups that address the critical aspects of virtual care: interoperability and governance; licensure and quality of care; payment



models; and medical education. These working groups informed the recommendations for generating a national framework in which to better guide provincial and territorial regulatory bodies. The report also highlights many recommendations that aim to support a more widely spread adoption of virtual care services across Canada. These recommendations include, but are not limited to:

- A payment model reform which will require clinical review to assess need for physical contact, and a pricing review. It is important to develop a fee schedule that is revenue neutral between in-person and virtual encounters;
- Fast-tracking licensing and license portability for physicians (supporting the work of the Federation of Medical Regulatory Authorities of Canada);
- Establish a national framework to regulate the safety of virtual care technology and systems, a framework for virtual care liability for physicians, and a framework for Indigenous virtual care standards;
- Education and training for health care providers. Incorporate virtual care in medical school curriculums; and
- Promotion of digital health literacy for the general population.

COVID-19 as a Catalyst for Virtual Health Uptake

The COVID-19 pandemic put patients and health care providers in a challenging and unprecedented space when states of emergency, lockdowns, and physical distancing directives were put in place. Recommendations to health care providers by government and regulatory bodies have increasingly supported the use of virtual care tools. Recent changes in relation to practicing telemedicine vary by jurisdiction. The College of Physicians and Surgeons of Nova Scotia issued a bulletin on March 20th, 2020 providing advice to physicians and support for adopting telemedicine services to care for their patients. The bulletin outlines recommendations for using telemedicine services for patients with suspected COVID-19 and for other patients with chronic or acute needs. In New Brunswick, two physicians launched an online platform, eVisitNB, that provides patients with secure virtual services for their primary care needs. Launched in February, the platform gained much attention and on March 5th, the government announced they will publicly fund virtual care services. This change, while promising, has begun to cause issues for the health care providers on this platform, as rates were reduced for billing their services. As a

result, eVisitsNB had to scale back their operation, which is of concern for New Brunswick residents, given 77% indicated being in support of virtual care services in the future, from a survey conducted by the New Brunswick Medical Society^{xiv}. Further, a telemedicine ‘essentials’ tool was developed in collaboration with regulatory bodies (BC and ON), the McGill University Department of Family Medicine, and other collaborators, to assist physicians in the use of telemedicine to provide medical care^{xv}. Also, the government of Alberta announced that they are making the virtual care billing codes permanent, and not just supported as a public health measure in the COVID-19 response^{xvi}. A more detailed list of virtual health options is provided on our infosheet “Virtual Health Solutions in Canada”.

“38% of respondents would choose the option of phone, video conference, email or text rather than an in-person consultation as the first point of contact for a doctor’s advice.”
-CMA National Survey Results, (2020)

The acute response and movements toward using ICTs to continue the provision of health care services is something that, while not a new interest to the health care system, is going to change future service provision. In the CMA survey^{xvii}, when asked about normal access to care for an illness or medical condition, 23% of respondents said they use either phone, telehealth, virtual service, text/email or video conference, all of

which would be considered information and communication technologies. Of respondents who do not have a primary care physician, 59% and 21% access a walk-in clinic or ER, respectively, and 16% opt for telehealth or virtual health provider services, compared to the 4% who have a family doctor. Generally, there is a good level of satisfaction among Canadians who have used virtual services in some way to access health care services and information. As a result of the COVID-19 pandemic, respondents’ utilization of health care services shifted to using the telephone (34% of respondents) over in person visits (10% of respondents). When asked about a future after the pandemic, it was noted that 38% of respondents would like to have a virtual first point of contact, while the majority (62% of respondents) still preferred an in-person examination. From this survey, there still seems to be mixed attitudes or preferences toward using ICTs in the provision of care,



especially for the first point of contact with a care provider. With increasing government interest and support for virtual health, there is an opportunity to allocate supports for practitioners and patients in accessing what is required for such services.

Considerations

The movement towards virtual health care, as a result of COVID-19, will not necessarily sustain itself unless physicians and other health care providers are supported in employing more virtual options that enhance their ability to provide patient care. National guidance for the regulation and provision of virtual health is identified as a critical recommendation as it will better enable jurisdictions to establish necessary payment models, licensing, and implementation models.

With technological interventions becoming sought after solutions in health care, it is critical to consider how this shift will impact the populations which rely on the systems the most. This review did not look in depth at the particular challenges faced by individuals with cognitive impairment, mental illness, acute or chronic conditions, low socioeconomic status, individuals residing in rural and remote communities, Indigenous communities, or visible minorities. The 'digital divide' persists for those who cannot access services virtually whether the infrastructure for basic Internet is not in their area, or they cannot afford a computer or tablet. The movement towards technology options needs to consider the equity and access barriers in place. Furthermore, the current pandemic has created financial burdens for many Canadians; moving toward health care service delivery with a patient cost will not be feasible for many unless supports are put in place. Lastly, rural and remote populations already experience issues with access to health care services. These issues will continue, or worsen, with greater implementation of virtual health services, if broadband expansion to more remote communities does not occur as they rely on strong Internet connections to support the use of ICTs. With the pivotal work already done by the CMA, College of Family Physicians Canada, and College of Physicians and Surgeons Canada and recent movements as a response to the global pandemic, jurisdictions are well placed to make incremental yet significant changes in the system that will support the uptake of virtual care across the country.

Appendix A

	Regulatory Body	Definition	Member Requirements
<p>PE</p>	<p>College of Physicians and Surgeons Prince Edward Island (CPSPEI) – Telemedicine Policy</p>	<p>Telemedicine may include, but is not limited to, the provision of pathology, medical imaging and patient consultative services.</p>	<p>The Policy applies to all CPSPEI members, regardless of location.</p> <p>Telemedicine does not alter the ethical, professional and legal requirements around the provision of appropriate medical care.</p> <p>The physician should exercise caution when providing prescriptions or other treatment recommendations to patients whom they have not personally examined.</p> <p>When collaborating on patient care with other providers, the physician is ultimately held responsible.</p> <p>Members are advised that when delivering telemedicine services into another jurisdiction, they may be held to that standards of that jurisdiction.</p>
<p>BC</p>	<p>College of Physicians and Surgeons British Columbia (CPSBC) –</p>	<p>Telemedicine is a medical service provided remotely via</p>	<p>Some jurisdictions require a physician to hold a license in order to treat a</p>



	Practice Standards, Telemedicine	information and communication technology; remotely is without physical contact and does not necessarily involve long distances.	<p>patient located in that jurisdiction.</p> <p>Physicians must ensure appropriate liability protection is in place to provide indemnity for malpractice.</p> <p>Physicians must obtain valid informed consent from the patient.</p> <p>Prior to referral, if a physical examination is necessary, the physician must ensure one is conducted.</p>
AB	College of Physicians and Surgeons Alberta (CPSA) – Standard of Practice, Telemedicine	Telemedicine means the provision of medical diagnosis and patient care through electronic communication where the patient and the provider are in different locations.	<p>A physician (regulated member) who not does hold a valid Alberta practice permit may practice telemedicine for a patient located in AB if: the total number of telemedicine events are limited to five (5) times per year; or the telemedicine event is for emergency assessment or treatment of a patient.</p> <p>If an AB physician practices telemedicine for a patient outside of AB they are subject to the standards of that jurisdiction.</p>
SK	College of Physicians and Surgeons	Telemedicine is a medical service	A physician who is physically located in

	<p>Saskatchewan (CPSS) – Policy, The practice of telemedicine</p>	<p>provided remotely via information and communication technology; remotely is without physical contact and does not necessarily involve long distances.</p>	<p>Saskatchewan, but who provides telemedicine services to patients located outside of Saskatchewan, is practicing medicine in Saskatchewan.</p> <p>A person need not be a licensed SK physician to do any of the following: provide telemedicine services in an emergency situation; provide treatment in consultation with a SK physician who has an ongoing relationship with the patient and who has agreed to supervise the patient’s treatment, including use of any prescribed medication; and provide services without any form of compensation.</p> <p>The college offers a telemedicine license to physicians who only practice telemedicine in SK.</p> <p>The college expects physicians that it licenses to meet the licensing requirements of another P/T in order to practice telemedicine with patients in that P/T – if they do not meet the requirements, the college considers this unprofessional conduct.</p>
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<p>NB</p>	<p>College of Physicians and Surgeons New Brunswick (CPSNB) – Regulation #13</p>	<p>Telemedicine is the use of communication and information technology to deliver medical services and information over distances.</p>	<p>Licensure to provide telemedicine is dependent on the nature and frequency the service requires – there is a telemedicine provider list and a list of requirements that must be met.</p> <p>Physicians must be licensed with a regulatory authority deemed acceptable to the council.</p>
<p>NS</p>	<p>College of Physicians and Surgeons Nova Scotia (CPSNS) – Professional Standards regarding the provision of telemedicine services</p>	<p>Telemedicine is the provision of medical expertise for the purpose of diagnosis or patient care by means of telecommunications and information technology where the patient and the provider are separated by distance. Telemedicine may include, but is not limited to, the provision of pathology, medical imaging, and patient consultative services</p>	<p>Physicians must comply with the regulatory requirements of telemedicine in any jurisdiction where they treat patients.</p> <p>Physicians are not to prescribe opioids or other controlled medications to patients whom they have not examined in person, or with whom they do not have a longitudinal treating relationship with, unless direct communications with another regulated health professional who has examined said patient.</p> <p>Exercise caution when prescribing or offering other treatments to patients who they have not examined in person.</p>

<p>ON</p>	<p>College of Physicians and Surgeons Ontario (CPSO) – Telemedicine Policy</p>	<p>Telemedicine is both the practice of medicine and a way to provide or assist in the provision of patient care (which includes consulting with and referring patients to other health-care providers, and practicing telemedicine across borders) at a distance using information and communication technologies such as telephone, email, audio and video conferencing, remote monitoring and telerobotics.</p>	<p>Physicians must continue to meet legal and professional obligations.</p> <p>Physicians must use their professional judgement to determine whether telemedicine is appropriate.</p> <p>When practicing or assisting in the provision of patient care across borders, physicians must comply with requirements of that jurisdiction.</p> <p>Physicians who are not CPSO members must comply with licensing requirements in the jurisdiction in which they hold licensure.</p>
<p>MB</p>	<p>College of Physicians and Surgeons Manitoba (CPSM) – Standards of Practice of Medicine Schedule K. Virtual Medicine</p>	<p>Virtual medicine means the provision of medical care by means of electronic communication when the patient and the provider are separated by distance, and may include, but is not limited to, the provision of pathology, medical imaging, and patient consultative services.</p>	<p>For greater certainty, a member who provides medical care by virtual medicine must comply with the requirements in the regulation and these standards of practice for patient records.</p> <p>Members must take reasonable steps to ensure the identity of the patients, the hardware and software being relied upon functions properly and securely; any support staff involved are adequately trained and</p>

			<p>competent to use the equipment; and the equipment is up to date and reliable.</p> <p>In the case of computer equipment, ensure the possibility of computer hacking or virus is kept to a minimum.</p> <p>Ensure a backup system is in place to protect the patient in the event of an equipment malfunction.</p> <p>Members practicing out of province services, must comply with the requirements of that jurisdiction.</p> <p>A member must take reasonable steps to ensure the medical information will not be interpreted by a third party.</p> <p>Members practicing in MB are required to carry professional liability insurance or have membership with the Canadian Medical Protective Association (CMPA), however, not all activities are covered.</p>
<p>NL</p>	<p>College of Physicians and Surgeons Newfoundland and Labrador (CPSNL) –</p>	<p>Telemedicine is the provision of medical expertise for the purpose of diagnosis or</p>	<p>Physicians are held to the same standard of legal, ethical, competent, and professional care as</p>

<p>Standard of Practice, Telemedicine</p>	<p>patient care by means of telecommunications and information technology where the patient and the provider are separated by distance. Telemedicine may include, but is not limited to, the provision of pathology, medical imaging, and patient consultative services.</p>	<p>physicians providing personal face to face medical services. Patient Quality, safety, and appropriateness of care are always kept in high regard.</p> <p>Physicians must refrain from prescribing narcotics or other controlled or regulated medications to patients whom they have not personally examined or with whom they do not have a longitudinal relationship with unless they are in direct communication with another licensed provider who has examined the patient.</p> <p>The college will not issue a telemedicine license.</p> <p>Physicians who practice telemedicine must hold a license in the jurisdiction they reside.</p> <p>If a physician refers a patient to an out of province physician, the referring physician must ensure that physician is licensed in their jurisdiction. The referring physician must also notify the patient of this.</p> <p>Complaints with any physician practicing</p>
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			<p>telemedicine go to the regulatory body in which they are licensed.</p> <p>Physicians providing telemedicine to patients outside NL must comply with the standards of that jurisdiction.</p>
QC	College of Physicians and Surgeons Quebec (CPSQ) – Medical Practice Guidelines	Telemedicine is defined as the practice of medicine at a distance using information and communication technologies (ITC).	<p>When a physician provides telemedicine services, the practice of telemedicine is deemed to occur in the territory in which the patient is located.</p> <p>Physicians who are licensed to practice in Quebec must, before providing telemedicine services to a patient outside Quebec, learn about and comply with the laws and regulations governing the practice of telemedicine in the territory where the patient is located.</p> <p>The college requires physicians who provide telemedicine services to a patient in QC at the time of consultation to hold a permit to practice issued by the college and be entered on the Roll of the Order. [He] may practice under an authorization issued by the college</p>

			<p>specifically for the practice of telemedicine.</p> <p>The guidelines also outline recommendations for use of ICTs in practice and acceptable use of social media platforms.</p>
YK	College of Physicians and Surgeons – Standards of Practice, Telemedicine	Telemedicine means the provision of medical diagnosis and patient care through electronic communication where the patient and the provider are in different locations.	<p>Physicians must be registered as with the Council; and adhere to the Council Standards of Practice and Code of Ethics.</p> <p>Physicians not licensed in Yukon may practice telemedicine for a patient located within Yukon if the total number of telemedicine events are limited to five (5) times per year or the telemedicine event is for emergency assessment or treatment of a patient.</p> <p>Physicians licensed in Yukon who practice telemedicine for a patient outside of the Yukon must comply with the licensing or registration requirements of the jurisdiction in which the patient is located.</p> <p>A physician must not issue or sign a prescription unless [they] obtain a medical history and conducts an appropriate</p>

			<p>examination to establish diagnosis, ensures there are no absolute contraindications to the treatment recommended, and has an appropriate and informed discussion to ensure the patient understands the risks, benefits and course of action.</p> <p>Physicians may issue a prescription without meeting the full scope above: in the event of an emergency treatment, in consultation with another physician who has an ongoing relationship with the patient, or in an on-call or cross-coverage situation.</p>
NWT	A specific telemedicine practice standard or policy could not be found	N/A	N/A
NU	A specific telemedicine practice standard or policy could not be found	N/A	N/A

References

- ¹ Canadian Medical Association (2020). What Canadians Think about Virtual Health Care: A Nationwide survey. Retrieved: <https://www.cma.ca/sites/default/files/pdf/virtual-care/cma-virtual-care-public-poll-june-2020-e.pdf>
- ² Exner-Pirot, H., B. Norbye and L. Butler (eds.) (2018). *Northern and Indigenous Health and Health Care*. Saskatoon, Saskatchewan: University of Saskatchewan. Available from: <https://openpress.usask.ca/northernhealthcare/chapter/chapter-25-challenges-to-telehealth-implementation/>
- ³ Canadian Medical Association Health Summit. Virtual Care in Canada: Discussion Paper. Retrieved: https://www.cma.ca/sites/default/files/pdf/News/Virtual_Care_discussionpaper_v2EN.pdf
- ⁴ Ibid. 3.
- ⁵ Moffatt, J. & Eley, D. (2011) Barriers to the up-take of telemedicine in Australia – a view from providers. *Rural and Remote Health*, 11:1581.
- ⁶ Stumpf, S., Zalunardo, R. & Chen, R. (2002). Barriers to telemedicine implementation. *Healthcare Informatics*.
- ⁷ Ludwick, D. & Doucette, J. (2009). Primary Care Physicians' Experience with Electronic Medical Records: Barriers to Implementation in a Fee-for-Service Environment. *International Journal of Telemedicine and Applications*. 2009. Article 853524.
- ⁸ Ibid. 5.
- ⁹ Damant, J., Knapp, M., Freddolino, P., Lombard., D. (2016). Effects of digital engagement on the quality of life of older people. *Health & Social Care in the Community*. ISSN 0966-0410
- ¹⁰ Canadian Radio-Television and Telecommunications Commission (2020) Broadband fund: Closing the digital divide in Canada. Government of Canada. Retrieved: <https://crtc.gc.ca/eng/internet/internet.htm>
- ¹¹ Canada Health Infoway. 2018 Canadian Physicians Survey: Physicians' Use of Digital Health and Information Technologies in Practice. Retrieved: <https://www.infoway->

inforoute.ca/en/component/edocman/3643-2018-canadian-physician-survey/view-document?Itemid=101

¹² Ibid. 3.

¹³ Ibid 3.

¹⁴ New Brunswick Medical Society (2020). New Brunswickers Overwhelmingly Support Virtual Health Care. Retrieved: <https://www.nbms.nb.ca/news-and-updates-2/news-and-updates/new-brunswickers-overwhelmingly-support-virtual-health-care/#.XwNPPS05TIE>

¹⁵ Arsenault, M., Evans, B., Karanofsky, M., Gardie, J., Shulha M. (2020) Telemedicine: The Essentials. Retrieved; https://www.cfp.ca/sites/default/files/pubfiles/PDF%20Documents/Blog/telehealth_tool_eng.pdf

¹⁶ Knight, Demi (2020). Virtual Physician Visits to Become Permanent in Alberta Post-COVID-19 Pandemic. Global News. Retrieved: <https://globalnews.ca/news/7041384/virtual-physician-visits-alberta/>

¹⁷ Ibid. 1.