

# Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19

Virtual care is any remote interaction between patients and their circle of care, involving the use of telephone, video, email or secure messaging ([WIHV, 2015](#)<sup>1</sup>). **With some upfront time and effort, virtual care can lead to a more efficient practice and better quality of care both during the pandemic and after.** This resource is designed to improve provider confidence in implementing virtual care to support quality chronic disease management.

## Why virtual care?

Using virtual care for chronic disease management can help you:

- Save time. Avoid visits to titrate medications or track side effects by collecting information on symptoms/risk factor control through email or secure messaging.
- Shorten or reduce follow up visits for chronic disease management by sending educational resources and plans for escalation of care.
- Save administrative staff time. Use email/secure messaging for preventive care (vaccinations, OBSP, CRC screening) and recalling patients for overdue visits.



Key resource: [OntarioMD Peer Leaders](#)<sup>2</sup> is a network of 60+ clinicians who offer free, direct support to assist healthcare providers in selecting and implementing health technologies that will best serve their unique needs.

## A Tips to improve effectiveness and efficiency when providing virtual care






Improved encounter efficiency	More effective patient self-management	Increased opportunities for proactive care
<ul style="list-style-type: none"> <li>• Prior to encounters and in-between virtual visits, send patients digital symptom scores or surveys to assess for exacerbations. Secure messaging platforms may include premade tools and validated scales.</li> <li>• Use patient-facing triage questions.</li> <li>• To replace follow-up visits by telephone or video, ask patients to follow-up via secure email or messaging at specified time intervals to report response to treatment and changes in symptoms.</li> <li>• Be flexible with modalities. Supplement a telephone visit with video for a comprehensive physical exam or follow-up a telephone call with an email to clarify instructions.</li> </ul>	<ul style="list-style-type: none"> <li>• Send patients an action plan, with instructions on how to address changes in disease status (e.g. titration of medication) and red flags for when to seek care.</li> <li>• Have patients use home monitoring devices (e.g. BP cuffs, weight scales) to monitor and support action plans.</li> <li>• Connect patients with free, virtual programs to support self-management skills.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider screening patients who are at risk of conditions that impact chronic disease and who may worsen during the COVID-19 pandemic.</li> <li>• Certain patients may benefit from enrollment in more intensive remote monitoring programs available in your region.</li> </ul>
<ul style="list-style-type: none"> <li>• For examples of how clinics are setting up email and secure messaging, see <a href="#">CEP: Additional supports - Learn from another practice</a><sup>3</sup></li> <li>• See <a href="#">CEP: Condition-specific patient supports</a><sup>4</sup> (e.g. Type 2 Diabetes)</li> </ul>	<ul style="list-style-type: none"> <li>• See <a href="#">CEP: Additional supports - Self-management programs</a><sup>5</sup></li> <li>• See <a href="#">CEP: Condition-specific patient supports</a><sup>4</sup> (e.g. Type 2 Diabetes)</li> </ul>	<ul style="list-style-type: none"> <li>• See <a href="#">CEP: Local services</a></li> <li>• See <a href="#">CEP: Additional supports - Remote monitoring programs/supports</a><sup>6</sup></li> <li>• See <a href="#">CEP: Condition-specific patient supports</a><sup>4</sup> (e.g. Type 2 Diabetes)</li> </ul>



Quality care can be provided whether care is delivered in-person or remotely. Review these resources to ensure your practice meets regulatory requirements.

- [CNO: Nurse Practitioner Practice Standard](#)<sup>7</sup>
- [CPSO: Practice Guide](#)<sup>8</sup>
- [CMPA: Summary of key concepts and good practices](#)<sup>9</sup>

## B Tips for practicing patient-centred virtual care

 <b>Assess</b> Patient Preference and Capacity	 <b>Enable</b> Patient Access	 <b>Strengthen</b> the Patient-Provider Relationship <sup>14, 15</sup>
<ul style="list-style-type: none"> <li>Identify language, visual or hearing barriers.</li> <li>Confirm tech literacy.</li> <li>Confirm access to technology and internet connection.</li> <li>Confirm access to private space for virtual visit. For example, “Are you in a private room?” or “Can anyone overhear your conversation?”</li> <li>Ask which modalities patients are comfortable with. For example, “How often do you use video-conferencing technology?”</li> <li>Consider privacy or security concerns. See <a href="#">CMPA</a><sup>10</sup> for specific considerations.</li> <li>Consider the need for “face-to-face” connection to support patient and therapeutic relationship.</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Canada's Connecting Families program</a><sup>11</sup> provides subsidized internet access for those eligible.</li> <li>Find ways to increase tech literacy, (e.g. have family or friends provide lessons or support a virtual visit).</li> <li>Run a donation drive to collect devices for patients.</li> <li>Support patients and caregivers to obtain and use home monitoring devices.</li> <li>Facilitate access to hearing and other communication aids. See <a href="#">MOH Assistive Devices Program</a><sup>12</sup>.</li> <li>Facilitate access to visual aids. <a href="#">CNIB technology programs</a><sup>13</sup> provide skills and training, as well as accessible/affordable technology.</li> </ul>	<ul style="list-style-type: none"> <li>Describe your behaviours aloud during virtual visit, such as looking up information or note-taking. This can prevent the misinterpretation of silence or a pause.</li> <li>Ask direct questions about a patient's emotional state. Visual cues may be lacking in virtual care visits.</li> <li>Show attentiveness by making affirming sounds as patient speaks.</li> <li>Avoid multi-part questions if the telephone or internet connection is causing delays or lags.</li> <li>Be aware of the patient's health literacy. Avoid acronyms and words that are not suitable for a lay audience.</li> </ul>

## C Tips to integrate virtual care into your workflow

- 1. Make a plan.** Include all team members when planning virtual care improvements, especially administrators. Discuss how to communicate changes to patients.
  - For a step-by-step guide, see: [Doctors of BC: Virtual care toolkit](#)<sup>6</sup>
- 2. Record patient consent.** Discuss the risks of virtual communication with your patient and document their consent. For subsequent virtual interactions, provide a brief reminder of the risks.
  - See [CMPA](#)<sup>10</sup> for a sample consent form; [OntarioMD](#)<sup>1</sup> for verbal consent scripts/EMR documentation examples
- 3. Prepare patients.** Give patients guidance on participating in virtual visits. Use pre-visit measurement instruments to increase appointment efficiency. See below for more tips on increasing encounter efficiency.
  - [CPSI: Preparing for a virtual visit \(2020\)](#)<sup>17</sup>
- 4. Manage documents.** Managing documents (e.g. signing and faxing) may require additional software or workflows when working virtually.
  - [Doctors of BC: Virtual care toolkit](#)<sup>18</sup> for suggested applications and workflows
  - [OCP: Temporary Method for Transmitting Prescriptions via Unsecure Email During COVID-19](#)<sup>19</sup>
- 5. Modify your schedule**

Consider scheduling similar types of appointments together (e.g. telephone appointments in the morning, video visits in the afternoon). Asynchronous communications in-between virtual care visits, when appropriate, can reduce the length and complexity of encounters.

# D Modalities to support virtual care in practice

To determine which services to offer in-person versus virtually, see CEP's [Determining when to schedule in-person vs remote visits](#)<sup>20</sup> resource.



For practical examples of how other health care professionals are optimizing their practice for virtual care, see [CEP's Additional supports and resources - Learn from another practice](#)

## Email and secure messaging

There are benefits to using email and secure messaging. Asynchronous virtual visits facilitate proactive care and patient self-management, which supports continuity and quality of care for patients. For more information see: [CEP: Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19: Email and Secure Messaging](#)<sup>21</sup>



### Email and secure messaging

#### Ideal for

- Follow-up and monitoring symptoms
- Receiving documents, photo and data collection to supplement virtual visits

#### Not ideal for

- Emergencies or when information is needed urgently
- Difficult conversations
- Addressing more complex medical issues

## Clinical pearls

### What email services can I use?

- Gmail, Yahoo and other large consumer email services are allowed for some patient exchanges, but do not support a completely secure exchange of information. Weigh the increased privacy risks versus benefits when deciding to use these services.
- See: [CEP: Addressing privacy and security concerns](#)<sup>21</sup>

### What is secure messaging?

- Secure patient messaging platforms are PHIPA compliant and support secure messaging between patients and providers. Messages may be one-way (provider-to-patient only) or bidirectional (initiated by either patient or provider).

### Examples of workflow tips:

- Consider setting up at least one clinic email. Set up an automatic reply for all clinical emails that inform patients when they can expect a response and when to seek care immediately
- Communicate to patients about when email should be used and when it is not appropriate. See [CEP: Appropriate use for providers and patients](#)<sup>21</sup>

### Provider self-care:

- Block time off to address patient messages and emails
- Limit the number of characters or words patients can use to make short, concise requests or comments
- Set patient expectations

## Telephone and video

There are benefits to using telephone and video. Synchronous virtual visits allow patients and providers to meet in real-time from different locations, allowing for live discussion, examination and delivery of care. For more information see: [CEP Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19: Telephone and Video](#)<sup>22</sup>



### Phone

#### Ideal for

- Triage clinical presentations
- Less-resourced or paper-based clinics
- Addressing a broad range of primary care concerns

#### Not ideal for

- Exams and assessments when nonverbal cues are important



### Video

#### Ideal for

- Clinical concerns where nonverbal cues are important
- Building, maintaining and strengthening the therapeutic relationship

#### Not ideal for

- Clinics without resources for up-front work to set up

## Clinical pearls

**Physical exams:** You may perform a limited physical exam by telephone and video, including patient-assisted maneuvers and assessments of older adults.

- [JAGS: Uptake of Virtual Visits in A Geriatric Primary Care Clinic During the COVID-19 Pandemic](#)<sup>23</sup>
- [Am.J. Med.: The Telehealth Ten: A Guide for a Patient-Assisted Virtual Physical Examination](#)<sup>24</sup>
- [MoCA: Montreal cognitive assessment](#)<sup>25</sup>
- [Stanford: How to Administer a Virtual Physical Exam](#)<sup>26</sup> [Video only]

### Provider self-care

- Being on video can be tiring. Break up your day by intermixing different modalities or limiting the number of video visits each day.
- Set patient expectations.

## References

- [1] Jamieson, T, Wallace, R, et al. Virtual Care: A Framework for a Patient-Centric System. WIHV; 2015. Available from: [https://www.womenscollegehospital.ca/assets/pdf/wihv/WIHV\\_VirtualHealthSymposium.pdf](https://www.womenscollegehospital.ca/assets/pdf/wihv/WIHV_VirtualHealthSymposium.pdf)
- [2] Peer Leader Program [Internet]. OntarioMD; 2021. Available from: <https://www.ontariomd.ca/products-and-services/peer-leader-program>
- [3] Additional supports - Learn from another practice [Internet]. Centre for Effective Practice; 2021. Available from: <https://tools.cep.health/tool/virtual-management-of-chronic-conditions-during-covid-19/#additional-supports-and-resources>
- [4] Additional supports - Condition-specific patient supports [Internet]. Centre for Effective Practice; 2021. Available from: <https://tools.cep.health/tool/virtual-management-of-chronic-conditions-during-covid-19/#additional-supports-and-resources>
- [5] Additional supports - Self-management programs [Internet]. Centre for Effective Practice; 2021. Available from: <https://tools.cep.health/tool/virtual-management-of-chronic-conditions-during-covid-19/#additional-supports-and-resources>
- [6] Additional supports - Remote monitoring programs/supports [Internet]. Centre for Effective Practice; 2021. Available from: <https://tools.cep.health/tool/virtual-management-of-chronic-conditions-during-covid-19/#additional-supports-and-resources>
- [7] Practice Standard: Confidentiality and Privacy—Personal Health Information [Internet]. College of Nurses of Ontario; 2019. Available from: [https://www.cno.org/globalassets/docs/prac/41069\\_privacy.pdf](https://www.cno.org/globalassets/docs/prac/41069_privacy.pdf)
- [8] Policies: Protecting Personal Health Information [Internet]. College of Physicians and Surgeons of Ontario; 2020. Available from: <https://www.cpso.on.ca/Physicians/Policies-Guidance/Policies/Protecting-Personal-Health-Information>
- [9] Summary of key concepts and good practices [Internet]. Canadian Medical Protective Association. Available from: [https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/key\\_concepts/key\\_concepts-e.html?open=communication&to=privacy\\_and\\_confidentiality](https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/key_concepts/key_concepts-e.html?open=communication&to=privacy_and_confidentiality)
- [10] Consent to use electronic communications. CMPA; 2016. Available from: [https://www.cmpa-acpm.ca/static-assets/pdf/advice-and-publications/risk-management-toolbox/com\\_16\\_consent\\_to\\_use\\_electronic\\_communication\\_form-e.pdf](https://www.cmpa-acpm.ca/static-assets/pdf/advice-and-publications/risk-management-toolbox/com_16_consent_to_use_electronic_communication_form-e.pdf)
- [11] Frequently asked questions: Connecting Families [Internet]. ISED; 2019. Available from: [https://www.ic.gc.ca/eic/site/111.nsf/eng/h\\_00002.html](https://www.ic.gc.ca/eic/site/111.nsf/eng/h_00002.html)
- [12] Assistive Devices Program [Internet]. Ontario Ministry of Health; 2020. Available from: <https://www.ontario.ca/page/assistive-devices-program>
- [13] Devices, services and training [Internet]. CNIB; 2019. Available from: [https://cnib.ca/en/programs-and-services/tech?gclid=Cj0KCOIA3NX\\_BRDQARIsALA3f17zQk2UmmYRNgn5F52dAyr75Tx8pt8ly-LQeqPD7x82-aevM1NgaAtjdEALw\\_wcB&region=on](https://cnib.ca/en/programs-and-services/tech?gclid=Cj0KCOIA3NX_BRDQARIsALA3f17zQk2UmmYRNgn5F52dAyr75Tx8pt8ly-LQeqPD7x82-aevM1NgaAtjdEALw_wcB&region=on)
- [14] Newcomb, A, Duval, M et al. Building Rapport and Earning the Surgical Patient's Trust in the Era of Social Distancing: Teaching Patient-Centered Communication During Video Conference Encounters to Medical Students. J Surg Educ 2021, 78 (1), 336-341
- [15] Yan M, Tan H et al. The Antecedents of Poor Doctor-Patient Relationship in Mobile Consultation: A Perspective from Computer-Mediated Communication. Int J Environ Res Public Health. 2020 Apr 9;17(7):2579. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7178203/>
- [16] Doctors Technology Office: Virtual Care Toolkit [Internet]. Doctors of BC; 2020. Available from: [https://www.doctorsofbc.ca/sites/default/files/dto\\_virtual\\_care\\_toolkit.pdf](https://www.doctorsofbc.ca/sites/default/files/dto_virtual_care_toolkit.pdf)
- [17] Checklist: Preparing for a Virtual Visit [Internet]. Canadian Patient Safety Institute; 2020. Available from: [https://www.patientsafetyinstitute.ca/en/Events/Conquer-Silence/Documents/2020%20Resources/CPSI\\_Checklist\\_Preparing\\_For\\_a\\_Visit-FINAL.pdf](https://www.patientsafetyinstitute.ca/en/Events/Conquer-Silence/Documents/2020%20Resources/CPSI_Checklist_Preparing_For_a_Visit-FINAL.pdf)
- [18] Doctors Technology Office: Virtual Care Toolkit [Internet]. Doctors of BC; 2020. Available from: [https://www.doctorsofbc.ca/sites/default/files/dto\\_virtual\\_care\\_toolkit.pdf#page=3](https://www.doctorsofbc.ca/sites/default/files/dto_virtual_care_toolkit.pdf#page=3)
- [19] COVID-19 information for Pharmacy professionals: Temporary Method for Transmitting Prescriptions via Unsecure Email During COVID-19 [Internet]. Ontario College of Pharmacists; 2020. Available from: [https://www.ocpinfo.com/wp-content/uploads/2020/03/email-prescription-guidance-web-page\\_032520\\_v3.pdf](https://www.ocpinfo.com/wp-content/uploads/2020/03/email-prescription-guidance-web-page_032520_v3.pdf)
- [20] Determining when to schedule in-person vs remote visits [Internet]. Centre for Effective Practice; 2020. Available from: <https://tools.cep.health/tool/pc-ops-covid-19-context/>
- [21] Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19: Email and Secure Messaging [Internet]. Centre for Effective Practice; 2021. Available from: <https://cep.health/clinical-products/virtual-care/>
- [22] Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19: Telephone and video [Internet]. Centre for Effective Practice; 2021. Available from: <https://cep.health/clinical-products/virtual-care/>
- [23] Dewar, S. Uptake of Virtual Visits in A Geriatric Primary Care Clinic During the COVID-19 Pandemic. J Am Geriatr Soc; 2020 Jul;68(7):1392-1394. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7267610/pdf/JGS-9999-na.pdf#page=2>
- [24] Benziger, C, Huffman, M et al. The Telehealth Ten: A Guide for a Patient-Assisted Virtual Physical Examination. Am J Med; 2021 Jan 134(1):48-51. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7368154/pdf/main.pdf#page=2>
- [25] Montreal Cognitive Assessment: Delivering remotely. [Internet]. MoCA; 2019. Available from: <https://www.mocatest.org/faq/>
- [26] Video: How to Administer a Virtual Physical Exam [Internet]. Stanford Medicine; 2020. Available from: <https://medicine.stanford.edu/news/current-news/standard-news/virtual-physical-exam.html>

This Resource was developed by the Centre for Effective Practice and Department of Family and Community Medicine, University of Toronto. Clinical leadership for the development of the Resource was provided by Dr. Onil Bhattacharyya and Dr. Payal Agarwal and by the Virtual management of chronic conditions during COVID-19 Working Group. The Managing Chronic Conditions during COVID-19 Advisory Committee provided feedback and input. This Resource was also subject to external review by health care providers and other relevant stakeholders. The development of this Resource was funded by the Government of Ontario as part of the Knowledge Translation in Primary Care.

This Resource was developed for licensed health care professionals in Canada as a guide only and does not constitute medical or other professional advice. Primary care providers and other health care professionals are required to exercise their own clinical judgment in using this Resource.



Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19 is a product of the Centre for Effective Practice and DFCM. Permission to use, copy, and distribute this material for all non-commercial and research purposes is granted, provided the above disclaimer, this paragraph and the following paragraphs, and appropriate citations appear in all copies, modifications, and distributions. Use of Virtual management of chronic conditions during COVID-19: Telephone and video for commercial purposes or any modifications of the Resource are subject to charge and use must be negotiated with the Centre for Effective Practice (Email: [info@cep.health](mailto:info@cep.health)).

**For statistical and bibliographic purposes, please notify the Centre for Effective Practice ([info@cep.health](mailto:info@cep.health)) of any use or reprinting of the Resource. Please use the below citation when referencing the Resource:**

Reprinted with Permission from Centre for Effective Practice and Department of Family and Community Medicine, University of Toronto. (January 2021). Enhancing Management of Chronic Conditions Using Virtual Care During COVID-19: Ontario. Toronto: Centre for Effective Practice and Department of Family and Community Medicine, University of Toronto.

Developed by:



Centre  
for Effective  
Practice



Family & Community Medicine  
UNIVERSITY OF TORONTO

With support from:

Ontario College of  
Family Physicians  
*Leaders for a healthy Ontario*



**afhto**  
association of family  
health teams of ontario

**eHealth**  
CENTRE OF EXCELLENCE



NURSE  
PRACTITIONERS'  
ASSOCIATION OF  
ONTARIO



Ontario Health  
OTN

OntarioMD  
Empowered Practices. Enhanced Care.

**SGFP**  
SOCIETY OF GENERAL FAMILIAL PRACTITIONERS