Virtual Care Maturity Model

Last revised October 2021

Ontario
Health

What is the Virtual Care Maturity Model?

This model is a self-serve resource developed by Ontario Health to support health care organizations in the adoption, implementation, and maintenance of virtual care. Specifically, this model aims to:

Provide a framework that can be used to measure and compare the virtual care maturity of health care organizations

Identify opportunities to adopt, implement, and maintain evidence-based virtual care to achieve objectives

Inspire the continuous improvement and growth of virtual care

Support the sudden growth of virtual care due to the pandemic

Highlight disparities between different organizations in the health care system

Virtual Care Definition

Any interaction between patients and/or members of their circle of care, occurring remotely, using any forms of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care. (WCH – WIHV). Refer to page 18 for definitions of other terms used in this model.

Note: **This model is strictly a self-serve resource and is not associated with any funding or any reporting requirements for Ontario Health.**

What is the Virtual Care Maturity Model?

Virtual care maturity is assessed using six key domains, each broken down into various criteria. This model describes maturity of these domains and criteria along three levels: **basic**, **evolving**, and **advanced**.

The descriptions in the model are designed to be high-level and non-prescriptive to accommodate different types of health care organizations that may vary in size, patient population, and geographic location. Health care organizations can align themselves to the Virtual Care Maturity Model using the Assessment Tool on page 8.

Note: **Virtual care is one of many ways to provide care and should be used in combination with in-person visits.**

Virtual Care Maturity Model
Basic

Domain	Criteria	Basic
Virtual Care Options for Patients and Providers	**Modality**	One virtual care modality is available for patients and providers
	Patient Populations	One patient population is supported with virtual care
	Models of Care	Virtual care modalities only have one model of care
	Integrated Care	Virtual care is not used to support integrated models of care
Patient Centered Design and Delivery of Virtual Care	**Equity**	Virtual care is not provided with considerations for reaching groups with barriers to access
	Patient Education	Virtual care program workflows do not include education for patients around the use of virtual care and how it might benefit them
	Service Design	Virtual care program workflows were not designed with patients
Commitment to Support Virtual Care	**Financial Resources**	Limited financial resource commitment for virtual care: one-time funding strategy
	Human Resources	Limited human resources to support virtual care
	IT Infrastructure	Limited technology and IT personnel are available to support virtual care (software, networking, hardware)
Internal Policy & Organization Structure for Virtual Care	**Governance**	Accountability for virtual care is not represented in the organization structure. There is limited governance and departmental sponsorship
	Vision and Plan	No vision or plan for virtual care
	Internal Champions	No internal champions for virtual care
	Policies and Standards	No virtual care policies or standards
Measuring Impact of Virtual Care	**Evaluation**	No evaluation of virtual care outcomes
	Quality Improvement	Evaluation has no impact on the future of virtual care program delivery
Utilization of Virtual Care	**Data**	Virtual care utilization data is limited or not available
	Virtual Encounters	Low number of virtual encounters (< 5%) from targeted patient populations across all virtual care modalities
	Provider Uptake	Low number of providers (<5%) supporting patients with virtual care, as appropriate to their practice

Definitions for key terms are on page 18

Virtual Care Maturity Model
Evolving

Domain	Criteria	Evolving
Virtual Care Options for Patients and Providers	**Modality**	Multiple (2 – 4) virtual care modalities are available for patients and providers
	Patient Populations	Multiple (2 – 4) patient populations are supported with virtual care
	Models of Care	Virtual care modalities only have one model of care
	Integrated Care	Virtual care is used to support integrated models of care
Patient Centered Design and Delivery of Virtual Care	**Equity**	Virtual care is provided with considerations for reaching some groups with barriers to access
	Patient Education	Some virtual care program workflows include education for patients around the use of virtual care and how it might benefit them
	Service Design	Some virtual care program workflows were designed with patients and are regularly refreshed as needs are identified by patient input
Commitment to Support Virtual Care	**Financial Resources**	Moderate financial resource commitment for virtual care: multi-year funding strategy
	Human Resources	Human resources are available to support virtual care in some areas the organization
	IT Infrastructure	Technology and IT personnel are available to support virtual care in some areas of the organization
Internal Policy & Organization Structure for Virtual Care	**Governance**	Accountability for virtual care is represented in the organization structure. Governance is program specific
	Vision and Plan	There is a vision and plan for virtual care, but it is not aligned with overall clinical needs or business strategy
	Internal Champions	Internal champions for virtual care are available in some areas of the organization
	Policies and Standards	Virtual care policies and standards are embedded in everyday workflows and deployed in some areas of the organization
Measuring Impact of Virtual Care	**Evaluation**	Evaluation is program-based and ad hoc
	Quality Improvement	Evaluation leads to the execution of quality improvement initiatives for virtual care program delivery
Utilization of Virtual Care	**Data**	Virtual care utilization data is available across most programs and modalities
	Virtual Encounters	Moderate number of virtual encounters (< 5 – 20 %) from targeted patient populations across all virtual care modalities
	Provider Uptake	Moderate number of providers (< 5 – 20 %) supporting patients with virtual care, as appropriate to their practice

Definitions for key terms are on page 18

Virtual Care Maturity Model Advanced
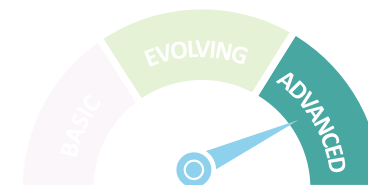
Domain	Criteria	Advanced
Virtual Care Options for Patients and Providers	**Modality**	Many (5+) virtual care modalities are available for patients and providers
	Patient Populations	Many (5+) patient populations are supported with virtual care
	Models of Care	Most virtual care modalities have many (4+) models of care
	Integrated Care	Virtual care is a key component of integrated models of care
Patient Centered Design and Delivery of Virtual Care	**Equity**	Virtual care is provided with considerations for reaching all groups with barriers to access
	Patient Education	Most virtual care program workflows include education for patients around the use of virtual care and how it might benefit them
	Service Design	Most virtual care program workflows were designed with patients and are regularly refreshed as needs are identified by patient input
Commitment to Support Virtual Care	**Financial Resources**	Significant financial resource commitment for virtual care: consistent and integrated multi-year funding strategy
	Human Resources	Human resources are available to support virtual care across the organization
	IT Infrastructure	Technology and IT personnel are available to support virtual care across the organization
Internal Policy & Organization Structure for Virtual Care	**Governance**	Accountability for virtual care is represented in the organization structure, with enterprise-level governance and sponsorship
	Vision and Plan	Vision and strategy for virtual care is closely aligned or integrated with the overarching business strategy to address critical clinical, business, and patient-centred opportunities
	Internal Champions	Internal champions for virtual care are available consistently across the organization
	Policies and Standards	Virtual care policies and standards are embedded in everyday workflows and deployed consistently and repeatably across the organization
Measuring Impact of Virtual Care	**Evaluation**	Most virtual care programs conduct scheduled evaluations that include patient measures along with critical clinical and business metrics
	Quality Improvement	Evaluation leads to continuous and operational cycles of quality improvement initiatives for virtual care program delivery
Utilization of Virtual Care	**Data**	Virtual care utilization data is available across all programs and modalities and is easily accessible
	Virtual Encounters	High number of virtual encounters (>20 %) from targeted patient populations across all virtual care modalities
	Provider Uptake	High number of providers (>20 %) supporting patients with virtual care, as appropriate to their practice

**Definitions for key terms are on page 18**

Virtual Care Maturity Model Assessment Tool

Virtual Care Maturity Assessment Tool

The assessment tool can be used by health care organizations to obtain a current-state outline of their virtual care maturity. This process requires an overarching knowledge of the virtual care programs across the organization and may require internal stakeholder collaboration.

How to use the assessment tool

1 Complete the assessment questions, on the following pages, for each of the 19 criteria found across the six maturity domains in this model.

2 Score each assessment question based on the scoring criteria identified for basic, evolving or advanced.

3 Once you answer all the questions across the six maturity domains, use the last page to total your maturity scores. Assign 1 point for Basic, 2 points for Evolving and 3 points for Advanced.

4 The sum of the scores from all criteria will be matched along the below scale to determine overall virtual care maturity:

BASIC	EVOLVING	ADVANCED
19 – 28	29 – 47	48 – 57
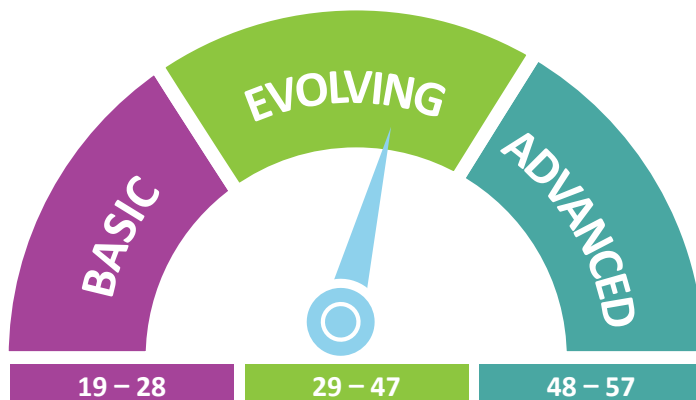
1. Virtual Care Options for Patients and Providers

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)
Modalities*	**Which virtual care modalities are used to support your patients and providers?** (Select all that apply) ☐ Virtual Visit: Audio ☐ Virtual Visit: Video ☐ Virtual Visit: Secure Messaging ☐ eConsult ☐ Digital Self-Care ☐ Remote Care Management	☐ **BASIC** Only one option selected ☐ **EVOLVING** 2 – 4 options selected ☐ **ADVANCED** 5 or more options selected
Patient Populations *	**How many patient populations are supported with virtual care?** (Select one) ☐ 1 ☐ 2 – 4 ☐ 5 or more	☐ **BASIC** 1 selected ☐ **EVOLVING** 2 – 4 selected ☐ **ADVANCED** 5 or more selected
Models of Care*	**Most of your modalities have:** (Select one) ☐ 1 model of care ☐ 2 – 4 models of care ☐ 5 or more models of care	☐ **BASIC** 1 model of care ☐ **EVOLVING** 2 – 4 models of care ☐ **ADVANCED** 5 or more selected
Integrated Care*	**Are your virtual care programs used to support an integrated model of care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question) **If yes, does the success of this integrated model rely on virtual care?** (Select one) ☐ Yes ☐ No	☐ **BASIC** No ☐ **EVOLVING** No ☐ **ADVANCED** Yes

* Definitions for key terms are on page 18

RESULTS:

☐ **BASIC** Number of ✓'s

☐ **EVOLVING** Number of ✓'s

☐ **ADVANCED** Number of ✓'s

Total should equal 4

Maturity score tabulated on page 15.

2. Patient Centered Design and Delivery of Virtual Care

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)	
Equity	**Does your organization provide virtual care with considerations for reaching groups with barriers to access?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, are these considerations made for all groups with barriers to access* in your patient population? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes	
Patient Education	**Do any of your virtual care program workflows* include education for patients around the use of virtual care and how it might benefit them?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, how many virtual care programs include this? (Select one) ☐ Some virtual care program (< 50%) ☐ Most virtual care programs (> 50%)	☐ **EVOLVING** Some virtual care program (< 50%) ☐ **ADVANCED** Most virtual care programs (> 50%)	
Service Design	**Are any of your virtual care program workflows designed with patients and are regularly refreshed as needs are identified by patient input?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, how many virtual care programs* does this represent? (Select one) ☐ Some virtual care program (< 50%) ☐ Most virtual care programs (> 50%)	☐ **EVOLVING** Some virtual care program (< 50%) ☐ **ADVANCED** Most virtual care programs (> 50%)	

* Definitions for key terms are on page 18

RESULTS:

☐ **BASIC**
Number of ✓'s

☐ **EVOLVING**
Number of ✓'s

☐ **ADVANCED**
Number of ✓'s

Total should equal 3

Maturity score tabulated on page 15.

3. Commitment to Support Virtual Care

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)
Financial Resources	**Does your organization have financial resource commitments to support virtual care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No
	If yes, select the best description of the funding strategy: (Select one) ☐ One-time funding strategy ☐ Multi-year funding strategy ☐ Consistent and integrated multi-year funding strategy	☐ **BASIC** One-time ☐ **EVOLVING** Multi-year ☐ **ADVANCED** Consistent
Human Resources	**Does your organization have human resources to support virtual care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No
	If yes, are they available to support virtual care across the organization? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes
IT Infrastructure	**Does your organization have technology and IT personnel available to support virtual care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No
	If yes, are they available to support virtual care across the organization? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes

RESULTS:

☐ **BASIC** Number of ✓'s

☐ **EVOLVING** Number of ✓'s

☐ **ADVANCED** Number of ✓'s

Total should equal 3

Maturity score tabulated on page 15.

4. Internal Policy & Organization Structure for Virtual Care

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)	
Governance	**Does your organization have a governance structure to support the ongoing use of virtual care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, please select the best description of the governance structure: (Select one) ☐ Focuses on a single service/tier within the organization ☐ Spans across the entire organization	☐ **EVOLVING** Single service/tier ☐ **ADVANCED** Entire organization	
Vision and Plan	**Does your organization have a vision or plan for virtual care?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, is it aligned with the organization's overarching business strategy to address address critical clinical, business, and patient-centred opportunities? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes	
Internal Champions	**Does your organization have any internal virtual care champions?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, are they available to support virtual care across the organization? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes	
Policies and Standards	**Does your organization have virtual care policies and standards that are embedded in everyday workflows?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐ **BASIC** No	
	If yes, are they deployed consistently and repeatably across the organization? (Select one) ☐ Yes ☐ No	☐ **EVOLVING** No ☐ **ADVANCED** Yes	

RESULTS:

☐ **BASIC**
Number of ✓'s

☐ **EVOLVING**
Number of ✓'s

☐ **ADVANCED**
Number of ✓'s

Total should equal 4

Maturity score tabulated on page 15.

5. Measuring Impact of Virtual Care

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)	
Evaluation	**Does your organization have a process in place to evaluate the success of virtual care programs?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐	**BASIC** No
	Is this process consistent across most virtual care programs and scheduled throughout the timeline of the program? (Select one) ☐ Yes ☐ No	☐	**EVOLVING** No selected for one question
	Does it consider both patient and provider perspectives? (Select one) ☐ Yes ☐ No	☐	**ADVANCED** Selected yes for all questions
	Does it include critical clinical and business measures? (Select one) ☐ Yes ☐ No		
Quality Improvement	**Has the evaluation of your virtual care program led to any quality improvement initiatives?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question)	☐	**BASIC** No
	If yes, is there a continuous and operational cycle for quality improvement initiatives? (Select one) ☐ Yes ☐ No	☐	**EVOLVING** No
		☐	**ADVANCED** Yes

RESULTS:

☐ **BASIC**
Number of ✓'s

☐ **EVOLVING**
Number of ✓'s

☐ **ADVANCED**
Number of ✓'s

Total should equal 2

Maturity score tabulated on page 15.
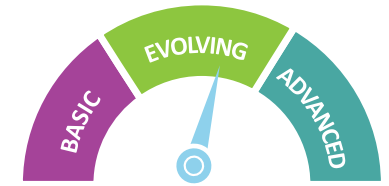
6. Utilization of Virtual Care

Criteria	Assessment Questions	Scoring and Results (✓ score in correct category)		
Data	**Does your organization have access to virtual care utilization data across most programs and modalities?** (Select one) ☐ Yes (proceed to next question) ☐ No (score basic and do not answer next question) **If yes, is this data easily accessible?** (Select one) ☐ Yes ☐ No	☐ **BASIC** No ☐ **EVOLVING** No ☐ **ADVANCED** Yes		
Virtual Encounters	**What percentage of your organization's targeted population (for virtual care) has received care virtually at least once in the last year?** (Select one) ☐ < 5% ☐ 5 – 20% ☐ > 20%	☐ **BASIC** < 5% ☐ **EVOLVING** 5 – 20% ☐ **ADVANCED** > 20%		
Provider Uptake	**What percentage of your organization's providers are supporting patients with virtual care (i.e. supported at least one patient virtually in the last year)?** (Select one) ☐ < 5% ☐ 5 – 20% ☐ > 20%	☐ **BASIC** < 5% ☐ **EVOLVING** 5 – 20% ☐ **ADVANCED** > 20%		

RESULTS:

☐ **BASIC** Number of ✓'s

☐ **EVOLVING** Number of ✓'s

☐ **ADVANCED** Number of ✓'s

Total should equal 3

Maturity score tabulated on page 15.

Virtual Care Maturity Model Assessment Final Score

Virtual Care Maturity Model Domains	BASIC	EVOLVING	ADVANCED
STEP ONE: Transfer the number of Basic, Evolving and Advanced scores for each of the previous domain question pages and plot on this table			
Page 9 – Virtual Care Options for Patients and Providers	☐	☐	☐
Page 10 – Patient Centered Design and Delivery of Virtual Care	☐	☐	☐
Page 11 – Commitment to Support Virtual Care	☐	☐	☐
Page 12 – Internal Policy & Organization Structure for Virtual Care	☐	☐	☐
Page 13 – Measuring Impact of Virtual Care	☐	☐	☐
Page 14 – Utilization of Virtual Care	☐	☐	☐
STEP TWO: Add up the totals for Basic, Evolving and Advanced — **Total for domain questions (<u>overall</u> total should be 19)**	☐	☐	☐

STEP THREE: Multiply totals by values indicated in equation

Multiply to determine value

$$\square \times 1 = \square \qquad \square \times 2 = \square \qquad \square \times 3 = \square$$

STEP FOUR: Add Basic, Evolving and Advanced values together to determine your final virtual score to determine your overall virtual care maturity score

Add values together for final score

$$\square + \square + \square = \square$$

19 – 28	**BASIC**
29 – 47	**EVOLVING**
48 – 57	**ADVANCED**

What does the overall virtual care maturity score mean for a health care organization?

BASIC

Organizations with a basic virtual care maturity are early in their virtual care journey and do not have a sustainable foundation to support their virtual care programs. These organizations tend to have limited virtual care options and limited considerations for patient centred design. Internal policies, organization structures, and financial resources do not reflect an emphasis on virtual care. Their virtual care programs are also not evaluated to improve outcomes.

EVOLVING

Organizations with an evolving virtual care maturity are further along in their virtual care journey and have taken measurable steps to ensure the sustainability of their virtual care programs. These organizations tend to have some of their virtual care options designed with a patient centred approach. Internal policies, organization structures, and financial resources reflect a moderate emphasis on virtual care. Some of their virtual care programs are also evaluated to improve outcomes.

ADVANCED

Organizations with an advanced virtual care maturity are far along in their virtual care journey and have worked towards the development of robust and sustainable virtual care programs. These organizations have many virtual care options and have made patient-centred design a priority. Internal policies, organization structures, and financial resources reflect a strong emphasis on virtual care. Most of their virtual care programs are also evaluated to improve outcomes.
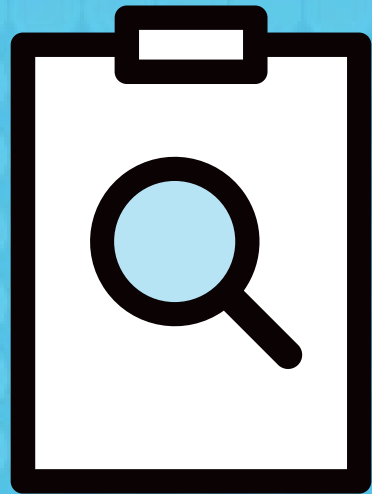
WHAT'S NEXT

With the completion of the assessment, an organization has a current-state outline of their virtual care maturity. Future-state objectives can then be identified by determining the next level of maturity relative to the obtained score for each maturity model criteria.

Organizations should align their strategic priorities to work towards advancing their virtual care maturity. Enablers of success include collaborating with regional and provincial partners to identify best practices, sharing successes, and establishing integrated models for virtual care.

We welcome your feedback, please take the time to complete a short survey: surveymonkey.com/r/HBB9333

Terms Defined

Definitions

Term	Definition
Modality	Technology that facilitates virtual encounters and access to virtual care. • **Virtual Visit:** A digital interaction where one or more clinicians, including physicians, nurses or allied health, provide health care services to a patient or their caregiver. A virtual visit can be supported using audio, video, and secure messaging. Reference: Ontario Health • **eConsult:** Occurs when a requesting provider sends a patient-specific question to a specialist using secure technology. Provider-provider clinical consults vary in the technology used. Reference: Ontario eConsult Centre of Excellence • **Digital Self-Care:** The delivery of self-management support to patients via technology using tools such as education or behavior change support to promote activities which contribute to condition management, for example medication adherence or increasing physical activity. Reference: Morton et al. (2016) • **Remote Care Management:** Utilize remote monitoring solutions to assess a patient's ongoing health status and utilize this data to guide care plan changes, address patient education needs, and activate interventions to proactively address emerging issues. Reference: Ontario Health
Patient Population	Patient groups that are distinct by their: • Specialty (e.g. Mental Health, Palliative, Surgical, etc.) • Acuity (e.g. low, medium, high, etc.)
Model of Care	In a virtual care context, refers to the usage of a virtual care modality to support a specific use-case. For example, virtual care can be used to support: • Pre-treatment for surgical patients • Waitlist management for substance use disorder programs • Treatment for mental health patients • Adjunct to treatment for chronic pain patients • Post-Treatment and follow up for patients undergoing chemotherapy

Term	Definition
Integrated Model of Care	A model of care that is not siloed and spans the entire patient journey across multiple: • Departments • Care Settings • Organizations
Groups with Barriers to Access	Examples include: • Seniors • Rural / Remote • Precariously housed • Disabled • Primary language other than English
Virtual Care Program	A service offered by a health care organization that: • Uses one or more virtual care modalities • Is offered to one of more patient populations • Supports one or more models of care
Virtual Care Program Workflow	The steps involved in the learning, delivery, and utilization of a virtual care program for patients and providers.

Appendix

Virtual Care Nomenclature

DIGITAL HEALTH

The use of information technology/electronic communication tools, services and processes to deliver health care services or to facilitate better health. Reference: Canada Health Infoway

Information Resources	Databases and Reporting Tools	Electronic Medical Records	Hospital Information Systems	Scheduling Solutions

VIRTUAL CARE

Any interaction between patients and/or members of their circle of care, occurring remotely, using any forms of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care. Reference: WCH - WIHV

Virtual Visit: Audio	Virtual Visit: Video	Virtual Visit: Secure Messaging
eConsult	Digital Self-Care	Remote Care Management

Virtual Care Modalities

Additional resources to support improving virtual care maturity

- [Adopting and Integrating Virtual Visits into Care](#) (Ontario Health)
- [COVID-19 Virtual Care Resources](#) (Ontario Health)
- [Digital inclusion for health and social care](#) (NHS Digital)
- [How to Start Using Virtual Care](#) (OntarioMD)
- [Meeting Priority Population Needs Through Virtual Care](#) (Ontario Health)
- [A Toolkit for Implementing Virtual Group Services](#) (Centre of Innovation in Peer Support)
- [Toolkit for e-Mental Health Implementation](#) (Mental Health Commission of Canada)
- [Virtual Care for Chronic Disease Management](#) (Centre for Effective Practice)
- [Virtual Care Playbook](#) (Canadian Medical Association)
- [Virtual Care Toolkit](#) (Accreditation Canada & Health Standards Organization)
- [Virtual care equity matrix: No one is left behind](#) (Ontario Mental Health and Addictions Virtual Care Collaborative)

[Verified Virtual Visit Solutions for Providers](#) (Ontario Health)

To assist health service providers in the selection of virtual care solutions appropriate for clinical use, Ontario Health has established a provincial standard and launched a verification process for virtual care solutions.

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