Rapid Synthesis:
Understanding the Use of and Compensation for Virtual-care Services in Primary Care
30-day response

27 July 2018
Understanding the Use of and Compensation for Virtual-care Services in Primary Care

McMaster Health Forum

The McMaster Health Forum’s goal is to generate action on the pressing health-system issues of our time, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. We aim to strengthen health systems – locally, nationally, and internationally – and get the right programs, services and drugs to the people who need them.

Authors

Kerry Waddell, M.Sc., Co-Lead Evidence Synthesis, McMaster Health Forum

Eilish M. Scallan, M.Sc., Research Assistant, McMaster Health Forum

Michael G. Wilson, PhD, Assistant Director, McMaster Health Forum, and Associate Professor, McMaster University

Timeline

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. This synthesis was prepared over a 30-business-day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on McMaster Health Forum’s Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

Funding

The rapid-response program through which this synthesis was prepared is funded by the Government of British Columbia. The McMaster Health Forum receives both financial and in-kind support from McMaster University. The views expressed in the rapid synthesis are the views of the authors and should not be taken to represent the views of the Government of British Columbia or McMaster University.

Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

Acknowledgments

The authors wish to thank Karen Waite, Doug McDonnold, and Eugene Johnson for their insightful comments and suggestions.

Citation


Product registration numbers

ISSN 2292-7999 (online)
KEY MESSAGES

Questions
• When and how is virtual care deemed appropriate to use to provide primary-care services in Alberta, Saskatchewan, Manitoba, Ontario, Quebec and New Brunswick?
• How do these jurisdictions define virtual care and compensation for virtual-care services?

Why the issue is important
• Provincial and territorial health systems across Canada continue to struggle with providing timely access to primary-care services (e.g., in 2016 Canadians reported the longest wait times of patients across 11 countries to see a primary-care provider, with one in five reporting a wait of over seven days the last time they needed medical attention).
• To address this challenge, policymakers across the country have been increasingly exploring options to improve the delivery of patient-centred health services through the introduction and evolution of virtual care to enhance accessibility and efficiency.
• The broadest definition of virtual care is the use of any technology (e.g., telephone, private messaging, videoconferencing) to support health providers to collaborate and to deliver remote care to patients.
• To support cross-provincial learning, we have conducted a jurisdictional scan of five Canadian provinces prioritized by the requestor of this rapid synthesis to identify:
  o how virtual care is defined in each province and the types of technologies being used by them;
  o when and how virtual care is deemed appropriate for providing primary-care services; and
  o what models of compensation are being used to remunerate primary care delivering virtual care.

What we found
• We conducted a jurisdictional scan using documentary analysis and key informant interviews with seven policymakers and stakeholders in Alberta, Saskatchewan, Manitoba, Ontario, Quebec and New Brunswick.
• All the provinces included in this jurisdictional scan have used a broad definition of virtual care, with many key informants expressing that this was a purposeful decision to allow for the expansion of virtual-care services in the coming years.
• All provinces use telephone and videoconference for both provider-patient interactions as well as consultations between primary and specialist providers.
• Other technologies such as secure text messaging and remote home-monitoring technologies have been implemented in select jurisdictions (Manitoba, Ontario, Quebec and New Brunswick).
• A wide range of primary-care services are provided using virtual technology, with all provinces having established virtual care for consultations between providers, primarily for linking primary and specialist care, and for triage or system navigation.
• In all provinces except Ontario, where eligibility requirements have been developed for some virtual-care service based on those most likely to benefit, the main eligibility requirement for using virtual-care services is being located in a northern, rural, remote or hard-to-reach community.
• Telehealth and other virtual-care services are provided as part of their respective provincial insurance plans, with no extra cost to insured patients.
• All provinces have designated telehealth billing codes using fee-for-service remuneration that distinguishes the service from face-to-face interactions, however Alberta and Ontario are the only jurisdictions where physicians are paid additional fees for delivering the service using technology as compared to the face-to-face rate.
Understanding the Use of and Compensation for Virtual-care Services in Primary Care

QUESTIONS
- When and how is virtual care deemed appropriate to use to provide primary-care services in Alberta, Saskatchewan, Manitoba, Ontario, Quebec and New Brunswick?
- How do these jurisdictions define virtual care and compensation for virtual-care services?

WHY THE ISSUE IS IMPORTANT

Provincial and territorial health systems across Canada continue to struggle with delivering timely access to primary-care services. In 2016, 74% of Canadians reported in the Commonwealth International Health Policy Survey that they received excellent or very good care from their regular doctor, which is above the 11-country average of 65%. However, Canadians also reported the longest wait times to see a primary-care provider across the 10 countries, with one in five reporting a wait of over seven days the last time they needed medical attention.

To address this challenge, policymakers across the country have been increasingly exploring options to improve the delivery of patient-centred health services through the introduction and evolution of virtual care to enhance accessibility and efficiency.

At its broadest definition, virtual care is the use of any technology (e.g., telephone, private messaging, videoconferencing) that supports health providers to collaborate with one another and to deliver remote care to patients. In many cases the first uses of virtual care consisted of interprofessional consultations over the telephone or through videoconferencing, but the use of these technologies has advanced significantly. This includes the establishment of telemedicine clinics in rural and hard-to-reach communities as well as using remote home-monitoring technologies for select chronic conditions.

Among the consistent challenges that policymakers face in expanding the use of virtual care is how to remunerate providers for the delivery of virtual care-services, and how to maintain the same degree of accountability over services that exist in face-to-face interactions. To support cross-provincial learning, we were requested to conduct a jurisdictional scan of five Canadian provinces that were prioritized by the requestor of this rapid synthesis to identify:
- how virtual care is defined in each of the included provinces and the types of technologies being used by them;
- when and how virtual care is deemed appropriate for primary-care services; and
- what models of compensation are being used to remunerate providers delivering virtual care.

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the McMaster Health Forum’s Rapid Response program. Typically, rapid syntheses summarize research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. However, this rapid synthesis focuses evidence on documentary analysis of government and stakeholder websites in the provinces included in the analysis, as well as on insights from key informants from each province. The rapid synthesis does not contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum’s Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

This rapid synthesis was prepared over a 30-business-day timeframe and involved five steps:
1) submission of a question from a policymaker or stakeholder (in this case, the Government of British Columbia);
2) identifying, selecting, appraising and synthesizing relevant evidence (in this case, documentary analysis of government and stakeholder websites in the provinces included in the analysis) about the question;
3) conducting key informant interviews;
4) drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence; and
5) finalizing the rapid synthesis based on the input of at least two merit reviewers.
WHAT WE FOUND

We undertook a jurisdictional scan using documentary analysis and key informant interviews with seven policymakers and stakeholders in Alberta, Saskatchewan, Manitoba, Ontario, Quebec and New Brunswick. Details about the findings from the jurisdictional scan are presented in Table 1 and a brief summary is provided below.

All the provinces included in this jurisdictional scan have used a broad definition of virtual care, with many key informants expressing that this was a purposeful decision to allow for the expansion of virtual-care services in the coming years. All provinces use telephone and videoconference for both provider-patient interactions as well as consultations between primary and specialist providers. Secure text messaging has been established in Manitoba and in Ontario, and remote home-monitoring technologies have been implemented in four jurisdictions in Canada: British Columbia (the requestor of this jurisdictional scan), Ontario, Quebec and New Brunswick.

A wide range of services are provided using virtual technology, with all provinces having established virtual care for consultations between providers, primarily for linking primary and specialist care, and for triage or navigation. In all provinces, the emphasis on virtual-care services has been to meet the health needs of those in northern, rural, remote and other hard-to-reach communities. In all provinces included in the jurisdictional scan except Ontario, this is the main eligibility criteria for receiving virtual-care services. In Ontario, eligibility requirements have been developed for some virtual-care services based on those most likely to derive benefit from the service.

Finally, telehealth and other virtual-care services are provided as part of their respective provincial insurance plans, with no extra cost to insured patients. All provinces have designated telehealth billing codes that distinguish the service from face-to-face interactions. All provinces examined in this scan, except Alberta and Ontario, reported remunerating physicians at the same rate as face-to-face services. In both Alberta and Ontario, additional fees are paid to physicians, with the rationale in Ontario reported as “recognition of the extra time and attention physicians give to ensuring successful patient consultations using new and innovative telemedicine technologies.”

In almost all provinces these services are paid for by fee-for-service, with the exception of Ontario where physicians with patient rosters who are registered as a telehealth provider continue to be paid through a blended model, with the possibility for an additional top-up depending on the service delivered using virtual-care technology (e.g., first virtual appointment with a patient, last-minute cancellations, and in the event of technical difficulties). In addition, physicians working in blended models in Ontario may shadow bill the provincial insurance program and receive remuneration up to 10% of the fee.

Discussions with key informants revealed that many physicians may be providing consultation services through telephones, emails or text messages on an ad hoc basis, but that these activities are not remunerated by a fee code. However, a proof-of-concept project is under way in Ontario which includes remuneration for these activities. To be eligible to provide virtual-care services in Alberta and Saskatchewan, physicians either have to be registered as a virtual-care provider or be delivering care in a designated telehealth clinic to be remunerated. If not delivered in a designated clinic, physicians cannot bill for the virtual service provided in these provinces.

Box 2: Identification, selection and synthesis evidence

To identify relevant information, we hand-searched government and relevant organizational websites for relevant policy documents. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

In addition, we used government organizational charts and electronic directories to identify potential key informants working in government departments, or stakeholder organizations focused on using virtual care or on remuneration for primary-care providers.
Table 1. Virtual care services in primary care across Canadian jurisdictions

<table>
<thead>
<tr>
<th>Province</th>
<th>How is virtual care defined?</th>
<th>When and how is it deemed appropriate for primary-care services? (includes situations it’s used in and the services that are provided)</th>
<th>Approaches to compensation?</th>
</tr>
</thead>
</table>
| Alberta  | • Virtual care in Alberta is defined as “telemedicine”, meaning “the provision of medical diagnosis and patient care through electronic communication where the patient and provider are in different locations” (2)  
• Virtual care is mainly carried out through videoconference technology, with over 900 videoconferencing sites operating across the province  
o Secure technology has been established in healthcare facilities to support clinical decision-making by linking healthcare professionals and patients  
• The teletriage service Health Link is provided by the organization RAAPID (Referral, Access, Advice, Placement, Information & Destination)  
  o Specially trained registered nurses provide health information and work with the Primary Care Networks to connect patients to health providers (3)  
• There have been a number of efforts to connect rural and remote communities to care through telemedicine  
  o Projects connect northern residents to primary-care nurse practitioners and primary-care physicians  
  o For instance, in 2015, the First Nations communities of Peerless Lake and Trout Lake engaged in a telehealth primary care project; the project was found to be feasible and sustainable (4; 5)  
• Telehealth is a provincially insured service and is provided at no extra cost to the patient  
  • Telehealth services have a different billing code than face-to-face services for which physicians are remunerated on a fee-for-service basis  
  • Additional fees are provided to physicians for providing virtual-care services compared to face-to-face services  
  • Physicians must provide services at a regional health authority telehealth site, a Health Canada health centre, or nursing station site to be eligible for remuneration  
  • Physicians must hold an Alberta practice permit for telehealth services and adhere to standards set by the Alberta College of Physicians and Surgeons  
  • Physicians who do not hold an active and valid Alberta practice permit for telehealth services may deliver telehealth services up to five times a year, or in the event of an emergency assessment (2; 6; 7) | |
| Saskatchewan | • Virtual care in Saskatchewan includes a broad range of services provided by Telehealth, including Telehealth clinic services, health education  
• Telehealth is deemed appropriate for patients who live in rural or remote areas and have difficulty accessing care  
• Primary-care services delivered include family medicine consultations and group-based patient education | • Telehealth is a provincially insured service and is provided at no extra cost to the patient  
• Telehealth services have a different billing code than face-to-face services | |
## Province

**How is virtual care defined?**

- The main purpose of Telehealth is the linkage of patients to diverse healthcare teams, including both specialized and primary-care providers across the province (8)

- Client navigators, registered nurses and social workers provide triage services and link patients to further care if necessary (9)

- There are no defined eligibility requirements for virtual-care services, with appropriate use determined by providers and through consultation with MBTelehealth to determine how to use their technology to provide care and to receive training for how to use the equipment independently

- Telehealth is the most prominently used type of virtual-care platform, but others such as secure text messages, communication through patient portals and technologies for remote-home monitoring are also used

- Primary-care services delivered through virtual-care platforms in Manitoba mainly consist of primary-care providers requesting specialist consults for patients through MBTelehealth and MyMBT Video, in order to connect patients with care that is not available in the region, or to connect providers to communicate and consult regarding patient care

- Teletriage is available through Health Links – Info Santé – through which nurses provide health information to assist patients as they navigate the health system

- Televisitation is used to connect families to relatives who are in hospital for an extended period of time

**When and how is it deemed appropriate for primary-care services? (includes situations it's used in and the services that are provided)**

- Virtual care in Manitoba encompasses a range of different services designed to overcome barriers of distance, time, and expense

- Services are delivered by MBTelehealth and use technologies such as videoconferencing, video for clinical and non-clinical events, secure text messaging and image sharing, and eConsults (11)

<table>
<thead>
<tr>
<th>Province</th>
<th>Approaches to compensation?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Manitoba      | - Physicians providing virtual care are remunerated on a fee-for-service basis on a different fee schedule  
|               | - Physicians must provide services at a designated telehealth site to be eligible for remuneration (10)  
|               | - Telehealth is a provincially insured service and is provided at no extra cost to the patient  
|               | - Telehealth services have a different billing code than face-to-face services for which physicians are remunerated on a fee-for-service basis  
|               | - Fees for providing virtual-care services are the same as the face-to-face fee  
|               | - Additional compensation is provided for email communication and other virtual care for those working in integrated primary-care models (e.g., for those that have incorporated features of the patient-centred medical ‘home’ model)  
<p>|               | - Claims vary depending on the type of service provided (13)  |</p>
<table>
<thead>
<tr>
<th>Province</th>
<th>How is virtual care defined? (includes situations it's used in and the services that are provided)</th>
<th>Approaches to compensation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>• Virtual care in Ontario is broadly defined (specifically by the Ontario Telemedicine Network) and includes: services delivered through short-message service (SMS); synchronous tools (e.g., videoconference, both scheduled and 'on-demand' emergency services); asynchronous applications (e.g., for consultation between professionals); and remote home-monitoring</td>
<td>• Any licensed physician can use telemedicine in their practice, however, if they intend to bill OHIP for telemedicine services, they must first register with the Ontario Telemedicine Network, who then requests that OHIP enable that physician’s telemedicine claims to be paid</td>
</tr>
</tbody>
</table>
|          | • The Rural and Northern Telehealth Service (RNTS) is a specialized telehealth service providing mental health care to First Nations communities in northern Manitoba  
  ○ This program was developed following Manitoba’s Youth Suicide Prevention Strategy and is geared towards children and adolescents  
  ○ The program receives referrals from community professionals and care is delivered by mental health clinicians and psychiatrists (12)  
 • There is work underway in the province to determine how best to enhance the use of virtual care (e.g., whether and how to use it to provide care for hard-to-reach populations, and/or whether and how to expand counselling services offered for some chronic conditions such as COPD to other chronic conditions) | • Billing for telemedicine services is dependent upon the services being provided, but in general physicians bill as follows:  
  ○ according to the OHIP fee schedule for eConsult referral to a specialist provided they are operating under a fee-for-service reimbursement  
  ○ if they are participating in a capitated model, the primary-care physician can ‘shadow bill’ OHIP according to the OHIP fee schedule and be reimbursed 10% of the amount claimed on the shadow bill |

8

Evidence >> Insight >> Action
<table>
<thead>
<tr>
<th>Province</th>
<th>How is virtual care defined?</th>
<th>When and how is it deemed appropriate for primary-care services? (includes situations it's used in and the services that are provided)</th>
<th>Approaches to compensation?</th>
</tr>
</thead>
</table>
|          | consumer-focused apps and other solutions to Virtual Critical Care, which provides two-way videoconference on demand to support patients in intensive-care units at sites in Northeastern and Northwestern Ontario | • OTN also has a project underway, Enhanced Access to Primary Care (EAPC), in which two Local Health Integration Networks (LHNs) allow patients to have access to software which allows them to forward symptoms to a family physician in their own practice who can review and provide advice  
• Services delivered through telehealth include: telephone triage (through Telehealth Ontario); on-demand/emergency videoconferencing services, including but not limited to Telestroke (hyper-acute phase); virtual ICU; scheduled videoconferencing services in acute care, primary care, community, long-term care and home settings supported by a scheduling solution tailored to telemedicine and an online directory of providers and sites crossing almost all specialties/sub-specialties; general eConsult services as well as teledermatology and teleophthalmology  
• In addition, new models of care delivered through telehealth include using digital tools to provide wound care, surgical transitions, mental health (Big White Wall), chronic kidney disease, and palliative care | • physicians can also bill according to the OHIP fee schedule for videoconferencing with a remote patient who is at a certified telemedicine site (but not presently at patients’ homes) provided they are operating under a fee-for-service model  
• if the physician is operating on a capitation model they can shadow bill OHIP and be reimbursed up to 10% of the fee, unless they see a patient who is not registered with their practice, in which case they are eligible for the full fee  
• if physicians are participating in the Enhanced Access to Primary Care proof of concept (operating only in select capitated reimbursement sites) and send a text, email or make a phone call they can bill half of the usual telemedicine fee  
• if this encounter leads to a videoconference with their own patient they may shadow bill OHIP for 10% of the fee, unless they see a patient outside their practice than they are eligible for the full fee  
• OHIP remunerates physicians for videoconferencing at the same rate as face-to-face with an additional premium of $35 for the first patient seen in a 24-hour period, and $15 for each subsequent patient, recognizing the additional time and attention required to provide a complete telemedicine consultation |
### Understanding the Use of and Compensation for Virtual-care Services in Primary Care

<table>
<thead>
<tr>
<th>Province</th>
<th>How is virtual care defined?</th>
<th>When and how is it deemed appropriate for primary-care services? (includes situations it’s used in and the services that are provided)</th>
<th>Approaches to compensation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quebec</td>
<td>and communication technologies” (14) • Virtual care in Quebec includes teleconsultation, tele-expertise, telemonitoring and teleassistance • Technologies used include telephone, email, secure text messaging, videoconference and remote home monitoring</td>
<td>• The majority of virtual-care services are provided by specialists or to link specialists through teledmedicine networks set up by Réseaux Universitaires Intégrés de Santé, and include specialties such as cardiology, ophthalmology, women’s health and mental health, to name a few (15) • Some teleconsultation services are provided by primary care, such as the provincial 811 telephone number which is operated by nurses for non-urgent health issues • Teleconsultations occur between professionals, in the absence of a patient, to provide diagnostic or therapeutic advice such as between primary-care and specialist physicians • Telemonitoring consists of ongoing remote monitoring by a physician of clinical or biological data collected by the patient, and in Quebec is primarily used in home-telemonitoring of chronic conditions • Finally, teleassistance occurs when one physician remotely supports another while delivering a particular service, which occurs largely in specialized care rather than in the delivery of primary-care services</td>
<td>• Telehealth services have a different billing code than face-to-face services and is remunerated on a fee-for-service basis • Billing for these services are restricted to teleconsultations between primary-care physicians and specialists (where a patient is present) and tele-expertise (between two professionals without a patient present)(16) • Physicians providing virtual-care services to residents of Quebec (whether the physician is within or out of province) must hold a permit to practice by the Collèges des Médecins du Québec and be enrolled on the Roll of the Oder (14) • Physicians from out of Québec may be provided with authorization to practise specifically for teledmedicine by the Collèges des Médecins du Québec (16; 17) • Teleconsultation and telehealth services are restricted to settings that are private and confidential (14)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>• Virtual care includes a broad range of services in New Brunswick delivered through technology, including teledmedicine services, teletriage, telehomecare and remote patient monitoring, and Navicare/SoinsNavi (18) •</td>
<td>• Virtual care is mostly used for primary care to monitor patients in rural and remote settings • Telemedicine is a physician-delivered service, and teletriage and telehomecare are provided by registered nurses • New Brunswick is one of four jurisdictions (along with British Columbia, Ontario and Quebec) that have a telehomecare program, which uses home-based equipment to monitor vital statistics, which are transmitted to a clinician • Navicare/SoinsNavi provides patient-centred care to New Brunswick families with children who have complex care needs</td>
<td>• Telehealth is a provincially insured service and is provided at no extra cost to the patient • Telehealth services have a different billing code than face-to-face services and is remunerated on a fee-for-service basis • Telehealth services must be provided at locations approved by the Department of Health • Physicians must be licensed with a medical regulatory authority and register on the Teledmedicine Provider List</td>
</tr>
<tr>
<td>Province</td>
<td>How is virtual care defined?</td>
<td>When and how is it deemed appropriate for primary-care services? (includes situations it's used in and the services that are provided)</td>
<td>Approaches to compensation?</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
|          |                               | • Patient navigators working in this program assist in sharing resources and information with families, often via phone and email (19) | • For services that are insured, physicians may receive additional compensation through New Brunswick Medicare reciprocal billing  
• For services that yield direct reports to hospitals (i.e., pathology, radiology), and noninsured services, physicians must acquire a special telemedicine licence (20; 21) |
REFERENCES


