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Providing safe and high-quality virtual care: A guide for new and experienced users

Clinician Change Virtual Care Toolkit

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Acknowledgements

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Background

Virtual care is a necessary and significant part of the healthcare system that can make care better and more accessible for patients and clinicians. As such, Healthcare Excellence Canada (HEC) and Canada Health Infoway (Infoway) partnered on the Clinician Change Management Project to support clinicians with the tools and resources they need to care for their patients virtually. The project included the development of this Clinician Change Virtual Care Toolkit as well as the launch and completion of the Virtual Care Together Design Collaborative, an initiative that brought together 25 teams across Canada to prepare, implement and evaluate virtual care tools and resources that focused on community-based primary care.

What is the Clinician Change Virtual Care Toolkit?

The Clinician Change Virtual Care Toolkit shares information and resources of virtual care in practice to support clinicians with the tools they need to provide safe, high quality virtual care. This toolkit contains:

- **Streamlined information from trusted sources** that can be used to plan for and improve virtual care services offered via different modalities, such as phone, video, secure messaging or remote patient monitoring. This toolkit includes helpful, evidence-based information focused on three priority areas that were identified and validated by stakeholders in the healthcare workforce:
    - **Appropriateness**
      Provides considerations for determining whether virtual care can be used, and which virtual care modalities would be most appropriate for particular circumstances.
    - **Use and optimization of virtual care services**
      Provides information to help address issues and challenges associated with enabling and delivering virtual care services, such as adaptation of clinical workflows (including technology, security and privacy considerations).
    - **Quality and safe virtual care interactions**
      Provides resources to help enhance the quality and safety of virtual care delivery, including communication (e.g., web-side manner, virtual relationship building) and assessment (e.g., conducting physical examinations virtually).

Policy Guidance for the Appropriate Use of Virtual Care in Primary Care Setting

While not in scope for the Clinician Change Management Project and this toolkit, the need for assistance when navigating the systemic barriers to virtual care were also identified as a priority by stakeholders. In response, HEC developed *What we Heard: Results of a Policy Lab on the Appropriate Use of Virtual Care in a Primary Care Setting* to support health leaders with developing policies and regulations to support virtual care.

- **Virtual care evaluation resources** that can be consulted to inform plans and approaches for evaluating virtual care services and identifying areas for improvement.
- **Additional virtual care tools and resources** that were identified through an extensive environmental scan and stakeholder outreach activities. Key evidence from the selected tools and resources listed were leveraged to develop the streamlined content in this toolkit. These additional tools and resources are not meant to be an exhaustive repository of available virtual care resources.

Who should use this toolkit?

This toolkit is intended to be used by clinicians and support staff who are new or experienced users of virtual care. The information in this toolkit was curated based on its applicability to community-based primary care organizations, but it may also be helpful to clinicians providing other types of care and in other settings.

How was this toolkit created?

Following an extensive environmental scan of existing virtual care tools and resources, HEC and Infoway convened a committee of clinicians and virtual care experts, to select key resources, published by trusted sources, as well as extract and synthesize information and evidence from these resources. The objective was to provide clinicians and support staff with streamlined information to support their efforts to deliver and optimize virtual care. See Appendix C for a fulsome description of how this toolkit was created.

Will this toolkit be updated?

As new evidence and tools emerge to support clinicians and the broader healthcare workforce with providing and evaluating virtual care, HEC and Infoway intend to update the Clinician Change Virtual Care Toolkit to reflect this information. These updates will be informed by HEC and Infoway's continued engagements with a broad range of stakeholders (including clinicians and support staff, virtual care experts, and participants in HEC's new virtual care programming that will be commencing later in 2022).

Questions/Feedback

If you have any questions or feedback and suggestions on how to improve this toolkit (e.g., a new resource to add, an area or topic where resources could help your efforts with virtual care), contact virtualcare.soinsvirtuels@hec-esc.ca.

Appropriateness

Virtual care can support the continuum of care and using virtual care to complement in-person care can be an appropriate approach in many situations (e.g., chronic disease management, preventive care).*

There are various factors to consider when determining whether to use virtual care, and which modality (phone, video, secure messaging, etc.) would be most appropriate. These decisions depend on the clinical situation, capabilities of clinicians and support staff, capabilities and preferences of patients and caregivers, and guidance from regulatory authorities.† Unless there is a risk of harm, patient preferences for modality of care should be prioritized.

Clinical considerations[1,2,3]

Determine whether you can obtain the necessary information to support clinical decision making and a therapeutic relationship with a virtual visit. Examples of questions to ask include:

- ☐ Are there symptoms or clinical concerns that require in-person assessment or care (e.g., need for an in-person examination, test or procedure; potential safety concerns)?
- ☐ What is the likelihood that a virtual visit will require an urgent/semi-urgent escalation to physical services, and is there a plan in place for that?
- ☐ Is the patient's medical history and information accessible (e.g., medications, allergies)?
- ☐ Can appropriate medication management and follow-up care be provided or arranged? (See Safe Medication Management in Virtual Care)
- ☐ What is the quality of the current therapeutic relationship? Would it benefit from an in-person visit?
- ☐ Are there any patient considerations that are important when choosing the type of visit (e.g., device availability, time off work, language needs/translation supports, childcare, transportation)? (See Patient and Caregiver Considerations)

* It is important that mechanisms and procedures be in place to ensure that providers as well as support staff are able to properly triage and advise patients regarding decisions about virtual care.

† Regulatory authorities are at varying phases in publishing and/or updating guidance for providers on the use of virtual care and visit modalities. Providers should confirm whether their regulatory authority has specific guidance around appropriateness. HEC's *What we Heard: Results of a Policy Lab on the Appropriate Use of Virtual Care in a Primary Care Setting* provides guidance on supporting health leaders with developing policies and regulations to support virtual care, including strategies clinicians and patients can use to share decision making and determine the most appropriate modality of care.

Situations typically amenable to virtual care include:

- Assessment and treatment of mental health issues.
- Assessment and treatment of many skin issues.
    - Consider asking patients to share photos as photos can provide resolution that is much better than resolution of even a high-quality video camera.
    - Serial photographs in similar light are likely to be a more reliable way of tracking evolution of skin lesions and response to treatment than clinician recall or written descriptions.
- Assessment and treatment of common minor infections (e.g., urinary tract infections and upper respiratory tract infections).
- Sexual health care (e.g., screening and treatment for sexually transmitted infections and hormonal contraception).
- Well-child visits
    - See the *Proposed schedule for well-child visits* provides a suggested schedule for in-person and virtual well-child visits.
- Prenatal care
    - See the *Proposed schedule for low-risk prenatal visits* provides a suggested schedule for in-person and virtual visits for low-risk pregnancies.
- Travel medicine (e.g., pre-travel health consultation).
- Assessment and treatment of conditions monitored with remote devices and/or laboratory tests (e.g., hypertension, lipid management, thyroid conditions and some diabetes care; in-person consultations will still be needed for some exam elements).
- Review of laboratory, imaging and consult reports.
- Follow-up visits for chronic conditions (e.g., heart failure, COPD [chronic obstructive pulmonary disease]), with plans for occasional in-person assessments and with monitoring plans (e.g., daily weights) in place.
- Other assessments that do not require in-person physical examinations.
- Triage to rule out concerns, determine appropriate modality and time frame for definitive diagnosis.

With any virtual assessment, a supplementary in-person assessment may be necessary if an in-person examination is required.

Situations typically not amenable to virtual care include:

- Any new and significant emergency symptoms (e.g., chest pain, shortness of breath and symptoms of stroke).
- Ear pain
- Cough
- Abdominal pain
- Back pain and musculoskeletal injuries
    - In certain situations, virtual assessment and management of back pain and musculoskeletal injuries can be effective, such as when clinician directed patient self-examination can be conducted (see Virtual Care Physical Examination).

Patient and caregiver considerations[1,4]

The circumstances and preferences of patients, caregivers and essential care partners should be given due consideration when making decisions about virtual care. You can help patients become better informed about the benefits and limitations of virtual care.

When clinically appropriate and logistically feasible, patient/caregiver preferences should be prioritized.

Below are some example questions to consider with the patient/caregiver:

- ☐ Does the patient have access to the required technology (e.g., devices, internet bandwidth) to participate in virtual care?
- ☐ Does the patient/caregiver have skills and/or support to use the required technology to participate in virtual care?
- ☐ Is the patient/caregiver comfortable using required devices or software/platform?
- ☐ Does the patient/caregiver require support services to enable participation in virtual care related to language (e.g., translation support), vision, hearing, dexterity, or other needs?
- ☐ Are there programs or supports that can help the patient/caregiver prepare for and/or participate in the virtual care encounter (e.g., use of the technology)?
- ☐ Does the patient have access to a safe and private space for a virtual appointment?
- ☐ Will a virtual or in-person visit better enable access for the patient and their caregiver/essential care partner?

☐ Can culturally safe care be provided virtually – whereby the person feels respected, safe, free from discrimination and racism, and supported to draw strengths from their identity, culture and community?[5]

Principles of culturally safe engagement

BC Patient Safety & Quality Council's *Culturally Safe Engagement: What Matters to Indigenous (First Nations, Métis and Inuit) Patient Partners* outlines eight key principles of culturally safe engagement identified by Indigenous patient partners, along with a series of recommended actions to help health care partners provide culturally safe engagement.

The eight principles of culturally safe engagement are:

- awareness and understanding;
- learning and education;
- build relationships;
- prepare;
- kindness and empathy;
- respect;
- value; and
- listen

Choosing the right virtual care modality

The table[2] below outlines benefits and limitations of virtual care modalities for clinician-patient communication:

Modality	Benefits and uses	Limitations
Video	✓ Simulates in-person conversations and observations ✓ Allows for eye contact and body language assessment ✓ Facilitates deeper understanding of the patient's home or work environment ✓ Facilitates a visual exam ✓ Allows for clinical observations such as movement, facial expressions, and sounds ✓ Addition of visual information can help build, maintain, and/or strengthen therapeutic relationship	× Requires reliable internet connection for both patient and staff × Requires a level of competency to use the solution/may require supports × Technical difficulties can arise unexpectedly

Modality	Benefits and uses	Limitations
Video (cont.)	✓ Allows family members and/or caregivers to be involved in the visit from different locations ✓ Allows multiple members of the care team to join a visit from different places ✓ Can be suitable for sensitive topics ✓ Increases access for remote, rural, or homebound patients ✓ Can be effective when patient is on remote patient monitoring, such as blood pressure monitoring, blood glucose, weight, and patient reported symptoms for a discussion with the patient	
Telephone	✓ Can help mitigate inequity of virtual care access related to internet availability, digital literacy and patient access to devices ✓ Patients and clinicians are very familiar with this technology ✓ Can be effective when the clinician and patient have an established relationship and/or the visit is straightforward and for a simple request (e.g., ongoing prescription renewal, administrative supports) ✓ Can be a first conversation for triage to decide if a video or in-person visit is better suited ✓ Can be helpful for reminders to increase compliance with appointments and medications ✓ Timely back up in case of video visit failures	× Engagement and building of relationships more difficult than with video × No ability to visually assess patient or see cues of emotional state and understanding × Less appropriate than video or in-person for upsetting information or news as signals of empathy and emotional support are more difficult
Secure messaging	✓ Low barrier for patients as it may not require a log in or downloading of an app ✓ Useful for reminders, messages and simple communications (e.g., medication management, appointments) which can improve office efficiency	× May be difficult to verify patient identity × Fewer natural boundaries exist regarding appropriate times for communicating (establish and communicate expectations about message monitoring and response time)

Modality	Benefits and uses	Limitations
Secure messaging (cont.)	✓ Can support patients who do not require physical or visual exam ✓ Allows for asynchronous communication (can send and receive messages at any time) ✓ Quick and efficient mode to deliver follow-up care	× Requires access to WIFI or a data plan × Not suitable when prompt response required × May funnel activities that are non-clinical in nature (such as appointment re-scheduling, questions about parking) through the clinician rather than the clinic's administrative resources if not appropriately configured × Many funding models do not support clinician remuneration for the provision of care through secure messaging
Remote Patient Monitoring	✓ Supports gathering and assessing patient data such as vital signs, symptoms or general health without the patient having to come into the clinical setting ✓ Can track and monitor data on a regular basis to assess evolution of a condition or response to treatment ✓ Supports care team with timely identification and intervention of patient symptoms ✓ Enables timely and convenient access to educational materials based on patient needs/responses to monitoring questions ✓ Many different ways this model can be used depending on clinical goal ✓ Alerts and notifications can be set up to flag care team of patient responses beyond a defined range/threshold	× Requires a level of competency to use the devices/technology for both the patient as well as the staff × Requires patient commitment to participate in monitoring × Requires staff to view and assess patient data at pre-determined points of time (which can vary depending on clinical goal) × Requires clear escalation pathways to other services/in-person care × Requires a clear plan for the patient if/when monitoring generates alerts off-hours

Use and optimization of virtual care services

Technology considerations

Acquiring a digital health solution can be a complex undertaking as there are a myriad of requirements to consider. Infoway has developed a *Digital Health Solutions Procurement Toolkit* that provides consolidated requirements which can be used for the procurement of virtual visit and remote patient monitoring solutions. These requirements were identified through consultations with executives and subject matter experts from the provinces, territories and other stakeholder groups, and represent a consolidation and expansion of existing work and artefacts developed across various organizations and jurisdictions.

Questions to consider when selecting digital tools and solutions for virtual care will depend on your workflow and patient population.

Functionality

- ☐ Does the solution protect privacy and security of patient information?
  - The use of pre-approved or verified solutions can provide confidence that the platform or software meets privacy and security requirements. You should check whether your jurisdiction or health region/authority have recommended solutions or requirements.
- ☐ Does the solution facilitate patient and, if needed, caregiver registration?
- ☐ Does the solution integrate with the electronic medical record (EMR) and/or other information systems?
  - For example, does the solution support the export of data (e.g., video recording, chat/messaging transcript, photo or other attachments) in such a way that it can be incorporated into the health record?
- ☐ How well does the solution integrate with clinical workflow?
- ☐ How well does the solution support the standard of care and best practice guidelines?
- ☐ Is the solution reliable (i.e., consistently performs according to its specifications)?
- ☐ Is the solution easy for clinicians, support staff and patients/caregivers to use?
- ☐ What devices (e.g., phone, tablet, computer) used by patients are compatible with the solution?
- ☐ What features are required for different users (e.g., patient, provider support staff) of the solution?

Video

- ☐ Does the solution facilitate the use of a virtual waiting room?
- ☐ Does the solution support and allow multiple participants in the same session (e.g., for group therapy or group appointments)?
- ☐ Can the solution prevent recording of the virtual visit when explicit consent has not been granted?
- ☐ Does the solution allow for screen sharing so providers and patients/caregivers can view information that may be helpful (e.g., results, reports, diagrams)?

Phone

- ☐ Do you want to use software that will display your office number or name when calling from a personal cell phone?
    - Patients may not answer blocked calls or calls from numbers they do not recognize.

Vendor services

- ☐ Does the vendor offer training for providers and support staff to ensure they know how to use the solution?
- ☐ Does the vendor offer educational materials to support patients with using the solution?
- ☐ Does the vendor offer technical support to providers and their support staff and/or patients and caregivers?
- ☐ Is there a free trial period for the solution so it can be tested by the clinic before making a decision or commitment to purchase?

Privacy considerations

The following provides recommendations and guidance to help clinicians and support staff best ensure privacy and communicate information about privacy with patients in a virtual environment.[1,6] It includes actions to take and information to consider discussing with patients before personal health information is shared during a virtual visit:

Inform Patients

- Share information about possible risks to privacy and the practices/procedures that have been implemented to mitigate those risks. Risks to privacy in virtual visits can include:
    - Using unsecure wi-fi networks (particularly free wi-fi networks in public places that are prone to digital piracy) and unsecure communications (e.g., email).
    - Emails or text messages sent to the wrong recipient or otherwise intercepted.
    - Unauthorized readers having access to computer files (e.g., due to cybersecurity issues such as computer hacks).
    - Mobile devices that are lost or stolen.
- Advise patients to use a personal computer/device if one is available to them (i.e., not an employer or third-party computer/device), and a secure internet connection.

Patient Consent

- Obtain and document informed patient consent for virtual care in accordance with your provincial/ territorial regulatory requirements. Receiving consent from patients or using disclaimers in emails does not obviate a clinician's legal and professional obligations to reasonably protect patient health information.
    - The *Virtual Care Playbook* includes sample disclosures, consent and chart templates.
    - The Canadian Medical Protective Association (CMPA) has published a Consent to Use Virtual Care Tools template.
- The CMPA recommends the following as important to include in the consent process:
    - The clinical and technological limitations and benefits of virtual care, including that an in-person visit may be necessary to complete an assessment or follow-up.
    - Privacy and confidentiality considerations, including privacy risks (see above) and efforts that have or will be made to mitigate them.

Protecting patient privacy

- Authenticate the patient's identity
    - For a phone visit, consider verifying two or more identifiers (e.g., health card number; date of birth) with the patient to confirm their identity.

    - For a video visit:
        - If you already know the patient by sight, that may suffice.
        - If it is a first encounter with the patient, ask the patient to provide a piece of valid photo identification (e.g., show it on camera) to confirm their identity.

- Ask the patient if they are in a location that will permit the sharing of personal information in a reasonably private manner.
    - If they are, record their response in their medical record.
    - If not, arrange for them to change locations (parked cars are a common fallback) or reschedule the visit.
- Ask whether other persons are with the patient.
    - For a video visit, others may be present and off-camera.
- Any recordings made during a visit (whether virtual or in-person) are considered part of the medical record.
    - Do not record virtual visits without patient consent and be aware that patients may record the encounter (e.g., using a secondary device) without your consent.
- Place your workstation in a place that protects the patient exchange from being seen, overheard or interrupted by others. This includes ensuring that there is no visibility of your screen(s) through a window or reflection.
- General videoconferencing software requires configuration to protect patient privacy.
    - Ensure software settings disable any recordings of virtual appointments.
    - Ensure that patients can only join the appointment with specific permission from a clinician or support staff.

Patient Communication

- Secure messaging, when available, should be used rather than email/unsecure messaging whenever possible.
    - Secure messaging functions may be offered in some vendor solutions.
- Use of conventional unsecured email or messaging (e.g., text via phone) is prohibited by law and/or regulation in some jurisdictions as there is an increased risk that health information may be intercepted or disclosed.
- In jurisdictions where it is permitted and when there are no other options, unsecured email should only be used with explicit informed consent from the patient of the additional and un-mitigatable privacy/security challenges inherent in such an interaction.
    - Secure messaging functions may be offered in some vendor solutions.

Workflow design

Guidance to consider when assessing and/or incorporating virtual care into your practice are provided below.[7,8]

Team Engagement

- Engage and consult the clinical team and support staff:
    - Discuss virtual care solutions that are being considered.
    - Identify clinician and staff onboarding needs.
- Provide training and education for the clinical team and support staff:
    - To use the virtual care tools effectively and efficiently.
    - To be able to support patients/caregivers with the use of the virtual care tools.
    - To consider patients' needs and preferences when deciding modality for appointments/encounters (see Appropriateness).

Processes and Policies

- Establish virtual care processes and policies (including roles and responsibilities).
- Provide the clinical team and support staff who are working remotely with the ability to access required software efficiently and securely.
- Obtain and document patient consent for virtual care (see Patient Consent).
- Provide technical support for the clinician and the patient/caregiver (e.g., video platform considerations).
    - Technical support may be available through the vendor.
    - Consider having support staff connect with the patient/caregiver in advance of their scheduled time (e.g., 15 minutes before) to test/troubleshoot technology and make sure they are prepared for their appointment (e.g., in the virtual waiting room).
- Optimize appointment scheduling to best accommodate virtual care.
    - Consider scheduling similar types of appointments together (e.g., virtual in the morning and in-person in the afternoon).
- Establish a process to communicate with patients if their appointment will be delayed.
- Establish how patients will obtain potential outputs from an appointment (e.g., prescriptions, lab requisitions, notes, forms) when the clinician is working in the clinic versus remotely (see Safe Medication Management in Virtual Care).

- Document virtual visit outcomes in the patient's medical record with reference to the technology used.
    - The CMPA recommends the following as important to document:
        - How information used to make the diagnosis was obtained (e.g., did the patient take their own temperature? Did you look at a lesion via webcam or high-resolution photo? Was the assessment conducted through an intermediary, such as a caregiver?)
        - Other diagnostic possibilities that were considered.
        - Recommendations/arrangements for follow up (whether in-person or virtual) and symptoms that should prompt a follow up appointment or emergency department visit.

Onboarding patients

- Consider a "soft launch", initially "testing" the virtual solution with a small group of patients before full deployment.
- Inform patients about virtual care:
    - Modalities offered (e.g., phone, video, messaging).
    - Benefits, limitations and most appropriate use of each modality.
    - Booking procedures.
    - Expectations regarding wait times for appointments and response times for messaging. (This should explicitly define the hours of operation for services, and what the patient should do when certain issues arise off-hours).
- Develop/share tools to help patients with virtual care.
    - Infoway's Digital Health Learning Program includes resources aimed at supporting the digital health literacy of the Canadian population including materials on virtual care.

Quality and safe virtual care interactions

Different strategies are needed to engage with patients and build their trust in a virtual environment. The following are some key considerations to help clinicians and support staff achieve the right environment to promote quality and safe virtual care interactions.[1]

Guidelines for conducting virtual visits

Preparing for a virtual visit

Regardless of the virtual care modality (e.g., phone, video):

- Create a professional and private space.
- Remove distractions, including device notifications.
- Make sure that you have access to the patient's chart/medical record and, if working remotely, ensure you are able to access digital records securely.
- If possible, provide opportunities for your patient/caregiver to understand how to prepare for and participate in a virtual visit.
    - Clinicians, staff, or volunteers may be able to help with this.
    - Share patient materials, such as:
        - Virtual Care Resources (Infoway)
        - Virtual Appointment Checklist (Infoway)
        - Preparing for a Virtual Visit Checklist (HEC)
        - During Your Virtual Visit Checklist (HEC)
- Share information with the patient/caregiver about possible risks to privacy and the practices/procedures that the clinic has implemented to mitigate those risks and obtain necessary consent (see Privacy Considerations).

For video visits:

- Practice and test the technology (e.g., equipment, software, microphones, headphones) that will be used to support the virtual visit in advance.
- If devices use wireless connections, ensure all required equipment are properly paired to each other.
- Consider using a professional/neutral backdrop.
- Set up hardware so that you can look at the camera and make eye contact with the patient/caregiver.
- Consider a dual display set up to enable concurrent access to video feed and the digital chart.
- Know where to obtain troubleshooting support if the need arises during the appointment.

- Ask the patient to test the software/platform in advance, and if possible, have staff or volunteers offer to conduct a test-run.
    - Establish a backup plan to use the telephone in the event of connection problems.

During a virtual visit

- Introduce yourself and disclose where you are located.
- Authenticate the patient's identity and get informed consent (see Patient consent).
- Ask the patient where they are located and what they should do if there is a need for in-person care (e.g., primary care services; care partners) or emergent care (e.g., closest emergency department).
- Ask whether other persons are with the patient.
    - For a video visit, others may be present and off-camera.
- Ask the patient if they are in a location that will permit sharing of personal information in a reasonably private manner.
    - If they are, record their response in their medical record.
    - If not, arrange for them to change locations (parked cars are a common fallback) or reschedule the visit.
- Discuss any potential limitations of virtual visits and what to expect during the visit.
- Be as engaging, respectful and attentive as you would be during an in-person visit, while considering that techniques for supporting therapeutic relationship (e.g., paraphrasing, summarizing, expressing empathy) and patient understanding (e.g., double checking to ensure understanding of instructions/information) may need to be done more actively in a virtual environment.
- If sharing your screen with the patient during a video visit, be careful and ensure that any personal health information from another patient is not shown.

Virtual care physical examination

Limited physical exams can be conducted during a video visit (see Clinical considerations). Evidence-based guidelines for virtual care physical examinations are in early stages of development. Some resources and information on how to conduct a virtual physical exam are provided.

Videos

- Problem-Based Approach to the Provider-Directed Patient Self-Exam
    - This video from the Stanford University School of Medicine provides an overview of physical examination techniques, with a focus on upper respiratory exams, low back exams and shoulder pain exams.
    - Additional information on remote physical exams is available on the Stanford University School of Medicine website.
- Virtual Visit: Performing a Physical Exam on Yourself (Peripheral Joints)
    - This video from the University of Calgary, Division of Rheumatology covers virtual care maneuvers clinicians can ask patients to do on the phone or over video to help assess inflammatory arthritis.
- Virtual Visit: Performing a Physical Exam on Yourself (Back Exam)
    - This video from the University of Calgary, Division of Rheumatology covers virtual care maneuvers clinicians can ask patients to do on the phone or over video to help assess ankylosing spondylitis.

Articles

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Safe medication management in virtual care

In the fall of 2021, the Institute for Safe Medication Practices Canada (ISMP Canada) and HEC conducted a literature review and convened patients and providers to identify opportunities to support safe medication management in virtual care. Opportunities to support safe medication management in virtual care are listed below.

During all phases

- Optimize the role of an ambulatory/primary care pharmacist to support medication reconciliation and comprehensive medication review before appointments, during transitions and in follow up.
    - *Comprehensive Medication Review: A prerequisite for patient/medication safety* includes tips for completing a medication review and interviewing patients.
- Share medication errors and good catches found in virtual care with the Canadian Medication Incident Reporting and Prevention System to inform continuous improvement.

Before the appointment

- Access all the patient's sources of medication information (e.g., provincial electronic medication record/database, community pharmacy profile, recent hospital discharge summary).
- Collect the patient's medication information and history, perform a medication reconciliation and complete a comprehensive medication review.
    - *Primary Care MedRec Guide* provides quality improvement based strategies and best practice ideas for implementing, sustaining and measuring medication reconciliation in primary care practice settings.
    - The *Best Possible Medication History (BPMH) Interview Guide* provides recommendations for conducting a systematic interview for gathering medication information and history from patients.

During the appointment

- Facilitate conversations about the patient's medications and encourage them to ask questions.
    - 5 Questions to Ask About Your Medications is a helpful resource you may want share with your patients.
- Communicate the medication summary, highlighting any medication changes to the patient and the patient's primary health care provider after every appointment.

Prescription transmission and receipt

- Use e-prescribing where possible (versus fax or telephone).
    - PrescribeIT® is a national e-prescribing service, provided by Infoway, that supports safe and efficient medication management by connecting community-based prescribers (such as physicians and nurse practitioners) to community retail pharmacies, enabling the digital transmission of prescriptions. Check with your jurisdiction or health region/authority about access to PrescribeIT®.
- Track the progress and receipt of the prescription by pharmacy and any pharmacy flags that require prescriber clarification.
- Ensure the patient is informed about prescription details including when the prescription will be ready and where to pick it up from.

A Deeper Dive: Safe Medication Management in Virtual Care

ISMP Canada presented a webinar to share information about evidence-based practices and opportunities to improve medication safety in virtual care on March 22, 2022. The webinar was part of the Virtual Care Together Design Collaborative learning supports offered in partnership by HEC and Infoway.

Recording: Webinar Presentation (video)

Infoway Partnership Series: Prescribing Excellence

Infoway's Partnership Series featured an event to showcase prescribing excellence in virtual care on October 19, 2021. Presenters reviewed evidence showing that e-prescribing can improve the quality, safety and patient experience of prescribing over non-virtual methods. One of the programs featured was PrescribeIT® a national e-prescribing service that enables clinicians to electronically prescribe medication directly from an electronic health record to the patient's pharmacy of choice.

Recording: Webinar Presentation (video)

Additional Resources: Prescribing Excellence Program | Digital Recap | PrescribeIT® Backgrounder

Health and digital health equity

As with any health service, virtual care should be equitable – that is, matched to a person's needs at the time and not limited by social, economic, environmental or personal factors (e.g., age, gender, education, employment, income level, migration background, race and ethnicity, place of residence, physical/mental abilities).

Supporting equitable access to virtual care

Recognizing the importance of addressing and avoiding unintended consequences related to equity arising from the widespread uptake and use of virtual care, the Federal, Provincial, Territorial (FPT) Virtual Care/Digital Table[9], consisting of senior FPT health officials, created the Task Team on Equitable Access to Virtual Care (Equity Task Team). The Equity Task Team applied an equity lens to the design and implementation of virtual care and developed principle-based recommendations for a collaborative approach to equitable virtual care across stakeholders and jurisdictions.

The Equity Task Team report, *Enhancing Equitable Access to Virtual Care in Canada: Principle-based recommendations for equity,* outlines the current healthcare system gaps and the changes needed to support equitable access to virtual care in Canada. This report suggests that it is critical to examine both social and digital determinants of health in examining barriers to equity in access to virtual care and provides principle-based framework for the design of virtual care.

Definitions

- **Health equity**[10]: the absence of unfair systems and policies that cause health inequalities ((differences in the health status of individuals and groups). Health equity seeks to reduce inequalities and to increase access to opportunities and conditions conducive to health for all.
- **Digital Health Equity**[11]: The provision of equitable health service using digital communication or information tools for the collection, exchange and use of health-related information for purposes of promoting quality care.
- **Equity in virtual care**[11]: The provision of remote health services using any form of communication or information technology to facilitate or maximize the quality of patient care by joining patients and/or members of their circle of care in a manner that ensures an absence of avoidable or remediable differences among groups of people based on digital or social determinants of health.

Determinants of health and digital health equity

It's important to minimize the risk that some communities and people will be systemically excluded from virtual care. Some communities where health equity has been identified as a priority issue[12] include:

- First Nations, Inuit, and Métis communities, particularly those living in rural and remote areas
- Immigrants and refugees
- Racially diverse communities
- LGBTQ2+ communities
- Older adults
- People experiencing homelessness or precarious housing situations
- People with severe mental illness
- People living in rural and remote locations
- Linguistically diverse groups

Other characteristics that can pose additional barriers to equitable access to virtual care include:

- Cognitive, hearing, vision, mobility or other disabilities
- Distrust in healthcare providers, systems or technology
- Lack of access to technology or to data services
- Lack of comfort with or literacy with using technology

Strategies for equitable access to virtual care

Individuals and communities bring many strengths and knowledge to their use of virtual care that can be built upon to ensure equity is addressed. Partner with patients, caregivers and communities to consider unintended impacts on equitable access to virtual care, as well as equitable outcomes from virtual care.

A Deeper Dive: Health & Digital Health Equity in Virtual Care

Dr. Allison Crawford, Associate Chief of Virtual Mental Health and Outreach at the Centre for Addictions and Mental Health (CAMH), presented a webinar to share information on Health & Digital Health Equity in Virtual care on February 10, 2022. The webinar was part of the Virtual Care Together Design Collaborative learning supports offered in partnership by HEC and Infoway.

Recording: Webinar Presentation (video).

The table below outlines example challenges and mitigation strategies for equitable access to care, associated with individuals, technology or health systems[12].

INDIVIDUAL LEVEL		
Thematic category	**Challenges**	**Strategies**
1. Person's orientation toward health-related needs	× Lack of perceived effectiveness of technology in meeting needs × Competing health and social needs	✓ Develop health literacy initiatives
2. Person's orientation toward health-related technology	× Preference for in-person care × Lack of trust in technology, clinicians, health system, or privacy protections × Lack of interest in technology	✓ Build accessible, trustworthy privacy policies ✓ Enable anonymity ✓ Counteract stigma of health-related issues addressed by technology applications
3. Person's digital literacy/comfort using technology	× Low self-efficacy in using technology × Lack of technology training opportunities	✓ Develop digital literacy training initiatives located in communities ✓ Provide easily accessible technical support

TECHNOLOGY LEVEL		
Thematic category	**Challenges**	**Strategies**
4. Technology Design	× Lack of compatibility with other technologies or applications × Lack of clarity in operating instructions × Lack of inclusive, user-friendly interface × Inability to provide input into design × Lack of cultural safety × Lack of adaptability	✓ Focus on inclusive design or co-design of technologies ✓ Ensure cultural, religious, and contextual relevance of technologies ✓ Gamification of design ✓ Focus on accessible design ✓ Ensure compatibility with low-cost devices ✓ Ensure interoperability and compatibility with other technologies or applications ✓ Enable multiple modalities of communication or interaction ✓ Facilitate networks through technology use

HEALTH SYSTEM LEVEL

Thematic category	Challenges	Strategies
5. Health system structure and organization	× Low clinician acceptance of technology × Lack of clinician training opportunities × Challenges building technology into health care workflows × Policy barriers to using technology in health care (e.g., privacy policies) × Lack of infrastructure × Costs of implementation and use	✓ Make connections between technology and other health care programs ✓ Make low-technology options to access care available ✓ Provide cultural safety training in technology-enabled care ✓ Maintain opportunity for in-person care and mixed modality care ✓ Enable direct communication between patients and clinicians ✓ Employ culturally or racially similar clinicians for communities

SOCIAL/STRUCTURAL DETERMINANTS LEVEL

Thematic category	Challenges	Strategies
6. Social and structural determinants of access to technology-enabled care	× Lack of available social support × Poor access to internet or cellular connectivity × Unaffordable out of pocket costs × Systemic racism × Inaccessible health care	✓ Employ culturally safe methods of implementation ✓ Make high speed internet access available ✓ Make digital devices available

Virtual Care Evaluation Guide

To support providers with evaluation of virtual care (see Appendix B for members), HEC and Infoway convened the Virtual Care Evaluation Committee to develop evaluation considerations and recommendations. The need for this work was based on feedback from the Virtual Care Together Design Collaborative participants that additional supports in this area was desired.

The Virtual Care Evaluation Guide presented in this section of the Toolkit can be used to help inform plans to evaluate virtual care and was reviewed by the evaluation committee and additional individuals which include experts in virtual care (see Appendix B).

Factors to consider when evaluating virtual care

Include a range of perspectives

Include diverse perspectives that represent the people you serve. In addition to providers, partner with patients, caregivers, and essential care partners to develop and implement virtual care evaluation. Such partnership helps ensure evaluation strategies and goals reflect experiences, needs and preferences of the people who will be impacted.

Resources that provide tips on how to partner with patients/caregivers effectively include:

- *Choosing Methods for Patient and Caregiver Engagement: A Guide for Health Care Organizations* (Ontario Health)
- *Long Term Success and Sustainability of Healthcare Improvement Guide* (HEC)
- *Engagement Guiding Principles* (HEC)
- *Tips for patient engagement in patient safety and quality committees* (HEC)

Equity in virtual care

Although equity in virtual care is not included as an independent measure, equity dimensions should be included as a cross-cutting theme in your evaluation plan. Virtual care should be equitable – that is, it should be matched to a person's needs at the time and should not be limited by social, economic, geographic and personal factors (e.g., age, gender, language, education, employment, income level, migration background, race and ethnicity, place of residence, physical/mental abilities) (See Health and digital health equity).

The ability to stratify your data according to equity indicators (e.g., understanding the characteristics of people served) will lead to better insights. However, we recognize that this data takes time to collect and may not be possible in all settings. The Canadian Institute for Health Information (CIHI) *Measuring Health Inequalities: A Toolkit* provides information on measuring and reporting health inequalities, with a focus on stratifying health indicators. While this resource was developed for analysts and researchers, it may be helpful for planning analysis and reporting of your data.

Assessing Virtual Care Modalities

It may be important for you to distinguish between modalities (e.g., to understand whether video visits provide better patient and provider experience than phone, messaging or other types of visits). Example survey questions provided in this guide can be modified to specify modality of interest.

Data Collection and Storage

It is important that data as well as ethics, privacy and security considerations are included in your evaluation plan. Questions should include:

- Data Considerations
    - Quality: Will the quality of information collected allow for accurate interpretation?
    - Validity and reliability: Are the methods used to collect the data validated and reliable?
    - Availability and feasibility: Can this information be collected
    - Best practices: Does the data collection follow best practice (e.g., ensures that diverse perspectives are captured)?
- Ethics, privacy and security[13]
    - What processes should be put in place to protect privacy and ensure secure collection and storage of data?
    - Is an ethics review and/or patient consent required, and, if so, how will this be obtained?

Measures and survey questions

This section contains example measures and survey questions that can be used and/or adapted by clinicians and their staff to help evaluate virtual care and identify areas for improvement in four key areas*:

- Patient and caregiver experience with virtual care
- Provider experience with virtual care
- Appropriateness of care modality: the suitability to use virtual and other care modalities, based on the clinical situation and patient, caregiver and provider considerations.
- Access to virtual care: ability and ease to participate in virtual care

Information in this section were curated based on its applicability to primary care but they may also be helpful to clinicians providing other types of care. This is not an exhaustive repository of measures and survey questions and does not reflect any specific evaluation requirements jurisdictions may have related to virtual care evaluation. It is recommended that you check whether your respective Ministry of Health and/or health region/authority have any specific evaluation requirements or surveys/tools that you should use for evaluating virtual care.

* The four key areas of measurement were identified by a panel of advisors, including virtual care evaluation experts and patient partners (see Appendix B)

Measure: Patient experience with virtual care[‡]

The extent to which a patient felt that something that should happen in a health care encounter (e.g., clear communication with a provider) did happen or how often it happened.

Components to consider assessing:[14,15]

- Patient perception of effectiveness, safety, respect, access, and ability to choose care modality.
- Patient satisfaction (e.g., whether the patient expectations about a healthcare encounter were met).
- Use of technology, including feasibility (e.g., ease of using technology; comfort with using virtual care applications and processes).

Example survey questions[§]

The following are examples of patient survey questions that can be adapted to fit your setting and used to measure patient experience with virtual care.

Questions 1-2 below from the Primary Care Patient/Client Virtual Care Experience Survey (Association of Family Health Teams of Ontario; AFHTO)

Thinking of the most recent time you received care virtually:

1. **How would you rate your overall experience with virtual care?**

   Very dissatisfied | Dissatisfied | Neither dissatisfied or satisfied | Satisfied | Very satisfied

2. **Overall, compared to an in-person visit, how was your experience with receiving care virtually?**

   Worse than an in-person visit | Same as an in-person visit | Better than an in-person visit | Unsure

[‡] The Canadian Institute for Health Information (CIHI) commissioned an environmental scan from the Person-Centred Care Team at the University of Calgary to explore the current state of virtual care patient experience survey tools in Canada and internationally. This work revealed that while common measures are used in academic literature to evaluate patient experience, no consistent measures of virtual care for patients have been validated for use across Canada. A copy of the environmental scan is available upon request by contacting CIHI at virtualcare@cihi.ca.

[§] The example survey questions may not necessarily be validated patient-reported measurement tools.

Questions 3-7 below adapted from Virtual Care Experience Survey (Women's College Hospital Institute for Health System Solutions and Virtual Care; WIHV).

Thinking about the most recent time you received care virtually, please tell us how much you agree or disagree with the following statements:

3. **The virtual care technology [*specify the technology*] was easy to use**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

4. **I could explain my health issue(s) well during my virtual care visit.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

5. **Virtual care allowed me to receive care in a timely manner.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

6. **Virtual care provided me with a good alternative to in-person care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

7. **Virtual care helped me manage my health needs.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Questions 8-11 below adapted from the Canadian Patient Experiences Survey – Inpatient Care (CIHI)

Thinking about the most recent time you received care virtually:

8. **During this virtual visit, how often did the health professional listen carefully to you?**

   Never | Sometimes | Usually | Always

9. **During this virtual visit, how often did the health professional explain things in a way you could understand?**

   Never | Sometimes | Usually | Always

10. **During this virtual visit, did you get information in writing about what symptoms or health problems to look out for after your virtual visit?**

    Yes | No | Not Applicable

11. **During this virtual visit, how often were you treated with courtesy and respect?**

    Never | Sometimes | Usually | Always

Other questions

Thinking about the most recent time you received care virtually:

12. I had a choice in how the care I received was delivered (e.g., phone, video, in-person).

Yes | No | Unsure

13. I received care in the modality of my choice (e.g., phone, video, in-person).

Yes | No | Unsure

14. (a) Virtual care cost me additional out-of-pocket expenses compared to in-person care.

Yes | No | Unsure

14. (b) If yes, what were the additional costs (compared to in-person care)?

Allow open-ended response and/or provide multiple choice options and ask respondents to select all that apply

15. (a) Virtual care saved me out-of-pocket costs compared to in-person care.

Yes | No | Don't Know

15. (b) If yes, what were the out-of-pocket cost savings (compared to in-person care)?

Allow open-ended response and/or provide multiple choice options and ask respondent to select all that apply to identify (1) the approximate cost savings (e.g., less than $10; $10-$30; $30-$50), and (2) the source of the cost savings (e.g., parking fees, gas cost, childcare)

16. (a) Virtual care saved me time compared to in-person care.

Yes | No | Don't Know

16. (b) If yes, approximately how much time did you save (compared to in-person care)?

Allow open-ended and/or provide multiple choice options and ask respondent to select one response to estimate time saved (e.g., < 1 hour; 1-2 hours; 3-4 hours; > 4 hours; Don't Know)

Measure: Provider experience with virtual care

Components to consider assessing[15]:

- Degree of comfort, ease, and competency with using technology.
- Experience providing virtual care (e.g., ability to conduct required assessments and treatments; stability of virtual care system and method used to transmit information; integration into workflow).
- Provider satisfaction (e.g., provider ratings of virtual care and willingness to expand virtual care in their practice, compensation).
- Education opportunities (e.g., to build competency/comfort to use technology to provide virtual care).

Example survey questions

The following are examples of provider/staff survey questions that can be adapted to fit your setting and used to measure provider/staff experience with virtual care.

Questions 1-2 below are from the Virtual Care Experience Survey (WIHV)

1. **Virtual care allows me to provide patient-centred care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

2. **I can adequately understand my patient's health history and care needs through virtual care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Other Questions

3. **Virtual care has been incorporated efficiently into my workflows**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

4. **I am compensated appropriately for providing virtual care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

5. **I have been able to find sufficient opportunities to develop skills I need to deliver virtual care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

6. **I feel confident using virtual care [specify modality]**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

7. **I was able to offer care in the modality my patient/caregiver preferred.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

8. **I was able to offer care in the modality I preferred.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

9. **How would you rate your overall experience with virtual care?**

   Very Good | Good | Fair | Poor | Very Poor

Measure: Appropriateness of care modality

Appropriateness of virtual care can include measuring whether the virtual (or other care modality) was suitable to use, based on the clinical situation and patient/caregiver/provider considerations.

Components to consider assessing[15]:

- Patient reported perceptions of quality, safety, experience, useability.
- Provider reported ability to support clinical decision making, e.g., perform required assessments, treatments and ability to develop/maintain therapeutic relationships.

Example survey questions

The following are example survey questions that can be adapted to fit your setting to measure appropriateness.*

Patient-reported

Thinking about the most recent time you received care virtually, please tell us how much you agree or disagree with the following statements:

1. **I was able to communicate my health issue well during my virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

2. **I felt safe during my virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

3. **I received quality care during my virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

4. **I was able to receive appropriate treatment during the virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

5. **I was able to receive appropriate assessment during the virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

6. **I experienced technical difficulties that affected my ability to participate in virtual care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

7. **The use of virtual care was appropriate in this situation.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

* Some of the example items in the patient experience and provider experience sections may also be used/adapted to assess appropriateness.

Provider-reported

Thinking about the most recent time you provided care virtually, please tell us how much you agree or disagree with the following statements:

1. **I was able to perform an appropriate assessment during the virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

2. **I was able to provide appropriate treatment during the virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

3. **I was able to maintain an appropriate therapeutic relationship during the virtual appointment.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

4. **I experienced technical difficulties that affected my ability to provide health services.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

5. **I feel the quality of care I provided during the virtual appointment was appropriate.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

6. **The care I provided virtually meets the standard requirements of care.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

7. **The use of virtual care was appropriate in this situation.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Measure: Access to virtual care

Components to consider assessing[15]

- Degree to which virtual care is delayed because of barriers prohibiting use, such as lack of devices or lack of access to high-speed internet.
- Ability for patients to receive care in their language of choice through virtual care.
- Ability of patients with physical challenges to receive care virtually through adaptive technologies.
- Access to health services for those living in rural and urban communities and/or medically underserved areas.
- The extent to which care can be provided virtually when patients are unable to attend an in-person appointment.
- Digital literacy and comfort using technology.

Example survey questions

The following are example survey questions that can be adapted to fit your setting to measure access to virtual care:

Provider/staff survey questions

1. **Is your clinic/organization making efforts to improve patient access to virtual care for any of the following potentially underserved populations?**

   Select yes, no or don't know for all that apply, and briefly describe the efforts where applicable.

   - ☐ First Nations, Inuit, and Métis communities
   - ☐ immigrants and refugees
   - ☐ racially diverse communities
   - ☐ LGBTQ2+ communities
   - ☐ older adults
   - ☐ people experiencing homelessness or precarious housing situations
   - ☐ people with severe mental illness
   - ☐ people living in rural and remote locations
   - ☐ linguistically diverse groups
   - ☐ people with cognitive, vision, mobility or other dis/abilities
   - ☐ people without a primary care provider (e.g., doctor, nurse practitioner)
   - ☐ people who lack access to technology or to data services
   - ☐ people who lack comfort with or literacy using technology
   - ☐ other (specify)

2. **Is your clinic/organization making efforts to improve patient experience of virtual care, relating to any of the following factors?**

   Select yes, no or don't know for all that apply, and briefly describe the efforts where applicable:

   - ☐ First Nations, Inuit, and Métis communities
   - ☐ immigrants and refugees
   - ☐ racially diverse communities
   - ☐ LGBTQ2+ communities
   - ☐ older adults
   - ☐ people experiencing homelessness or precarious housing situations
   - ☐ people with severe mental illness
   - ☐ people living in rural and remote locations
   - ☐ linguistically diverse groups
   - ☐ people with cognitive, vision, mobility or other dis/abilities
   - ☐ people without a primary care provider (e.g., doctor, nurse practitioner)
   - ☐ people who lack access to technology or to data services
   - ☐ people who lack comfort with or literacy using technology
   - ☐ other (specify)

Patient survey questions

Questions 1-4 are from the Primary Care Patient/Client Virtual Care Experience Survey (AFHTO)

Thinking of the most recent time you received care virtually:

1. **(a) When your last appointment was booked, were you hoping to be seen as soon as possible?**

   Yes | No

1. **(b) If yes, how many days after you wanted the appointment did the appointment take place?**

   Same day | next day | 2-3 days | 4-5 days | More than 5 days | Other - specify

2. **Have you experienced any of the following issues or concerns in relation to this appointment (please select all that apply)?**

   - ☐ Instructions to join virtual visit were unclear
   - ☐ Concerns about privacy and security
   - ☐ More comfortable with in-person visit
   - ☐ Health issue required an in person visit to address
   - ☐ Not comfortable with technology

- ☐ Connectivity issues (e.g., had to switch mode of communication during visit
- ☐ Other - please specify

3. **Are there limitations that prevent you from connecting with your provider virtually (please select all that apply)**[‡]

   - ☐ No or unreliable access to internet
   - ☐ No or unreliable access to a phone
   - ☐ No access to a computer/laptop/tablet
   - ☐ Difficulty finding a private space
   - ☐ No limitations
   - ☐ Other: please specify

4. **If you weren't offered virtual care by your clinic, what would you have done?**

   - ☐ Booked an in-person appointment
   - ☐ Called telehealth
   - ☐ Called the clinic to try to resolve my issue over the phone
   - ☐ I would not have sought care at the time
   - ☐ Used a different virtual service
   - ☐ Visited a walk-in clinic
   - ☐ Visited an emergency room
   - ☐ Other - please specify

5. **Did having the option for virtual care improve access to the care that you needed?**

   Yes | No | Don't know

Other questions

6. **I received care in my language of my choice.**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

7. **My virtual appointment was delayed because of problems with technology (e.g., accessing technology).**

   Strongly agree | Agree | Neutral | Disagree | Strongly disagree

[‡] This question could be modified and included in a survey administered to patients who have not yet participated in virtual care, to help identify possible barriers to virtual care access.

Additional resources for evaluating virtual care

The following resources can be used to inform plans to evaluate virtual care and identify areas for improvement.[16] These resources were leveraged to develop the virtual care evaluation guidelines in this Toolkit and are not an exhaustive list of resources.

Resource	Description
Primary Care Patient/Client Virtual Care Experience Survey Association of Family Health Teams of Ontario (AFHTO)	This survey was developed to assess satisfaction with virtual care experiences for patients/clients of primary care practices and centres in Ontario.
Virtual Care Survey (2020) Bureau of Health Information (Australia)	This survey was developed to assess various aspects of patient virtual care appointments during 2020 and was used in Australia. Survey results and sample questionnaires are available.
Health Technology Review: Approaches to Evaluations of Virtual Care in Primary Care Canadian Agency for Drugs and Technologies in Health (CADTH)	This environmental scan includes a broad scope of information related to virtual care evaluation in primary care settings such as information to consider when creating virtual care evaluation, examples of evaluations that have assessed economic outcomes through cost analyses, healthcare utilization, participation outcomes, clinical outcomes in various contexts, and appropriateness of prescribing.
Benefits Evaluation Toolkit Canada Health Infoway	The Benefits Evaluation Toolkit is designed to help support organizations implement, adopt and promote digital health solutions. This toolkit includes resources and information such as a Benefits Evaluation Framework, System and Use Assessment Survey and template for a Benefits Evaluation plan.
Virtual Care Maturity Model Ontario Health	This model aims to support health care organizations adopt, implement and maintain virtual care. It includes a virtual care maturity assessment tool that can help guide creation of objectives/strategic priorities to advance virtual care practices and maturity. It also includes detailed definitions related to virtual care (e.g., virtual care program workflow, models of virtual care, and virtual care nomenclature); and additional resources to support improving virtual care maturity.

Resource	Description
Virtual Care in Canada: Strengthening Data and Information Canadian Institute for Health Information (CIHI)	This report provides a snapshot of available virtual care data in Canada, as well as recommendations for future pan-Canadian measurement of virtual care.
A Performance Measurement Framework for the Canadian Health System Canadian Institute for Health Information (CIHI)	CIHI's Health System Performance (HSP) Measurement Framework gives you a structure that helps you identify the key factors to consider when selecting indicators or measures. Use it to: • Examine data and ask questions • Explore critical connections • Get a complete picture of performance • Make evidence-based recommendations You can apply it to a sector or a health system as a whole. The CIHI Learning Centre also has courses on: • How to Use CIHI's HSP Framework: Quick Start Guide overview of the steps to follow when using the framework, examples that illustrate the process and definitions of the framework's quadrants and dimensions. • HSP Framework in Action: Using a long-term care example, the video shows how you can use CIHI's to assess overall health system performance.
Canadian Patient Experiences Survey — Inpatient Care (CPES-IC) Canadian Institute for Health Information (CIHI)	This is a standardized survey patients use to provide feedback about the quality of care they received during their most recent stay in a Canadian acute care hospital. The bilingual survey has been endorsed by Accreditation Canada and meets the accreditation requirements for patient experience surveying. It is provided here as a reference to consider adapting to evaluate patient experience within virtual care. The CPES-IC Procedure Manual provides guidelines to administer the CPES-IC in the field and outlines information about sampling methods and surveying modes.
Measuring Health Inequalities: A Toolkit Canadian Institute for Health Information (CIHI)	The information in this toolkit is intended to assist analysts and researchers with measuring and reporting health inequalities, with a focus on stratifying health indicators. It includes templates, guides and CIHI reports relevant to measuring and reporting health inequalities.

Virtual Care Tools and Resources

This section includes resources referenced in the development of this Toolkit. These tools and resources can be used by clinicians and support staff to adopt or improve their virtual care services and were identified through environmental scans and stakeholder outreach but is not meant to be an exhaustive repository.

Considerations for Family Physicians: Balancing In-Person and Virtual Care (OCFP)

Resource: *Considerations for Family Physicians: Balancing In-Person and Virtual Care*

Author/Owner: Ontario College of Family Physicians (OCFP)

Language: ☑ English | ☐ French

Format: PDF

Description

The Ontario College of Family Physicians created *Considerations for Family Physicians: Balancing In-Person and Virtual Care* to share information that family physicians can use to guide decision-making and prioritize in-person visits. The information was developed for Ontario physicians but may also be useful for clinicians in other jurisdictions and is not intended to replace or supersede any other provincial guidance, government directives or public health measures. The document includes:

- Examples of concerns and types of patients which would require in-person care
- A link to a cancer screening tip sheets for primary care providers, developed by Ontario Health

Culturally Safe Engagement: What Matters to Indigenous (First Nations, Métis and Inuit) Patient Partners? (BCPSQC)

Resource: *Culturally Safe Engagement: What Matters to Indigenous (First Nations, Métis and Inuit) patient partners?*

Author/Owner: BC Patient Safety & Quality Council (BCPSQC)

Language: ☑ English | ☐ French

Format: PDF

Description

This guide to creating culturally safe engagements was created from the voices of Indigenous (First Nations, Métis and Inuit) patient partners. The BC Patient Safety & Quality Council hosted an event centered around "What Matters to You in Indigenous Culturally Safe Patient Engagements?", where Indigenous patient partners shared what makes them feel comfortable and safe during engagements. From these meaningful discussions, eight key principles emerged along with a series of recommended actions to help and encourage health care partners to provide culturally safe patient engagement opportunities. The eight principles of culturally safe engagement are:

- Awareness and understanding
- Learning and education
- Build relationships
- Prepare
- Kindness and empathy
- Respect
- Value and listen

This guide, and the at-a-glance resource it accompanies, supports healthcare partners to put cultural safety and humility into practice when engaging with Indigenous Peoples. The aim is to help partners understand what culturally safe engagements might look like while providing tips and suggestions on how to strengthen engagement approaches through a cultural safety lens.

Toolkit for e-Mental Health Implementation (MHCC, CAMH)

Resources: *Toolkit for e-Mental Health Implementation*

Authors/Owners: Mental Health Commission of Canada (MHCC)
Centre for Addiction and Mental Health (CAMH)

Language: ☑ English | ☑ French

Format: Webpage with link to resources

Description

To help expand the use of e-mental health services, the Mental Health Commission of Canada (MHCC) and the Centre for Addiction and Mental Health (CAMH), developed resources to support e-Mental Health implementation.

The *Toolkit for E-Mental Health Implementation* can be downloaded (in PDF format) on MHCC's website. The goal of this toolkit is to provide:

- An introductory resource for practitioners who many not yet have any formal e-health training
- Evidence-informed samples and templates for e-mental health planning and implementation
- A resource for front-line practitioners, managers and senior mental health leaders with a project implementation, quality, risk focus
- A support to e-mental health champions and leaders who provide training and guidance to other health practitioners
- A map of current internationally recognized e-mental health practices and trends
- A starting point for promotion knowledge sharing, lessons learned, successes and challenges

The e-Mental Health Implementation e-Modules is a free, self-directed learning course, based on the Toolkit for E-Mental Health Implementation, is designed to give mental health providers, managers, and leaders the knowledge and skills they need to integrate e-mental health into daily practice and support effective, person-centred e-mental health projects. The course consists of four e-Modules:

- Module 1: Exploring the world of e-mental health
- Module 2: Roadmap for launching e-mental health
- Module 3: Building your digital skill set
- Module 4: Engaging clients in e-mental health

Telehealth and Virtual Care Resources (CMPA)

Resource: Telehealth and Virtual Care Resources © CMPA 2021

Author/ Owner: Canadian Medical Protective Association (CMPA)

Language: ☑ English | ☑ French

Format: Webpage with links to resources

Description

The Canadian Medical Protective Association (CMPA) created resources and information to inform safe virtual care, accessible on their *telehealth and virtual care webpage*. Information and resources include articles, a podcast, microlearning (short video) activities including:

- *Virtual Care: What About Consent?*
- *4 Things to Consider When Providing Virtual Care*
- *Write it Down: 4 Pearls in Virtual Care*
- *Patient portals—Considerations for safety and medico-legal risk*
- *Sample consent to use electronic communication*

Virtual Health Handbook (PHSA)

Resource: *Virtual Health Handbook*

Author/Owner: Provincial Health Services Authority (PHSA)

Language: ☑ English | ☐ French

Format: PDF

Description

The Provincial Health Services Authority (PHSA) in British Columbia created a comprehensive *Virtual Health Handbook* to support PHSA staff with virtual health in their clinical practice. Information from this guide includes:

- "Virtual health web-side manner" infographics that includes recommendations for clinicians
- Patient and clinical considerations for deciding whether virtual health is appropriate
- Considerations that may help inform decision on choosing the right care modality

Virtual Care Playbook (CMA, CPFC, RCPSC)

Resource: *Virtual Care Playbook*

Authors/Owners: Canadian Medical Association (CMA)
College of Family Physicians of Canada (CPFC)
Royal College of Physicians and Surgeons of Canada (RCPSC)

Language: ☑ English | ☑ French

Format: PDF

Description

The Virtual Care Playbook was created to help Canadian physicians maximize their success when conducting virtual patient encounters (i.e., telemedicine) in their daily practices. The playbook is intended to be virtual care platform and vendor agnostic, and focuses on video visits, though phone calls and patient messaging are also categorized as virtual care.

While not exhaustive, the playbook covers all key considerations to succeed at providing safe, effective and efficient care:

- Fitting virtual care into your practice workflow
- Technology requirements
- Scope of practice – what problems can be safely assessed and treated
- "Web-side" manner
- The virtual visit from beginning to end

Related Resources

- Video: *How to set up technology for Virtual Care*
- Video: *How to achieve "webside" manner during a virtual care visit*
- Guidebook: *Virtual Care Guide for Patients*

A Deeper Dive into the Virtual Care Playbook

Dr. Mark Dermer presented a webinar to share information from the Virtual Care Playbook on December 6, 2021. This webinar was part of the Virtual Care Together Design Collaborative learning supports offered in partnership by HEC and Infoway.

Recordings available: Webinar Presentation (video) | Q&A Session (video)

Virtual Care Resources (CEP)

Resource: Virtual Care Resources

Author/Owner: Centre for Effective Practice (CEP)

Language: ☑ English | ☐ French

Format: Webpage with links to resources

Description

The Centre for Effective Practice (CEP), together with partners including the Department of Family and Community Medicine, University of Toronto, have created resources to help healthcare professionals deliver safe and appropriate virtual care.

Information on the *Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19* webpage was developed to improve clinician confidence in implementing virtual care to support quality chronic disease management, and includes:

- *Tips to improve effectiveness and efficiency when providing virtual care*
- *Tips for practicing patient centred virtual care*
- *Tips to integrate virtual care into your workflow*
- *Modalities to support virtual care in practice*

Resources that can be downloaded include:

- *Framework* - Summary of information from the webpage.
- *Telephone and Video* - Information to help healthcare professionals determine if a telephone or video visit is most appropriate; how to set up virtual care visits in primary care practice; and how to integrate telephone and video visits into practice.
- *Email and Secure Messaging* - Includes information about how to use email and secure messaging to save time; ensure privacy and security when using email and secure messaging; integrating email and secure messaging into practice.

A Deeper Dive into the CEP Virtual Care Resources

Dr. Kevin Samson and Angela Du presented a webinar to share information about virtual care tools created by the CEP on November 22, 2021. This webinar was part of the Virtual Care Together Design Collaborative learning supports offered in partnership by HEC and Infoway.

Recording: Webinar Presentation (video)

Additional resources

The following CEP resources aim to support virtual care for specific health issues:

- *Virtual Care for Alcohol Use Disorder*: Virtual care tips and provider and patient resources to support clinicians screen and manage individuals with at-risk drinking or alcohol use disorder.
- *Virtual Care for Youth and Young Adult Mood Disorders*: provides considerations for virtual and in-person visits, with patient and provider resources embedded throughout.
- *Virtual Care for Type 2 Diabetes*: includes information on the types of diabetes care and support that can be delivered through virtual visits.
- *Virtual Care for COPD*: contains provider and patient resources to optimize self-management, including guidance to support the remote interaction with COPD patients.

Virtual Care Resources (HEC)

Resources: Virtual care resources for Members of the Public
Virtual care resources for Healthcare Providers and Healthcare Leaders

Author/ Owner: Healthcare Excellence Canada (HEC)

Language: ☑ English | ☑ French

Format: Webpage with links to resources

Description

Healthcare Excellence Canada adapted the Canadian Medical Association (CMA) materials, with CMA permission, to create virtual care resources for providers and virtual care resources for patients and caregivers. Information from these webpages is available to download.

Resources for patients and caregiver

- Checklist: *Preparing for a virtual visit*
- Checklist: *During your virtual visit*
- Infographic: *How to make the most of a virtual visit*

Resource for providers

- Infographic: *Web-side Manner*

Virtual Care Resources (Doctors of BC)

Resource: Virtual Care Resources

Author/Owner: Doctors of BC

Language: ☑ English | ☐ French

Format: Webpage with links to resources

Description

Doctors of BC has created a list of tools, education, and knowledge resources that community physicians can use to support implementation of virtual care solutions. The resources listed were developed by the Doctors Technology Office (DTO), a program funded jointly by the Doctors of BC and the BC government through the General Practice Services Committee.

Featured sections of the toolkit list include a step-by-step approach to implementing virtual care and practical tips for equipment and technology essentials Note that while some information in these resources is applicable only to clinicians and support staff in British Columbia, other information is applicable to any jurisdictions.

Available Resources

Resources available on the webpage include:

- *Virtual Care Quick Start Guide*
- *Virtual Care Toolkit*
- *Guide to e-faxing when working remotely*
- *Getting patients back to practice guide*
- *Virtual care Frequently Asked Questions (FAQ) for physicians and Medical Office Assistants (MOAs)*

Related Resources

Additional resources published by Doctors of BC that can be shared with patients/caregivers include:

- *How to Prepare for a Positive Virtual Care Experience* - A one-page handout with practical tips for patients
- *Virtual care for patients FAQs* - Information to help patients prepare for virtual care visits, including troubleshooting tips

Digital Health Learning Program (Infoway)

Resource: Digital Health Learning Program

Author / Owner: Canada Health Infoway

Languages: ☑ English | ☑ French
☑ Arabic | ☑ Armenian | ☑ Chinese Simplified |
☑ Chinese Traditional | ☑ Punjabi | ☑ Tagalog

Format: Webpage with link to resources

Description

The Digital Health Learning Program is part of Infoway's initiatives to support digital health equity and literacy of the Canadian population. This program aims to improve the digital health literacy of patients, families and caregivers by providing resources to improve their awareness and understanding of digital health as well as their ability to access virtual care. The priority areas for this program were identified and validated through extensive stakeholder engagement and consultation, including stakeholder interviews, focus groups and a national survey with over 1200 respondents.

In addition to English and French, the Digital Health Learning Program resources are available in Arabic, Armenian, Chinese (Simplified and Traditional), Punjabi, and Tagalog. If you would like to access resources in these languages or receive a toolkit to help with sharing these resources with your patients and network, please contact Haley Armstrong (harmstrong@infoway-infoway.ca).

Available Resources

Digital Health Learning Program includes materials include articles, information sheets, infographics, checklists and frequently asked questions on three topic areas:

Topic	Resources
1. Virtual Care Resources	• What is virtual care? • Understanding virtual care — the benefits and considerations (article) • The benefits of receiving health care virtually (infographic) • How to prepare for a virtual appointment • Virtual appointment checklist • Virtual health services in your province or territory • Provincial and territorial digital health priorities

Topic	Resources
2. Health Data Information Resources	• Personal health information: Where it is stored and how can I access it? • Health data privacy and safety • Personal health information privacy and access across Canada • Frequently asked questions about personal health information and health records
3. Proactive Health Management Resources	• Proactively managing your health (infographic) • How can I be proactive about managing my health (article)

Virtual Group Visits Guidelines (HHS)

Resource: Virtual Group Visits Guidelines

Author/Owner: Hamilton Health Sciences (HHS)

Language: ☑ English | ☐ French

Format: PDF

Description

The Hamilton Health Sciences (HHS) *Virtual Group Visits Guidelines* provides steps for facilitating virtual visits to a group of participants (including patients, families, caregivers, and research participants). Although this guide was specifically created for staff, physicians and learners at HHS, it includes information that may be relevant for other organizations and can be considered in various care settings.

This resource includes the following information and guidance for conducting virtual group sessions:

- Steps to follow prior to, during and following a group visit
- Tips for encouraging group discussion
- Sample clinical workflows (specific to a cardiac health and rehab clinic and a research setting)
- Roles for providers during a virtual group visit

Deeper dive of the Hamilton Health Sciences Virtual Group Visits Guideline

Pooja Patel, Stacey Anderson and Zeb Demaiter presented a webinar to provide an overview of the Virtual Group Visits Guideline on March 8, 2022. This webinar was part of the Virtual Care Together Design Collaborative learning supports

Recording: Webinar Presentation (video)

Accessibility Resources

Resource: Accessibility resources

Authors/Owners: Multiple (see below)

Language: ☑ English | ☑ French

Format: Webpage with link to resources

Description

Resources exist to support people who have accessibility barriers participate in virtual care. Examples of resources that clinicians/support staff can use and/or share with patients to promote quality and safe virtual care interactions are listed below.

Canadian Hearing Services

The Canadian Hearing Services (CHS) is an accredited, non-profit organization that provides services, products and education to empower the Deaf and hard of hearing to overcome barriers to participation. CHS provides offers a range of accessibility services to support communications for the Deaf and hard of hearing.

An example of services offered are interpreting services that can facilitate clear two-way communication between Deaf and hearing people through sign language and spoken language. CHS Interpreting Services are available on-site or through video remote technology and provide communication in American Sign Language (ASL) - English, or la Langue des Signes Québécoise (LSQ) - French.

Canadian National Institute for the Blind Foundation

The Canadian National Institute for the Blind (CNIB) Foundation is a non-profit organization that delivers programs and advocacy for people impacted by blindness. CNIB offers a range of free, virtual programs for Canadians who are blind or partially sighted as well as their families, friends and caregivers. These include technology programs to support digital literacy and provide skills and training that focus on the accessible, available, and affordable technology. Program offerings and schedules may vary by jurisdiction and region.

Accessibility Features on Devices

Electronic devices (used by the provider or patients) may offer accessibility features (hearing, vision and mobility) that can be leveraged during virtual care for mobile phones, tablets and computers. Features may be built-into the device or require users to upgrade their operating system or download specific apps to access these features.

Links to accessibility feature page for commonly used operating system are provided below:

Apple (iOS) | Android | Microsoft

Appendices

Appendix A: Clinician Change Virtual Toolkit Reviewers

The following individuals reviewed and informed the creation of a preliminary Clinician Change Virtual Care Toolkit (Sept 2021

Angela An-Yi Du
Centre for Effective Practice

Arbella Yonadam
Healthcare Excellence Canada

Ashfiya Pirani
Canada Health Infoway

Dr. Carolyn Steele-Gray
Lunenfeld-Tanenbaum Research Institute
University of Toronto

Dr. Ed Brown
Physician consultant

Ellis Chow
Canada Health Infoway

Haley Warren
Healthcare Excellence Canada

Dr. Jennifer Major
Healthcare Excellence Canada

Dr. Jennifer Rayner
Alliance for Healthier Communities

Dr. Kevin Samson
Centre for Effective Practice

Morenike Akinyemi
Canada Health Infoway

Dr. Owen Adams
Canadian Medical Association

Dr. Rashaad Bhyat
Canada Health Infoway

The following individuals reviewed the revised Clinician Change Virtual Care Toolkit for public release (May 2022)

Angela An-Yi Du
Centre for Effective Practice

Arbella Yonadam
Healthcare Excellence Canada

Ashfiya Pirani
Canada Health Infoway

Dr. Ed Brown
Physician consultant

Ellis Chow
Canada Health Infoway

Haley Warren
Healthcare Excellence Canada

Dr. Jeff Sisler
College of Family Physicians of Canada

Dr. Jennifer Major
Healthcare Excellence Canada

Karen Waite
Ontario Health

Dr. Kevin Samson
Centre for Effective Practice

Maria Judd
Healthcare Excellence Canada

Morenike Akinyemi
Canada Health Infoway

Dr. Onil Bhattacharyya
Women's College Research Institute

Dr. Owen Adams
Canadian Medical Association

Dr. Rashaad Bhyat
Canada Health Infoway

Shelagh Maloney Canada Health Infoway

Dr. Trevor Jamieson
Women's College Research Institute

Appendix B: Virtual Care Evaluation Committee and reviewers

Virtual Care Evaluation Committee Members

Dr. Bahar Kasaai
Canadian Institutes for Health Research

Dr. Carolyn Steele Gray
Lunenfeld-Tanenbaum Research Institute
University of Toronto

Dr. Ed Brown
Physician consultant

Haley Warren
Healthcare Excellence Canada

Dr. Jay Shaw
Women's College Hospital
Institute for Health System Solutions and Virtual Care

Dr. Jennifer Major
Healthcare Excellence Canada

Dr. Jennifer Rayner
Alliance for Healthier Communities

Kelly Hogan
Canadian Institute for Health Information

Necole Sommersell
Healthcare Excellence Canada

Ron Beleno
Patient partner

Dr. Sabrina Wong
University of British Columbia

Simon Hagens
Canada Health Infoway

Vanessa Sovran
Canadian Institute for Health Information

Virtual Care Evaluation Guide Reviewers

In addition to the Virtual Care Evaluation Committee members, the following individuals reviewed the virtual care evaluation guide contained in the Clinician Change Virtual Care Toolkit:

Ashfiya Pirani
Canada Health Infoway

Ellis Chow
Canada Health Infoway

Dr. Ibukun Abejirinde
Women's College Hospital
Institute for Health System Solutions and Virtual Care

Dr. Janette Brual
Women's College Hospital
Institute for Health System Solutions and Virtual Care

Dr. Kevin Samson
Centre for Effective Practice

Dr. Lydia Sequeira
Canada Health Infoway

Michele Strom
Women's College Hospital
Institute for Health System Solutions and Virtual Care

Morenike Akinyemi
Canada Health Infoway

Dr. Rashaad Bhyat
Canada Health Infoway

Shelagh Maloney
Canada Health Infoway

Appendix C: How and why was the toolkit created?

Phase 1: Identifying priority areas of need *(February 2021 – June 2021)*

To identify resources and supports clinicians and staff need to provide safe and high-quality virtual care, Healthcare Excellence Canada (HEC) and Canada Health Infoway (Infoway) conducted research and engaged with a variety of stakeholders across the following activities

- Environmental scan and social media scan, including review of approximately 150 national and international resources related to virtual care implementation and adoption
- Needs assessment and gap analysis, including focus groups and 1:1 interviews with approximately 60 stakeholders including patients, caregivers, primary health care clinicians and support staff
- Scoping review and qualitative survey of over 200 clinicians and support staff across the country to validate identified priority areas

Three areas were identified where clinicians require resources and supports to provide safe and high quality virtual care[§]:

- **Appropriateness**: to provide considerations for when virtual care can be used, and which virtual care modalities would be most appropriate.
- **Use and optimization of virtual care services**: to help clinicians adopt virtual care and optimize their workflows (including technology, security and privacy considerations).
- **Quality and safe virtual care interactions**: to enhance the quality and safety of virtual care communication (e.g., web-side manner, virtual relationship building) and virtual care physical examination and assessment.

169 resources that contained information about the three priority theme areas were identified.

Phase 2: Curating the preliminary Clinician Change Virtual Care Toolkit
(June 2021 – September 2021)

A preliminary version of the Clinician Change Virtual Care Toolkit was created for sharing and further refining through the Virtual Care Together Design Collaborative.

HEC and Infoway reviewed the 169 resources to identify a short-list of items for inclusion in a preliminary Clinician Change Virtual Care Toolkit, based on the following criteria:

- Addressed at least one of the three focus areas (appropriateness; quality and safe virtual care interactions; optimization)
- Created for the intended audience
- Relevance to the Canadian context

[§] Addressing systemic barriers to virtual care, including policy and regulatory barriers, was also identified as a priority and was explored by HEC through a policy lab process that convened patients, caregivers, policy and decision makers, and virtual care experts in fall 2021. Refer to the document What we Heard: Results of a Policy Lab on the Appropriate Use of Virtual Care in a Primary Care Setting.

- Developed by trusted sources, such as professional colleges and associations
- Included precise, streamlined information

Based on this review process, a short list of 25 resources were identified as candidates to include in the preliminary clinician change virtual care toolkit.

HEC and Infoway convened a review panel of fourteen individuals, including nine clinicians and/or virtual care experts and five HEC/Infoway staff (see Appendix A for the list of reviewers) to review the 25 resources and asked to do the following

- Prioritize the tools to include in the preliminary Clinician Change Virtual Care Toolkit.
- Identify tools we could prioritize updating or creating, to better support Virtual Care Together Design Collaborative participants to provide safe, high quality virtual care (e.g., to streamline information from the existing resources, or create new resources where gaps existed for example, guidelines on how to conduct virtual care physical exam).
- Identify additional existing resources to consider including in the early edition toolkit (i.e., that were not captured by HEC and Infoway's earlier research).
- Inform learning and implementation support opportunities we could provide through the Virtual Care Together Design Collaborative, featuring the tools and related change management supports to help participants adapt, use and evaluate them at their sites.

Based on feedback from reviewers, 14 resources were identified and included in the preliminary Clinician Change Virtual Care Toolkit shared with Virtual Care Together Design Collaborative teams to support their efforts to provide safe, high quality virtual care in the three theme areas of appropriateness; use and optimization of virtual care services; and quality and safe virtual care interactions.

Phase 3: Refining the preliminary Clinician Change Virtual Care Toolkit
(October 2021-January 2022)

The preliminary version of the Clinician Change Virtual Care Toolkit was refined during the Virtual Care Together Design Collaborative, which included:

- Collaborative activities (e.g., webinars, coaching, monthly newsletter) featured overviews and discussions of tools in the toolkit, facilitated by the author organization and/or clinical experts.
- Teams provided feedback on the toolkit through a survey and coaching calls. HEC analyzed the feedback and identified the following suggestions for the next iteration of the toolkit:
    - Include streamlined information summarizing the evidence in each of the three theme areas (to make it easy for clinicians and support staff to find and understand the evidence they need to deliver virtual care).
    - Organize information by theme area rather than by author of the resource.

    - Include additional tools or summaries of evidence in areas to support team-based virtual care; tools for non-clinicians, including support staff; evaluation; appropriateness; and virtual care physical exam.
    - Include case examples from teams, to share strategies of how primary care practices and organizations that participated in the Design Collaborative delivered virtual care in their settings.
- Engaged collaborative advisors (including nine clinicians and/or virtual care experts, a patient partner and HEC/Infoway staff) to discuss summarized input from the collaborative teams and gather additional advice to inform revision to improve its value for clinicians and staff.[§]

Phase 4: Creating the Clinician Change Virtual Care Toolkit *(January to March 2022)*

Based on the input from Phase 3, HEC and Infoway worked together and with two clinician advisors to:

- Summarize evidence in each of the three theme areas, primarily through extracting evidence from tools in the Virtual Care Tools and Resources section of this toolkit; additional evidence was included from published research or information where possible (e.g., links to articles with guidance on how to conduct physical exams virtually; links to pre-approved, virtual care solutions; a guide to creating culturally safe engagements published by the BC Patient Safety and Quality Council).
- Create a new version of the Clinician Change Virtual Care Toolkit, which contained the same sections as this document.
- Convene a review panel of 16 individuals, including 10 clinicians and virtual care experts and six HEC/Infoway staff (see Appendix A for the list of reviewers) to review the revised toolkit and provide guidance:
    - To support clinicians and staff with tools they need to provide safe, high quality virtual care, review the toolkit and share your reflections for the following questions for each section of the toolkit[‡]:
        - What information is most useful?
        - What information is not useful?
        - Is there additional information or evidence we should incorporate and reference?
        - Share any other ideas to improve information to support clinicians and staff to provide virtual care.

[§] The meeting was on January 17, 2022 and included participation from special guest advisors from College of Family Physicians of Canada and Dr. Clare Liddy. Dr. Kevin Samson of the Centre for Effective Practice led the discussion, in collaboration with HEC staff who analyzed and created the summary of recommended revisions for the toolkit

[‡] A review template was provided that included additional background; the sections of the toolkit reviewers were asked to review were (1) streamlined information on appropriateness, optimization and quality and safe virtual care interactions; evaluation resources.

Based on the results of the review by the review panelists, HEC and Infoway created the Clinician Change Virtual Care Toolkit for public release.

In addition, as part of Phase 4 and to address the Virtual Care Together Design Collaborative participant request for additional supports to inform evaluation of virtual care, HEC and Infoway:

- Convened an evaluation committee to create the Virtual Care Evaluation Guide that can help inform plans to evaluate virtual care in key domains including patient and clinician experience, appropriateness, and access. This guide was reviewed by the committee as well as additional experts in virtual care (see Appendix B for the list of committee members and reviewers).
- Compiled resources that can help inform plans to evaluate virtual care and identify areas for improvement, (see the Additional resources for evaluating virtual care section of this toolkit).

Phase 5: Continued Evolution of the Clinician Change Virtual Care Toolkit and Evaluation Guidelines (March 2022 - ongoing)

The Clinician Change Virtual Care Toolkit and the Virtual Care Evaluation Guide will be updated by HEC and Infoway to reflect new evidence and tools to support clinicians and support staff to provide and evaluate virtual care. To inform updates, HEC and Infoway will continue to engage clinicians and support staff, virtual care experts, and participants in new virtual care programming, including HEC's new virtual care programming commencing later in 2022.

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