

Ontario Health Teams: Digital Health Playbook

Initial Release Date: August 23, 2019
Update #1: December 1, 2019
Update #2: April 27, 2022





Updates and Changes

Since the last update, changes have been made to the Digital Health Playbook for improved user experience based on stakeholder feedback. A summary of changes can be found below:

Section	Summary of Changes
Playbook	<ul style="list-style-type: none">✓ Streamlined the content within the Playbook for improved navigation, accessibility, and user experience.✓ New content includes:<ul style="list-style-type: none">➤ A general overview of the Digital First for Health strategy;➤ Digital Health Maturity Objectives; and➤ Guidance for developing Digital Health Plans and Harmonized Information Management Plans (HIMPs).
Digital Health Catalogue	<ul style="list-style-type: none">✓ Updates to improve navigation, user experience, and alignment with the Digital Health Maturity Objectives.✓ Additional information on the digital health assets have been included in each entry, such as:<ul style="list-style-type: none">○ A more comprehensive description of each digital health asset;○ Availability of the asset by region and sector; and○ More information on implementation considerations.
Digital Health Provincial Guidance Document	<ul style="list-style-type: none">✓ Renamed from the Digital Health Policy Guidance Document to the Digital Health Provincial Guidance Document to better reflect how some of the policies have evolved from draft guidance to provincial direction on digital health.✓ General format updates to improve navigation, user experience, and alignment with the Digital Health Maturity Objectives.✓ Updates to the policies to reflect the most current guidelines, and advice on implementation approaches that OHTs should follow when developing their digital health plans.✓ Additional information and a link to the Harmonized Health Information Management Plan (HIMP) Guidance Document to support Ontario Health Teams (OHTs) in developing their HIMPs.



This version of the Playbook is meant to be an interim update with an explicit focus to better support digital health implementation in OHTs. A more comprehensive update is being planned to be able to address a wider range of needs from different health system stakeholders.



Introduction

Ontario Health Teams (OHTs) are part of the government's plan to build a modern, sustainable, and integrated health care system. The purpose of the Playbook is to provide OHTs with:

- Information on the types of tools, requirements, and policy directions that will guide the creation of digitally-enabled OHTs; and
- Advice on how best to use the tools within the Playbook as OHTs build their digital health plans.

OHTs should use this Playbook to:

1 Understand the provincial strategy and objectives for digital health

OHTs should use this section to:

- ✓ Understand the overall provincial digital health strategy and the Digital Health Maturity Objectives.
- ✓ Develop and align their digital health plans with the Digital First for Health strategy and OHT Digital Health Maturity Objectives.
- ✓ Learn about the objectives of a Harmonized Information Management Plan (HIMP).
- ✓ Learn about funding opportunities to support digital health maturity.

2 Find the appropriate tools for their digital health plans

OHTs should use this section to:

- ✓ Find information on the digital health assets they need based on their digital health plans.
- ✓ Use the information to begin appropriate implementation efforts for their chosen assets.

3 Ensure alignment with provincial direction and implementation approaches

OHTs should use this section to:

- ✓ Guide the development of their digital health plans.
- ✓ Determine how best to choose digital health tools to meet their objectives.
- ✓ Ensure that the development and implementation of their digital health plans align with provincial guidelines.

4 Find guidance on how to spread and scale innovative digital tools

OHTs should use this section to:

- ✓ Understand the Ministry of Health's (the ministry) innovation management framework and innovation priorities.
- ✓ Find information on the innovation lifecycle for developing and adopting solutions.

5 Find information for further assistance

OHTs should use this section to:

- ✓ Find information on additional resources and supports.



Using the Digital Health Playbook

Digital health is a key enabler for a more connected and integrated health care system. As such, OHTs are crucial to fostering local innovation and provincial digital advancement. This Playbook provides guidance and support to OHTs as they develop their digital health and information management plans on their journey to digital health excellence.

Click on any of the objects to jump to the respective section.

Click on the title on any page to return to this page.

1 **Understand the provincial strategy and objectives for digital health**

- Introduction
- The Digital First for Health strategy
- The Digital Health Maturity Objectives
- Harmonized Information Management Plans
- Guide to Building Your Digital Health Plan
- Funding Supports

2 **Find the appropriate tools for their digital health plans**

- Introduction to the Digital Health Catalogue
- The Digital Health Catalogue

3 **Ensure alignment with provincial direction and implementation approaches**

- Introduction to the Digital Health Provincial Guidance Document
- The Digital Health Provincial Guidance Document

4 **Find guidance on how to spread and scale innovative digital tools**

- Innovation Management Guidance

5 **Find information and contact information for further assistance**

- Further Assistance for OHTs

1 Introduction: Provincial Objectives for Digital Health

OHTs should use this section to:

- ✓ Understand the overall provincial digital health strategy and the Digital Health Maturity Objectives.
- ✓ Develop and align their digital health plans with the Digital First for Health strategy and OHT Digital Health Maturity Objectives.
- ✓ Learn about the objectives of a Harmonized Information Management Plan.
- ✓ Learn about funding opportunities to support digital health maturity.

OHTs will provide a new way of organizing and delivering services in local communities to enable integrated health care. Digital health services and tools, together with a harmonized health information management plan, will be key enablers in supporting seamless and efficient delivery of care.

In this section, OHTs will find an overview of:



The Digital First for Health strategy (DFFH)

The provincial digital health strategy that aims to bring the patient experience into the 21st century and help end hallway health care by offering more choices and making health care simpler, better and more convenient for patients.



Digital Health Maturity Objectives

The Digital Health Maturity Objectives outline the digital capabilities that OHTs should aim for as part of the DFFH strategy to deliver integrated care for patients and providers.



The Harmonized Information Management Plan

A plan developed by OHTs to support information sharing and integrated care while ensuring the privacy of individuals and confidentiality of their personal health information (PHI).



Advice for OHTs Building their Digital Health Plans

The steps and considerations to keep in mind as OHTs develop digital health plans to support the delivery of integrated care for patients and providers.

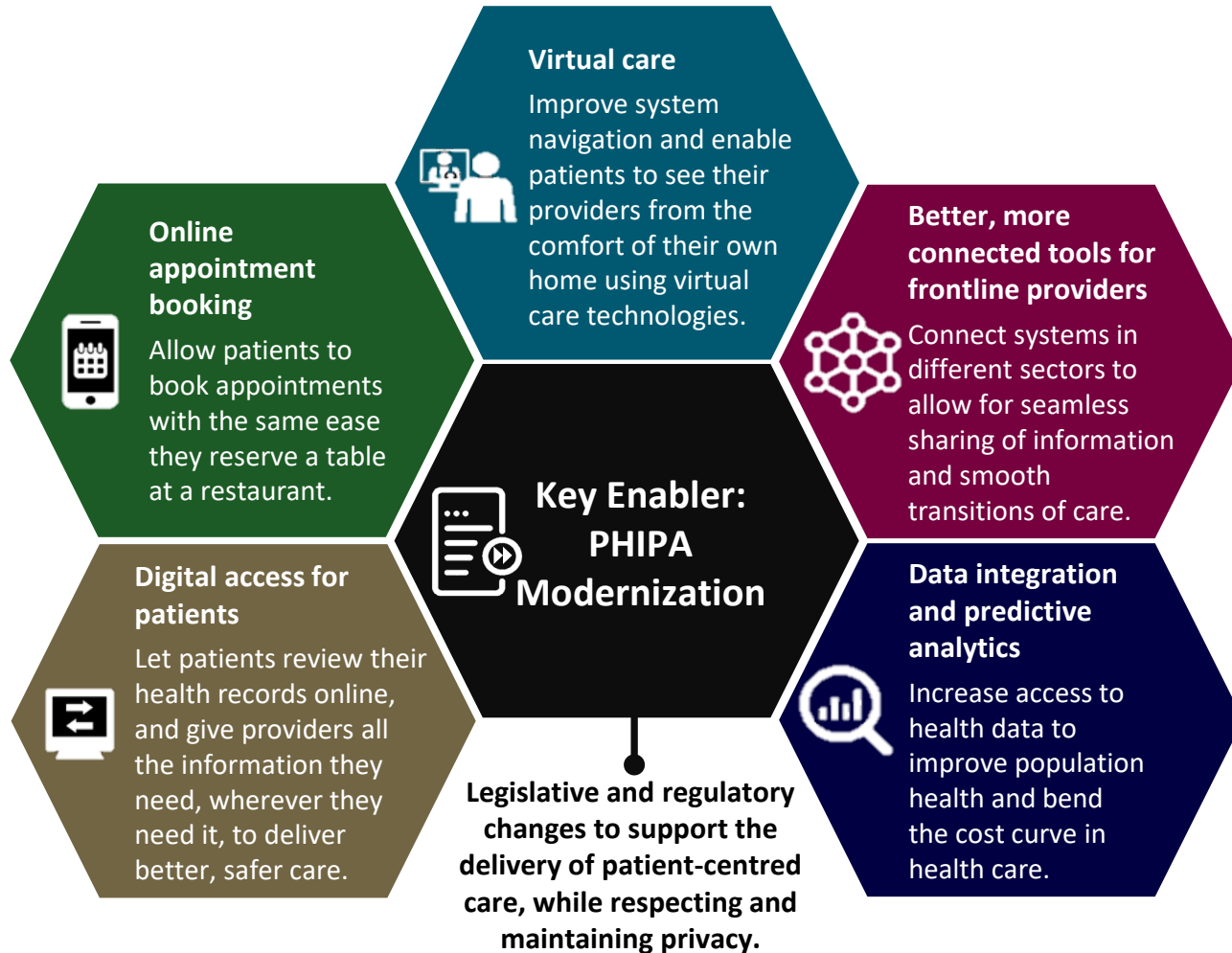


Funding Opportunities

Opportunities to help OHTs build towards digital health maturity.

1 > The Digital First for Health strategy

Digital First for Health is central to the government's efforts to transform the health care system so that it is integrated, sustainable, and patient-centred. Strong digital capabilities are a critical enabler for system integration and information sharing within OHTs and the health care system so that patients have choice on how they engage with the health care system and receive seamless care.



Benefits



For patients and caregivers, this means having access to a trusted digital identity and their personal health information (PHI), as well as the choice to engage with providers in-person or via digital tools, such as video visits and secure messaging.



For providers, digitally-enabled OHTs offer clinicians and health service providers access to the information they need, when they need it, and better channels for delivering services.



For organizations, this means equipping teams with tools that allow them to focus their efforts on providing care directly to patients while minimizing time lost to inefficient and redundant reporting activities.

1 > Objectives for Digital Health

The Digital Health Maturity Objectives allows OHTs to assess their current state and collectively address their digital health gaps. Understanding that OHTs have different patient populations, needs, and levels of digital maturity, the objectives provide a vision for digital health to guide OHTs in the development and implementation of their digital health plans.

The three Digital Health Maturity Objectives are below:



Key Objective:
**Patient
Centred Care**

In the ideal state, OHTs can deliver care in a more patient-centred way by leveraging the use of digital and virtual tools. Patients have options in how and when they navigate the system, access care, manage their health status, and view their personal health information.



Key Objective:
**Connected
Frontline
Providers**

In the ideal state, frontline providers communicate and share information and clinical data in a manner that enables improved collaboration and efficiency in care planning and provision. Care is highly efficient and transitions are seamless. Shared instances of digital tools and digital tools that are connected and integrated and built on common standards enable real-time, team-based care.



Key Objective:
**System
Self-
Management**

In the ideal state, OHTs have the ability to manage themselves and improve their performance through advanced predictive analytics and strong information-management practices. They have the information to facilitate population health management, and optimize measurement and efficiency of reporting.

Additional information on the key objectives can be found on their respective pages.

Click on the objectives to jump to their sections.

1 > Digital Health Maturity Objective: Patient Centred Care



Key Objective:
**Patient Centred
Care**

In the ideal state, OHTs can leverage digital tools to deliver care in a more patient-centred way.

- Patients understand and have user friendly tools to effectively navigate the system and access care.
- Patients have choice in how and when access and receive their care.
- Patients have the tools and support they need to self-manage, view and consume their personal health information.

Area of Focus	Maturity Levels	
	Low	High
Patient Navigation	<ul style="list-style-type: none"> ▪ Providers offer ad hoc health care navigation advice to patients. ▪ Online directories of services are incomplete, out of date, or don't represent a single source of truth. 	<ul style="list-style-type: none"> ▪ All patients in the province get a streamlined and digital means of finding services and connecting to the providers of their choice.
Virtual Care	<ul style="list-style-type: none"> ▪ Patients are only able to access care in person, with service location and appointment times set according to the provider's availability. ▪ Resources are not allocated to develop or deliver care virtually. ▪ Governance and accountability are not inclusive of virtual care and innovative delivery models. ▪ Data are not captured on care delivery modes and existing virtual care programs are not evaluated to improve uptake and positive patient outcomes. 	<ul style="list-style-type: none"> ▪ Many virtual care modalities and models of care are available for patients. ▪ Virtual care is seamlessly woven into workflows and integrated care delivery while also ensuring that accommodations are provided for groups with barriers to accessing health care and digital health care services. ▪ Human, financial, and technology resources are sufficient to deliver virtual care and digital virtual care is represented in organizational/OHT governance and accountability.
Patient access to their health information	<ul style="list-style-type: none"> ▪ Patients are unable to see their health information or there are barriers to accessing personal health information. ▪ PHI available digitally lacks critical datasets or is otherwise incomplete. ▪ Patients must log into to multiple systems to view their health information digitally. ▪ Systems that are accessible to patients are difficult to navigate, and data included is not accessible and understandable. 	<ul style="list-style-type: none"> ▪ Patients can easily access their health information digitally using an accessible and user-friendly solution. ▪ Health information is appropriately shared with patients and aligns with the provider care and communications. ▪ Patients have control over who can access their health information and for what purposes.
Online appointment booking (OAB)	<ul style="list-style-type: none"> ▪ Patients can only book appointments through one channel (e.g. telephone) and are further constrained by administrative hours and processes. ▪ Appointment times are offered at time and locations that are most convenient for the provider or involve long waits. 	<ul style="list-style-type: none"> ▪ Patients have different ways to book appointments with a health care provider (e.g. telephone, online, etc.) at their own convenience.

1 > Digital Health Maturity Objective: Connected Frontline Providers



Key Objective:
Connected Frontline Providers

In the ideal state, OHTs can leverage digital tools to enable high quality collaborative care.

- Patients receive care in an efficient and timely manner from a team of clinicians suited to their specific needs.
- Patients receive care that is grounded in clinical best practices.
- Patients receive highest quality care from clinicians who have a full picture of their health status.
- Patients experience smooth transitions between providers who have the right information at the right time.
- Patients avoid repeat testing and unnecessary interactions with the health care system.

Area of Focus	Maturity Levels	
	Low	High
Data Sharing between Providers	<ul style="list-style-type: none"> ▪ Providers share information verbally only or via mailed or faxed documents. ▪ Providers view patient data from other providers via printed reports. ▪ Digital information is printed and re-entered for consumption in another provider’s system. ▪ Many distinct disconnected instances of clinical systems being used within the OHT. 	<ul style="list-style-type: none"> ▪ Data standards and agreements have been implemented to support information sharing between providers in a circle of care. ▪ OHTs adhere to provincial standards to enable broad digital information sharing. ▪ Systems are directly integrated to enable convenient access to data in point of care systems. ▪ Providers in the circle of care have access to all up-to-date patient information that is easily accessed at the point of care.
Clinical Standardization	<ul style="list-style-type: none"> ▪ Limited use of clinical standards limiting the ability to standardize and improve workflows. ▪ Clinical standards are in disparate systems or printed references and not integrated into digital tools and workflows. 	<ul style="list-style-type: none"> ▪ Adoption of provincial clinical standards and tailored local clinical standards is widespread and embedded as decision supports at the point of care. ▪ Clinical workflows are streamlined via digital tools.
Integrated Care	<ul style="list-style-type: none"> ▪ Providers do not share records of the care delivered with others in the circle of care. ▪ Care is not collaboratively planned between the providers in the circle of care. ▪ Care plans are not shared proactively. 	<ul style="list-style-type: none"> ▪ Digital solutions support near real-time team-based care.

1 > Digital Health Maturity Objective: System Self-Management



Key Objective:
System Self-Management

In the ideal state, OHTs can leverage digital tools to understand their attributed population and their performance in serving that population.

- Patients receive care from OHTs and providers who are continually learning and improving.
- Patients receive care that considers their overall well-being and their social determinants of health.
- Patients receive care that has been evaluated as representing high value for money.
- Patients receive care from providers and organizations who are held to account through consistent measurement, tracking and reporting of their performance.

Area of Focus	Maturity Levels	
	Low	High
Advanced Analytics	<ul style="list-style-type: none"> ▪ Data are not consistently available between providers. ▪ Data are not used or only used in a limited way to inform prioritization, resource allocation and value for money. 	<ul style="list-style-type: none"> ▪ Data-driven approach to system planning and population health management. ▪ Evidence informs the prioritization of efforts and resources aimed to support target populations. ▪ Data, historical trends and predictive analytics inform the allocation of financial resources to deliver care.
Reporting and measurement	<ul style="list-style-type: none"> ▪ Reporting and measurement is uncoordinated and ad hoc. 	<ul style="list-style-type: none"> ▪ Real time reporting from OHTs allows for an accurate understanding of the health outcomes and experiences of their attributed population, of local, regional and provincial health care utilization, and monitoring of program delivery (including digital health). ▪ The OHT has adopted its own approach to meet the reporting requirements set by the ministry and Ontario Health and is measuring performance at the level of their attributed population.

1 > The Harmonized Information Management Plan

The HIMP is a mechanism to help advance the OHT's overall information management maturity to support integrated care. The plan should document the OHT's information management efforts and would include:



- The OHT's vision and plans for information governance;
- Identification of needs related to data and information management;
- Evaluation of privacy considerations; and
- Approaches to meet the operational and delivery needs, and to address challenges.

Why is the HIMP important to OHTs?

OHT implementation is fundamental to the government's plan to build a modern, sustainable and integrated health care system that connects health care providers and provides services focused on the patient. A HIMP will help:

- ✓ Ensure more timely and shared access to quality data and information to enable effective and efficient care.
- ✓ Ensure proper management of the data and information required to meet the OHT's goals of integrated patient care.
- ✓ Guide OHTs to protect the privacy of individuals and maintain the confidentiality of their personal health information, while transforming Ontario's health care service delivery models, and consequent patient and population health and wellness outcomes.

Additional information on the HIMP Guidance Document can be found on the next slide

1 > The HIMP Guidance Document

The HIMP Guidance Document is a resource for OHTs looking to develop their Harmonized Information Management Plans and advance their information management maturity to support integrated care while maintaining the privacy of individuals.

The HIMP Guidance Document includes the information below:



Information Management (IM)

- Provides an overview of the HIMP and introduces some information management concepts.



OHT IM Planning

- Presents the key content topics to include in a harmonized IM and privacy plan, and the considerations toward developing the components.



Data and Information Management

- Explains concepts relating to IM and data, and needs and risk assessments, to inform OHT service planning.



Privacy

- Presents concepts under Ontario's privacy legislation, and related considerations for OHTs around privacy and information sharing.







IM and Privacy Resources

- Provides a selected suite of available supports and information resources that OHTs may leverage in the development of their plans.

[Go to: The HIMP Guidance Document](#)

1 > Building A Digital Health Plan

The successful implementation of the OHT model will require groups to develop and implement effective digital health plans. Below are some general steps and considerations OHTs should undertake to develop their digital health plans.

<p>Assess 1</p>  <p>Assess and articulate the current state of clinical workflows and processes for those organizations that will be part of the OHT, and their use of supporting digital health technology.</p>	<p>Align 2</p>  <p>Understand how the current state aligns with the DFFH strategy and Digital Health Maturity Objectives and determine the gaps and requirements to meet the maturity objectives.</p>	<p>Redesign 3</p>  <p>If necessary, redesign clinical workflows and undertake process redesign activities to align with the maturity objectives and provincial standards.</p>	<p>Outline 4</p>  <p>Outline the key activities to be undertaken over the next 12 months to begin to move from the current state to the desired end state.</p>
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Considerations





<ul style="list-style-type: none"> • Do the digital tools address the needs of providers? • Do the digital tools address the needs of patients, especially those of OHT target populations (e.g., Indigenous communities, Francophones, etc.) who may face unique challenges and have specific health service needs? 	<ul style="list-style-type: none"> • Do current digital tools meet the goals outlined in the Digital Health Maturity Objectives? • Do current tools meet provincial guidelines and standards for digital health and information management? 	<ul style="list-style-type: none"> • What types of digital health tools are needed to address the identified gaps? • Are there any opportunities to incorporate innovative digital health technologies? 	<ul style="list-style-type: none"> • What change management supports are required to ensure that implementation is successful?
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Available Tools (Click to access)

<ul style="list-style-type: none"> ✓ Health Equity Impact Assessment 	<ul style="list-style-type: none"> ✓ The Digital First for Health strategy ✓ Digital Health Maturity Objectives ✓ Virtual Care Maturity Model ✓ Digital Health Provincial Guidance Document ✓ HIMP Guidance Document ✓ Digital Standards in Health Care 	<ul style="list-style-type: none"> ✓ The Digital Health Catalogue ✓ Funding Supports to Enable Digital Health Plans ✓ Innovation Management Framework ✓ Digital Health OHT Community of Practice 	<ul style="list-style-type: none"> ✓ The Digital Health Catalogue
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1 > Funding Supports for Digital Health Plans

These funding supports can help OHTs solidify their digital health foundations and accelerate their path towards maturity. **OHTs and health care providers should understand the breadth of funding and choose the funding stream(s) that meet their specific needs.**

	Opportunity	Description
All Digital Health Maturity Objectives  Key Objective: Patient Centred Care 	Tests of Change	The purpose of this funding is to explore new approaches to support the use of digital health in the delivery and management of health in Ontario. All types of digital health-related innovations – product, service, process, model, and method – will be considered for funding.
	Virtual Care Online Appointment Booking Patient Digital Access to Information (Patient Portals)	Several opportunities are available to improve the patient and caregiver experience, focused on remote care monitoring, virtual urgent care, virtual surgical transitions, patient navigation*, and other virtual programs* that align with provincial priorities. Funding is available to enable OHTs to better meet the demand of Ontarians for tools which enable them to book an appointment online with their primary care provider and other members of their health care team. Opportunities are available for OHTs looking to support the implementation of patient portals to meet Ontarians’ growing demand for having digital access to their health information via patient portals.
Key Objective: Connected Frontline Providers 	Hospital Information Systems (HIS) Standardization Ontario Standards for Care (OSC)	Hospitals that use Cerner, MEDITECH and Epic HIS’s have been tasked with identifying opportunities that could be funded to support greater standardization between separate instances of a HIS under the same vendor. A Call for Applications has been issued for one digital health delivery organization to lead the establishment of a provincial program that takes standardized, evidence-based clinical content and translate it into tools and templates that are embedded into frontline clinical systems.
	Digital Health Enablers 	Regional Security Operation Centres (RSOCs)

*Funding for these initiatives is supported by a federal investment in virtual care.

OHTs should leverage a combination of provincial assets (which can be found in the Digital Health Service Catalogue), and available funding supports, when no provincial assets exist to build towards digital health maturity.



Additional information on the funding opportunities, where available, can be found by clicking here.

2 > Using the Digital Health Service Catalogue





OHTs should use this section to:

- ✓ Find information on the digital health assets they need based on their digital health plans.
- ✓ Use the information to begin appropriate implementation efforts for their chosen assets.

Important Note: The Catalogue is complimentary to the [Digital Health Maturity Objectives](#) and [Digital Health Provincial Guidance Document](#). All of these documents should be read in tandem as OHTs are required to ensure that their implementation and deployment efforts are appropriately guided by the established standards.

Ontario's digital health delivery organizations provide tools and services that improve outcomes for patients and providers. From virtual care to health data collection and sharing, these solutions and assets lead to increased clinical value and better health care system integration. The [Digital Health Service Catalogue](#) is designed to assist OHTs with understanding the digital landscape in the province.

OHTs can find the following information in the Digital Health Service Catalogue:

	A description of the tool, service or asset, including details on: <ul style="list-style-type: none">➤ Functionality and value for OHTs;➤ How the tool integrates with other technology systems;➤ Alignment with provincial technical and service standards; and➤ Potential future enhancements.
	Implementation considerations, including: <ul style="list-style-type: none">➤ Technical requirements and pre-requisites;➤ Implementation/change management requirements; and➤ Privacy and security considerations.
	Availability of the digital health tool by sector and region.
	Next steps for implementation <ul style="list-style-type: none">➤ Information on the digital health delivery organization; and➤ Contact information for further inquiry.

Go to: The Digital Health Service Catalogue

3 > Provincial Guidance on Digital Health

OHTs should use this section to:

- ✓ Guide the development of their digital health plans.
- ✓ Determine how best to choose digital health tools to meet their objectives.
- ✓ Ensure that the development and implementation of their digital health plans align with provincial guidelines.

To ensure that the basic tools and functionalities are in place to support integrated care delivery, the ministry has compiled a set of minimum requirements for prospective OHTs and provincial guidance to support the selection, procurement, implementation, and evaluation of digital health tools.

OHTs will be required to align with:

The Digital Health Provincial Guidance Document

This document contains:



4 general digital health policies

to support the implementation and/or ongoing use of all digital health systems.



3 system-specific policies

to guide implementation activities for those OHTs that are undertaking new procurements, significant upgrades, or development of new virtually enabled models of care.

A summary of these policies can be found on the next slide.

Note: For guidance on the Harmonized Information Management Plan, please refer to [earlier slides](#) in this Playbook or the [HIMP Guidance Document](#).

3 Policy Summaries

Below are a summary of the policies included in the Digital Health Provincial Guidance Document:

General Digital Health Policies	Summary
Digital Health Information Exchange Policy	Promotes the increased interoperability of clinical systems and provincial digital health assets, including those within and outside of OHTs, by setting out requirements for health information custodians (HIC) to select, develop or use digital health assets that comply with applicable interoperability specifications published by Ontario Health.
Digital Health Investment and Value for Money Policy	Ensures that health service providers achieve value for money from their procurement activities, and that vendors are reimbursed for the outcomes that their products and services deliver. This policy leverages local, regional, and/or provincial purchasing power to create value in the healthcare system, promote innovation, and to move away from localized purchasing.
Digital Health Reporting and Performance Guide	Provides requirements for OHTs to report against a limited number of indicators, to ensure that investments in Ontario's health care system are transparent and accountable.
Digital Health Cyber Security Policy	Provides guidance and resources for OHTs to support robust cyber security policies, procedures and practices, as well as ministry direction in the event of a cyber incident.

System-Specific Policies	Summary
Patient-Facing Digital Health Policy	Provides guidance on the minimum set of functionalities that OHTs must enable for their patients to enhance how and when they receive care and access to their PHI.
Clinical Systems Policy	Outlines requirements that OHTs must meet in order to ensure their point-of-service clinical system allows providers to access relevant health information, enables patients to access their own PHI, and facilitates data extraction for system-level performance measurement.
eServices Policy	Supports OHTs in offering eServices tools (i.e. eConsult and eReferral), and also provides implementation guidance to enhance how providers communicate to support transitions in care. Guidance is also provided to technology service providers to support them in aligning with mandatory provincial standards.

[Go to: The Digital Health Provincial Guidance Document](#)

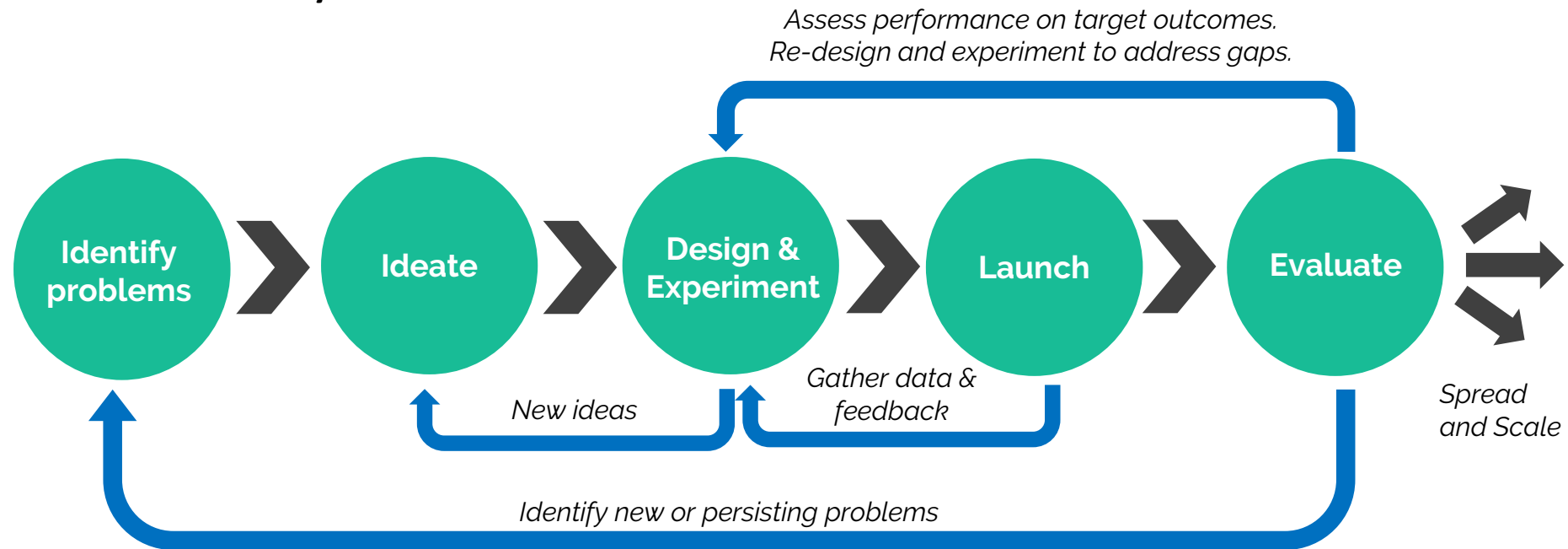
4 > Innovation Management

OHTs should use this section to:

- ✓ Understand the ministry's innovation management framework and innovation priorities.
- ✓ Find information on the innovation lifecycle for developing and adopting solutions.

Ontario has a rich ecosystem of digital health innovators, creating products that improve the delivery of health care and the patient experience based on cutting edge technologies. Consistent with global best practices, the ministry is using an innovation management framework to develop and deploy innovation capabilities, evaluate performance, and achieve intended innovation outcomes. This is a systematic approach to managing innovation, from ideation through spread and scale.

The Innovation Lifecycle



This diagram illustrates the innovation lifecycle. It begins with investigating problems, ideating solutions, and developing products or processes to address them. For example, an OHT using an inefficient process for information sharing can identify a better approach, then develop and refine the solution.

4 Innovation Management (continued)

OHTs are encouraged to take an innovative approach to digital health and leverage the framework to best serve patients and caregivers, as well as providers and their OHT. The diagram below shows the stages of the innovation lifecycle that OHTs will undergo when developing a problem statement, sourcing or building solutions, and evaluating and refining their approach and implementation. The ministry and Ontario Health (OH) will play a role supporting regional and provincial scaling of select digital health solutions by issuing specific innovation challenges (Tests of Change) to help guide OHTs on their innovation journey.

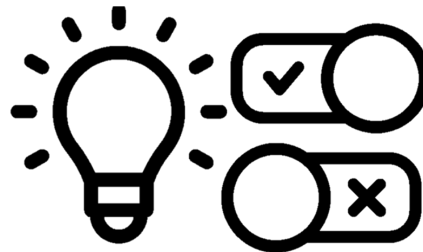
Ideation phase



After generating ideas, OHTs can design, build and experiment with new solutions, or choose from a variety of existing solutions to adopt.

OHTs should identify a clinical and business opportunity that needs to be solved. OHTs can run local innovation challenges to determine if there are digital health solutions that support their business objectives.

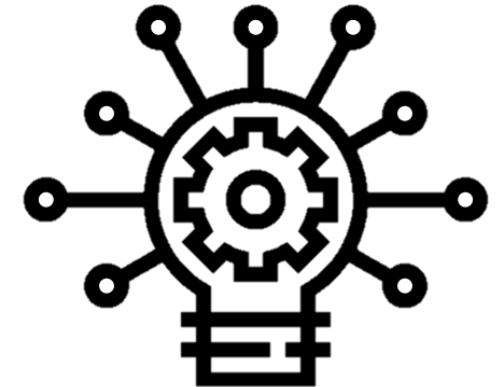
Innovation



The ministry will partner with OH and OHTs to evaluate innovations and address policy and procurement barriers.

Once OHTs select solutions, they can start to implement them in a few settings and continue to refine their use as they scale more broadly across the team. At this stage, OHTs should gather continuous feedback from users in order to evaluate and improve solutions.

Spread and scale



The ministry and OH will work to spread and scale successful innovations that are evidence-based and demonstrate a strong return on investment (ROI) across the province to support other OHTs in addressing their digital health needs.

5 > Further Assistance for OHTs

The ministry is dedicated to the successful transformation of health care through the creation of OHTs. To support OHTs, the ministry has developed a centrally coordinated program of supports that includes resources in key areas aligned with the OHT model, such as: digital health, provincial data, analytics, information management and privacy, governance and leadership, patient partnership and community engagement, evidence translation, and primary care engagement.

Ministry of Health Supports	Additional Supports for OHTs
<p>Some key examples of ministry supports include:</p> <ul style="list-style-type: none">• Assistance in the crafting of OHT policy and digital plans to support integrated care;• Assisting OHTs with barrier resolution;• Supporting privacy and security requirements for OHTs; and• Developing standards and guidance for OHTs that support information management best practices in data quality, storage, transmission and disclosure.	<p>Identified digital health delivery organizations will be responsible for supporting OHTs through the following means:</p> <ul style="list-style-type: none">• Maintaining provincial digital catalogue services for priority roll out to the OHTs; and• Service level accountabilities, including:<ul style="list-style-type: none">○ Client education and onboarding;○ The provision of service;○ Co-design activities with OHTs where invited; and○ Any technical support.



For further resources and information on OHTs, please visit <http://health.gov.on.ca/en/pro/programs/connectedcare/oht/>.



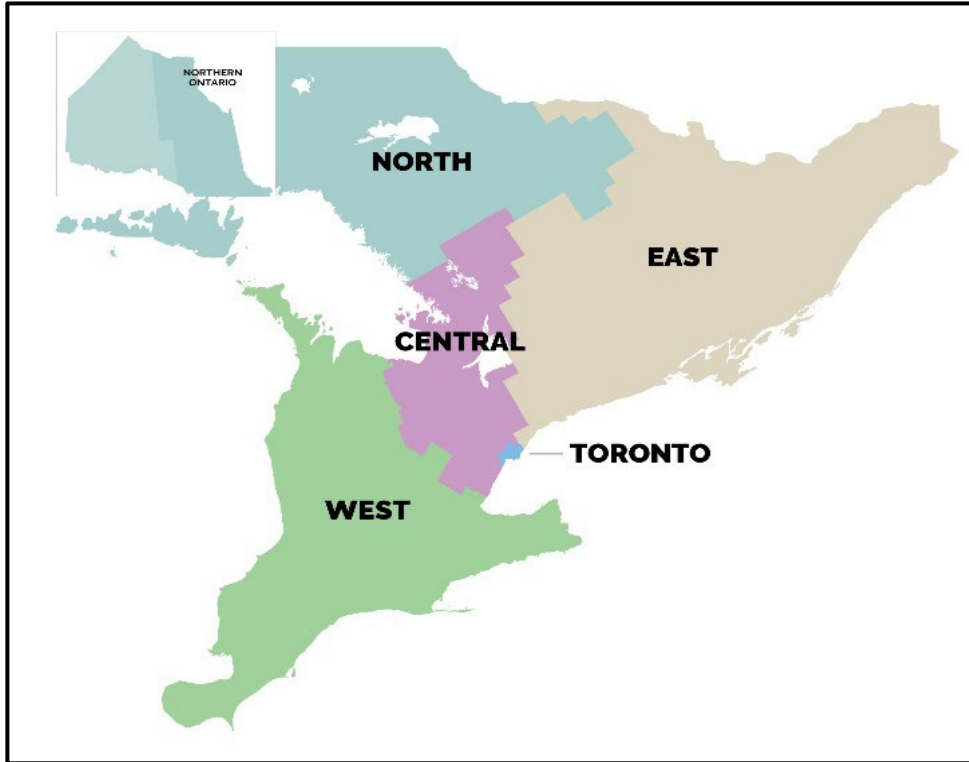
Health care providers can also leverage the resources available from their professional associations for support with the OHT transition process. Please contact your association for more information.



OHTs can join the [Digital Health OHT Community of Practice](#) to collaborate and learn from other OHT practices.

Additional supports from Ontario Health can be found on the next slide.

5 > Further Assistance for OHTs (continued)



As the principal digital health delivery organization in the province, OH also has resources to support OHTs in the development of their digital health plans.

For more information, please contact your OH regional digital health teams via the following email addresses:

Region	Contact
Central	OH-Central_DigitalVirtual@ontariohealth.ca
East	OH-East_DigitalVirtual@ontariohealth.ca
North	OH-North_DigitalVirtual@ontariohealth.ca
Toronto	OH-Toronto_DigitalVirtual@ontariohealth.ca
West	OH-West_DigitalVirtual@ontariohealth.ca



The Digital Health Playbook is a living document, intended to evolve and change over time. For the next version of the Playbook, the ministry is carefully considering the feedback provided by OHTs in previous consultations sessions.

However, any further inquiries, comments, and suggestions are welcome and can be sent to the Digital Health Division at OHTdigital@ontario.ca.

The Digital Health Provincial Guidance Document

The Ministry of Health (MOH)
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Introduction

To ensure that the basic tools and functionalities are in place to support integrated care delivery, the Ministry of Health (the ministry) has compiled a set of minimum requirements for approved and in-development Ontario Health Teams (OHTs) and provincial guidance to support the selection, procurement, implementation, and evaluation of [digital health tools](#). OHTs should use this Provincial Guidance Document to:

- ✓ Guide the development of their digital health plans;
- ✓ Determine how best to choose digital health tools to meet their objectives; and
- ✓ Ensure that their digital health plans and implementation approach align with the provincial guidelines set out in the policies.

Overall, this Provincial Guidance Document contains:

(Click on any of the policy titles to jump to the page.)

Four general digital health policies

To support the implementation and/or use of all digital health systems. These policies apply to all digital health assets, services or tools used in Ontario, including items from the Digital Health Service Catalogue, and any solutions procured outside of the Catalogue.

- [Digital Health Information Exchange Policy](#)
- [Digital Health Investment and Value for Money Policy](#)
- [Digital Health Reporting and Performance Guide](#)
- [Digital Health Cyber Security Policy](#)

Three system-specific policies

To guide implementation activities for those OHTs that are undertaking new procurements, significant upgrades, or development of new virtually enabled models of care. These policies apply to specific types of solutions to ensure that all solutions procured within these categories have appropriately considered minimum provincial requirements and service levels, while supporting digital health maturity in OHTs.

Digital Health Maturity Objective: Patient Centred Care	<ul style="list-style-type: none"> • Patient-facing digital health such as: <ul style="list-style-type: none"> ○ Virtual visits ○ Online appointment booking (OAB) ○ Patient empowerment and self-management (including access to personal health information (PHI))
Digital Health Maturity Objective: Connected Frontline Providers	<ul style="list-style-type: none"> • Clinical systems (e.g., electronic medical record (EMR) systems and hospital information systems (HISs)) • eServices (e.g., eReferral, eConsult)

Information management is also an important component of supporting digital health use and OHTs are required to have a Harmonized Health Information Plan (HIMP), as per requirements identified in their Implementation Funding Transfer Payment Agreements. For specific information and resources, please refer to the [HIMP Guidance Document](#).

Digital Health Information Exchange Policy

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Background

Access and exchange of health information across sectors are central to the government’s objectives for OHTs and ending hallway health care. Achieving this requires connecting various points of care so that patients and their health care providers (HCP) from different organizations have more streamlined access to the patient’s PHI. As we transition to an integrated model of health care, the future state of digital health in the province will focus on the ability of OHTs and other HCPs to leverage current and future digital health technologies to access and exchange

PHI to provide a seamless and consistent experience for patients and caregivers, as well as their providers.

Currently, a large amount of clinically useful patient health information is stored in closed systems that are only accessible by sector and program-specific digital health tools; this presents significant gaps in seamless access to integrated patient records and has led to fragmentation, redundancies and an inconsistent user experience. Filling these gaps would enhance the quality of patient care through improved patient handovers and streamlined provider workflows; it would also enable value-added uses of data, such as advanced detection and tracking of disease and other risks to population health.

The anticipated impact of this policy and the underlying interoperability regulation is more flexibility in ways Ontarians and their HCPs access patient health information, improved information sharing between providers, and greater value for money from government investments.

Policy Direction and Regulatory Approach

This Digital Health Information Exchange (DHIEX) policy directs all health information custodians (HIC) to:

1. Modernize relevant digital health assets that are selected, developed, or used by the HIC according to interoperability specifications and implementation timelines established by Ontario Health (OH).
 - a. This would mean working with vendors who are supportive of interoperability within their digital health products.
2. Make use of any OH resources including the list of OH-certified digital health assets to guide digital health asset modernization efforts and vendor management, and provide a report to OH that sets out the HIC’s compliance with the requirement to select, develop or use digital health assets that comply with the applicable interoperability specifications.

Staying prepared

As OH works on implementing the DHIEX program, HICs including OHTs should:

- Keep themselves updated on OH's specification development process;
- Contribute and participate in the process where possible when OH seeks stakeholder participation; and
- Consider general interoperability principles when selecting or developing new digital health assets (e.g., asking vendors if their solutions could integrate with FHIR¹-based application program interfaces (API) and internationally recognized standards.

Regulatory approach

To underpin the DHIEX policy, the ministry established an [interoperability regulation under the Personal Health Information Protection Act \(PHIPA\)](#) which came into force in January 2021. This regulation authorizes OH to establish interoperability specifications and other requirements to uphold the policy's governance and compliance model. Specifically, in establishing or amending interoperability specifications, OH would:

- Name or describe the HIC or class of HICs that must select, develop or use the digital health assets that comply with the specification;
- Describe the types of digital health assets to which the specification applies;
- Specify the date on which the specification becomes effective, and if the specification is amended, specify the date when an amendment to the specification becomes effective; and
- Specify the circumstances, if any, when a health information custodian may be exempted from the requirement to select, develop or use digital health assets that comply with the specification.

This regulatory approach to advancing interoperability is consistent with global trends and will benefit Ontarians by providing more secure, streamlined exchanges of information between health care providers and facilitating patients' access to their health information.

Approach for Implementation

To modernize health care in Ontario and deliver it more efficiently, the connectedness of digital health assets across sectors must increase. This means that the ministry will prioritize interoperability when making digital health investments. This also means that each digital health delivery organization must do its part to enable authorized connections to digital health assets it oversees, operates, creates, or provides.

To this end and with the ministry's guidance on use cases for data access and exchange, OH is currently engaged in planning activities to set up the DHIEX program that would be responsible for establishing, maintaining and amending interoperability specifications and establishing a process for certifying digital health assets that are compliant with those specifications.

To start, OH is developing the specification for the Health Level 7 (HL7[®]) International Patient Summary as the first use case for data access and exchange between hospitals and primary care providers. The

¹ Fast Healthcare Interoperability Resources[®]

target date for publishing this specification is spring 2022 and future interoperability specifications will be prioritized through consultations with stakeholders.

Understanding that interoperability specifications evolve over time, an operational working group with relevant sub-committees will be formed and co-chaired by OH and the ministry to oversee the process for establishing and evolving the interoperability specifications under the regulation and as described by this policy. Meaningful consultation with HICs, HCPs, digital health product vendors and innovators, and other health system partners including patient groups, to define requirements and determine the appropriate specifications and stages for implementation, is expected of OH and is part of the regulation.

Furthermore, in contemplating the ways in which to make health data interoperable and accessible to a wider audience, patient safety, privacy and security of PHI is of paramount concern. To provide HICs with the assurance that the PHI held in their digital health assets is being accessed by authorized users, the ministry is exploring a number of initiatives, including increasing cyber security capacity across the health sector and options for establishing a patient digital identity.

For more information, see the [Digital Health Information Exchange Standard](#).

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Digital Health Investment and Value for Money Policy

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Background

Ontario is modernizing its health care system to be more integrated, sustainable, innovative, and patient-centred. To accomplish this, it will require health care providers to re-think how their digital services and related infrastructure are organized. This may include the purchase of new and/or updated health information systems, applications, and communication technologies.

It is important to ensure that the acquisition of digital health tools does not place an undue burden on OHTs and HCPs, and leverages economies of scale when appropriate to improve

value for money. These tools should support provincial strategic objectives and improve the experience of patients and providers. This policy will support the evaluation of promising innovations, enable the spread and scale of proven and successful digital health tools, and reduce the fragmentation caused by local decisions and one-off purchases that has led to inequality and variation in health outcomes.

Policy Direction

This “Digital Health Investment and Value for Money Policy” (the policy) guides the province’s HCPs to:

- Abide by the principles of the [Broader Public Sector Procurement Directive](#) (e.g., accountability, transparency, value for money, quality service delivery, and process standardization), and any future direction from the Ministry of Government and Consumer Services (MGCS) regarding Broader Public Sector procurement, where appropriate.
- Comply with the [Interim Measures](#) (effective March 18, 2019) of the Ontario Public Service Procurement Directive, where appropriate and as updated.
- Consider first those provincially funded digital health assets, services, and infrastructure services listed in the *Digital Health Service Catalogue* when assessing digital health solutions. If an OHT determines that their requirements cannot be sufficiently addressed by a particular resource included in the Catalogue, then that OHT is required to work with the ministry to ensure their procurement of a market-available solution is appropriately guided by the standards established in the Digital Health Provincial Guidance Document.
- Engage in *value-based procurement*, which considers stating the problem that needs to be solved rather than including technical language for solutions in procurement documents.
- Leverage *regional and provincial services* (e.g., shared services organizations, framework agreements, etc.) to ensure procurement expertise, best practices in sourcing, and value for money.
- Include *provisions within competitive procurement documents and agreements* that request a benefits evaluation to be completed by the ministry through the Centre for Digital Health

Evaluation (or equivalent), and then assessed by the ministry’s Investment Management Framework.

- Consider *incentive-based reimbursement models* (e.g., models that pay for outcomes and share risk) for non-commodity digital health innovation.
- Develop *extensible agreements* that state how future purchasers, including all OHTs, can participate in the procurement, including parameters around terms, pricing and at what point the term agreement becomes “stale”.

Rationale for Policy Direction

This policy is intended to ensure that OHTs and HCPs achieve value for money from their procurement activities, and that vendors are reimbursed for the outcomes that their products and services deliver. This policy also leverages local, regional, and/or provincial purchasing power to create value in the health care system, promote successful innovations to spread and to move away from individual purchases that are based on cost and technical factors alone.

Implementation Expectations

This policy applies to all OHTs and HCPs that procure digital health solutions. This policy will ensure that procurements of new and/or updated digital health assets, services, and programs are aligned with collateral policy directions (e.g., the [Digital Health Information Exchange Policy](#)) and support the province’s Digital First for Health strategic objectives.

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Digital Health Reporting and Performance Guide

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Background

Ontario is committed to applying an evidence-informed approach to build a more digitally integrated and connected health care system. This approach requires measuring the performance of Ontario’s digital health solutions on an on-going basis and gathering robust, integrated data to develop and enhance analytical capacity.

In 2019, the ministry released the Digital First for Health strategy that aims to harness digital health solutions to improve the experiences of Ontarians within the healthcare system. Organizations that deliver and use digital health services, such as OHTs will play an important role in supporting the successful implementation of the Digital First for Health strategy by leveraging diverse digital solutions to expand Ontario’s digital

capacity. Funding to support the strategy’s implementation will allow OHTs to develop, procure, utilize, and scale digital health solutions. OHTs will be required to measure and report on their digital health assets as a funding stipulation to enable the ministry to make data-driven investments and decisions. The initial reporting of digital health indicators will occur in parallel to the phased introduction of reporting requirements as part of the [OHT Performance Measurement Framework](#).

This “Digital Health Reporting and Performance Guide” aims to enhance OHTs’ knowledge of the different elements (e.g., policies, strategies, and frameworks) that should be considered when making decisions about measuring and reporting digital performance, as part of satisfying the ministry’s digital implementation funding expectations.

Policy Direction

The ministry will work with OH to support OHTs in executing deliverables and reporting requirements outlined within the Transfer Payment Agreements to ensure that the digital implementation funding is being used purposefully. OHTs should:

1. Report on the progress of implementing the Digital First for Health strategy through key performance indicators that are in alignment with the strategic pillars of the strategy; and
2. Report on the sets of digital health solutions being developed, procured, and/or otherwise deployed within the OHT to improve Ontario’s digital health maturity and interoperability (e.g., OHTs will report on digital health assets in which they are investing to ensure the province has a centralized understanding of Ontario’s digital health landscape).

Rationale for Policy Direction

Ontario relies on local delivery organizations to improve its digital health ecosystem. While data about some digital health assets are available from provincial delivery partners such as OH, data from local delivery organizations are necessary to maintain a fulsome understanding of digital health maturity. By aligning digital health performance measurement and reporting across the province, Ontario will have the information necessary to make strategic adjustments to continue to enable and support the use of digital health assets to improve health care.

Implementation Expectations

Digital Health Reporting and Performance Indicator Guide

To understand digital health performance across the system, the Ministry of Health's Digital Health Division utilizes a digital health scorecard that evaluates progress across the five strategic pillars of the Digital First for Health strategy; 1) more virtual care options; 2) expanded access to online appointment booking; 3) greater data access for patients; 4) better, more connected tools for frontline providers; and 5) data integration and predictive analytics. The key performance indicators highlighted in the Digital First for Health Scorecard are focused on outcomes that capture the changes that Ontarians expect to see as the Digital First for Health strategy is implemented. The ministry currently measures:

- The percentage of Ontarians who have had a virtual visit in the last 12 months.
- The percentage of Ontarians who made an appointment using a website/email in the last 12 months.
- The percentage of Ontarians who digitally accessed their health information in the last 12 months.

Virtual Care

OHTs should assess virtual care encounters (virtual visits) within their-target population(s).

Virtual visits are complete episodes of care between a patient and health care provider in which at least one of them is using a tool that allows them to have the interaction from a remote location. The patient and/or an HCP may be using a video, audio, or secure messaging solution to complete the episode of care. This includes (but is not limited to):

- Direct videoconferencing, phone consultations, or secure message (using email, short message service (SMS), or an online portal) between patients and HCPs;
- Videoconferencing where a doctor is connecting via video to a patient at a medical office so that they can be assisted by a nurse or other allied professional (e.g., so that the patient can have their blood pressure taken and reported to the health care provider).

This does not include administrative interactions, such as appointment booking or requests for health records. It also does not include the use of digital tools to access non-patient-specific clinical advice or information (e.g., WebMD).

Methodology:

$$\% \text{ of OHT virtual visits} = \frac{\text{Total number of instances of virtual visits}}{\text{Total number of instances of care encounters (virtual and non-virtual)}} \times 100\%$$

Online Appointment Booking

OHTs should measure the percentage of target population(s) that are able to book appointments online that best meet their needs.

Online appointment booking solutions allow patients and caregivers to book an in-person, video, or telephone appointment electronically, by choosing a date and time and receive an automated appointment confirmation, with limited to no interaction with another person. Appointment reminders are automated either by email, text message, app notification or voice recordings.

Methodology:

OHTs should consider solutions that align with the [Online Appointment Booking Service Standard](#) and have the ability to measure outputs. This will allow the OHT to calculate the necessary reporting requirements and could include:

- Number of unique OABs;
- Number of unique patients who are able to book an appointment online;
- Number of patients who are registered for OAB;
- Percentage of total appointments that were booked online based on total available for booking online; and

Patient Digital Access to Health Information

OHTs should consider solutions that align with the [Patient Portal Standards](#) and measure the percentage of target population(s) that are able to review their secure health record online.

Patient digital access aims to provide patients with greater access to their personal health information and the means to control who has access to it. Digital patient health information can better follow patients across transitions of care and between providers, leading to better delivery of health care services.

There are three sources of digitized patient data:

1. Health care providers – PHI contained within HCPs information systems (e.g., clinical information in Canadian Mental Health Association (CMHA), acute, primary care, home and community care, etc.).
2. Digital Health Delivery Organizations – PHI contained in provincial digital health repositories operated by OH (e.g., clinical viewers, diagnostic imaging (DI), lab test, drugs, immunization).
3. Ministry of Health – HIC for some provincial digital health assets.

Methodology:

OHTs should reference solutions that are available directly to patients through health care providers.

- Number of patients who access PHI using a patient portal or viewer
- Number of patients who access PHI through other community apps or services (e.g. laboratory reports/portals).
- Number of tools available to access PHI (e.g., patient portals or COVID-19 lab results).

Additional indicators for reporting are in development.

Appendix: Enhanced Digital Health Measurement

As the ministry and digital health delivery organizations continue to implement the Digital First for Health strategy and increase their digital health maturity, developing and measuring performance continues to be critical.

When developing additional digital health performance indicators, OHTs should aim to measure several domains deemed strategic to support the broader goals of digital health and be selected against specific standards. This helps ensure that information on digital health assets is measured and reported in a robust, consistent, and holistic manner.

The performance indicators may be categorized under the following five strategic domains:

Domain	Measurable Performance Indicator Example
Quality	This domain may include performance indicators that are measuring and assessing the quality of digital health solutions and/or quality of care that patients are receiving through digital health solutions such as patient outcomes (e.g., is a case resolved via a digital health solution).
Risk	This domain may include performance indicators that support risk reduction for the delivery of care while using digital health solutions such as supporting the training of HCPs.
Performance	This domain may include performance indicators that measure the performance of digital health solutions such as output, impact, and use.
Equity	This domain may include performance indicators that are measuring whether uptake, experience, and outcomes vary according to critical factors such as gender, race, ethnicity, socioeconomic status, or geographic location.
Access	This domain may include performance indicators that are measuring utilization of digital health solutions (e.g., how many providers and patients are using the respective digital health solution) and whether the utilization varies according to measures of equity (e.g., gender, race, ethnicity, socioeconomic status, or geographic location).

Each performance indicator should consider the following elements:

1. **Validity:** Indicators should be valid, such that they measure what they are intended to measure regarding the digital health asset.

2. **Reliability:** Indicators should be reliable and accurate, such that they are of high quality to reduce the risks of inaccurate reporting and misrepresentation.
3. **Measurability:** Indicators should be quantifiable and measurable against an intended target that is set on a fiscal yearly basis to help identify progress and goals. They should help identify opportunities for improvement as the program and service matures.
4. **Time-bound:** Indicators should be reviewed on a regular cycle to ensure indicators remain useful to the sector and reflective of current evidence-informed practice.

Meaningful digital health performance indicators should adapt and mature to accurately reflect the progress of programs and services through the implementation, adoption, and mature stages of a digital health solution journey. For example, performance indicators for the initial stages of setting up a program and service might focus on singular measures but shift towards long-term outcomes over time as program and service matures.

Digital health delivery organizations should consider adopting a data quality strategy that incorporates the standard data quality dimensions (accuracy, completeness, consistency, timeliness, validity, uniqueness) as well as adopting SMART (specific, measurable, attainable, relevant, time-bound) key performance indicators (KPIs).

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Digital Health Cyber Security Policy

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Background

The broader healthcare sector is increasingly vulnerable to cyber attacks as health care delivery becomes more reliant on digital health technology, and as personal health information is increasingly shared and stored. Under Ontario’s health privacy legislation, the *Personal Health Information Protection Act, 2004* (PHIPA), HCPs are accountable and responsible for safeguarding PHI in their custody or control, including managing cyber security risks. Having security safeguards in place is essential to the protection of data and the broader systems that support the delivery of health care services.

While HCPs have clear responsibilities under PHIPA and other legislation and regulations, the ministry and OH in partnership with MGCS have a role in providing province-wide support to the health sector. Therefore, the ministry, OH and MGCS have set out a vision to improve the overall cyber security maturity of the health sector in Ontario by providing leadership and support on the development of a number of cyber security initiatives for the health sector. Initiatives underway to support the vision, include but are not limited to:

- Improving the *sharing* of cyber intelligence across the sector, so that HCPs have timely, accurate and actionable cyber security information to manage cyber security threats and incidents.
- Defining a *model for maturity assessment* so that HCPs can develop their cyber security plans, understand their cyber security maturity, capabilities, and targets.
- Exploring opportunities for *partnerships* to enable regional collaborations on security operations to allow for streamlining of effort, cost efficiency and leveraging of shared cyber security expertise.
- Embarking on the development of a *Cyber Security Operating Model* to operationalize the provincial vision for cyber security in the health care sector.

The ministry will collaborate closely with our partners on the initiatives and ensure alignment with recommendations from the [Cyber Security Expert Panel](#), announced in October 2020.

Policy Direction

This “Digital Health Cyber Security Policy” (the policy) guides the province’s OHTs to undertake the following:

- OHT member organizations should work together to collectively identify and mitigate security risks and areas of non-compliance in respect of OHT participants’ connectivity with provincial digital health assets. OHTs may want to consider establishing a joint function for this purpose.

- OHTs and OHT participants are encouraged to harmonize their security policies, procedures, and practices with respect to operations conducted within the governing framework of the OHT.
- OHTs and OHT participants should maintain Business Continuity Plans which include clear and robust responses and protocols in the event of a cyber incident.
- In the event of a cyber attack, OHTs should enact their Business Continuity Plans, contact the police in their jurisdiction immediately, and follow the direction below.

When a cyber incident occurs in your organization you should report it to the ministry, if any of the following apply:

- The cyber incident is, or is likely to be, in the news.
- There is high potential for the cyber incident to impact the Ontario Public Service (OPS), including the Ministry of Health, OH, and/or any other organizations with whom data is shared, including other HCPs and Broader Public Sector (BPS).
- The cyber incident has, or could, impact the OPS including the ministry, OH, and/or any other organizations with whom data is shared, including other HCPs and BPS (i.e. multiple infections, confirmed privacy/data breach, etc.).
- If you are not certain whether the incident meets any of the criteria, please connect with the Ministry of Health, Health System Emergency Management Branch (HCP Hotline: 1-866-212-2272 or ecoperations.moh@ontario.ca) and cyberadvice@ontario.ca.

When a cyber incident meets any of the criteria above, take the following actions:

- Report the incident to the Ministry of Health, Health System Emergency Management Branch (HCP Hotline: 1-866-212-2272 or ecoperations.moh@ontario.ca), who can assist in engaging with the MGCS Cyber Security Division.
- If PHI is involved or any privacy breach is suspected or confirmed, ensure that all breach reporting obligations are followed, as required under PHIPA and as directed by the Information and Privacy Commissioner of Ontario (IPC):
 - [Privacy Breaches – Guidelines for Public Sector Organizations](#)
 - [Privacy Breaches – Guidelines for the Health Sector](#)
 - [Privacy Breaches – Guidelines for Child Youth and Family Services Service Providers](#)
- Contact cyberadvice@ontario.ca if your organization's network connects to the Government of Ontario's network.
 - Cyber Security Division will participate in any conference call at any time with the impacted BPS entity.
 - Cyber Security Division will provide advice and guidance support through the ministry for your cyber incident but does not provide on-site remedial services.
- **Freedom of Information (FOI) requests:**

- In the event an FOI request is made pertaining to a cyber security incident in the BPS, it is recommended that the information pertaining to how the BPS environment was exploited be withheld, as well as any details around protective measures that organizations may have in place or may implement. This is to protect the integrity of the cyber security measures in place. The decision to withhold information related to a cyber incident would fall under the “Discretionary Exemption” heading. Organizations should carefully review the Discretionary Exemption list to determine which would apply.
 - [How to Effectively and Efficiently Respond to FOI Requests](#) (IPC Link)
 - [Freedom of Information and Protection of Privacy Act \(FIPPA\) Mini-Guide](#) (IPC Link)

Rationale for Policy Direction

Cyber security underpins the objectives of the Digital First for Health strategy and the provision of a more integrated health care experience through the OHTs, both of which reinforce the need to ensure that patients, caregivers, and providers are able to securely communicate and interact digitally. Cyber security is a growing concern for the broader health care sector as attacks using malicious software, such as ransomware, have compromised the confidentiality of sensitive information and/or impacted the integrity and availability of service delivery. In addition, COVID-19 has highlighted the importance of cyber security protection as more health care services move to online platforms creating a strong need for a coordinated system-level approach to support the health system.

Implementation Expectations

Information management, privacy and cyber security should be thought of as interconnected as more health information is stored online. Privacy protection increasingly relies on effective cyber security implementation by HCPs to secure health data both when it is in transit and at rest. Therefore, this policy should be considered in conjunction with the OHT’s information management and privacy plans. OHTs seeking more information on information management and privacy plans, should refer to the [HIMP Guidance Document](#).

OHTs are encouraged to leverage provincial resources and guidance in implementing cyber security policies, procedures, and practices, including the following:

1. **MGCS Cyber Security Division’s Cyber Advisory Service Catalogue**

The MGCS Cyber Security Division mandate is to provide advice, guidance, and information sharing to support cyber resilience of ministries and their BPS partners. The team develops a range of tools that are available for consumption across the BPS, including videos, tip sheets, articles, webinars and runs awareness campaigns such as Cyber Security Awareness Month. The advisory catalogue highlights the following services:

- Knowledge Sharing and Education Service;
- Security Policy and Standards; and

- Vendor of Record (VOR) for Information Technology (IT) Security Products and Services.

The full Cyber Advisory Service Catalogue can be accessed by going to the [Cyber Security Centre of Excellence webpage](#).

2. Additional Resources

The following are additional educational resources that have been developed by the Government of Ontario and Healthcare Insurance Reciprocal of Canada (HIROC) that can support HCPs to bolster their cyber security practices.

- **Key Measures for Preventing and Mitigating Cyber Attacks and Ransomware**

In light of recent events, HIROC has prepared this [one-pager](#) to provide key measures that health care entities and providers are advised to take to facilitate the prevention of a cyber attack and the immediate steps to be taken to mitigate harm should a cyber attack occur.

- **Cyber Risk Management Guide**

The purpose of [HIROC's Cyber Risk Management Guide](#) is to provide practical cyber incident prevention and post-incident risk management strategies and recommendations to help minimize the occurrence or impact of cyber related losses.

- **Cloud First Principles and Security Requirements (GO ITS 25.21)**

This [Government of Ontario Information Technology Standards \(GO-ITS\)](#) describes principles and security requirements for ministries and agencies (or other organizations) that are selecting, procuring, adopting, operating, and/or managing Cloud Services on behalf of the Government of Ontario. It is intended to assist in Cloud Services adoption and help ensure that the use of Cloud Services does not result in undue levels of risk.

- **Additional Government of Ontario Security Standards (GO ITS Series)**

More information on GO ITS security requirements can be found on [Ontario.ca](#). These include requirements around the use of cryptography and enterprise vulnerability management (e.g., patch management).

Additional guidance and support will be released to the sector over the coming months to further support cyber security development and implementation.

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Patient-Facing Digital Health Policy

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Background

Historically, patients have had limited options for accessing care through digital tools, which has impeded their ability to access care how and where they want it. It has also been difficult for patients to get access to their health records, which are typically paper-based, and often bears a cost. This lack of digital access to care and health information has been a significant pain point for many patients — whether it be travel required to access health care services, booking time off work, or arranging child care.

Patient-facing digital health refers to the use of digital tools that make it easier and more convenient for patients and their caregivers to interact with Ontario’s health care system, anytime and anywhere they need it. Through a patient-facing digital health policy, a wide range of health care services will be made available through digital platforms that are more convenient for patients, just as consumers have come to expect in other industries such as banking and travel.

The objectives of patient-facing digital health are to:

- Enhance patient choice to access care how and where they want it (e.g., virtual visits delivered via video, audio call, or secure messaging through verified virtual visit solutions).
- Empower patients with access to their own health information (e.g., information from point of care systems, a single trusted digital identity, and PHI in provincial repositories), and innovative self-management tools (e.g., digital self-care, remote monitoring).
- Simplify the administrative and navigation aspects through OAB.

The ministry is committed to making digital health options available to patients so that Ontarians can make choices about how and where to engage with the health system and be active participants in their care.

Policy Direction

This “Patient-Facing Digital Health Policy” (the policy) requires that all OHTs to offer a minimum set of functionalities to their patients and also provides implementation guidance.

At minimum, OHTs are required to achieve functionality in the following areas:

1. **Virtual visits:** Digital interactions where one or more health care providers, provide health care services to a patient or their caregiver. Virtual visits do not include administrative interactions, such as appointment bookings, requests for health records, responses to administrative questions, or collection of biometric data by a remote monitoring device.

Virtual visit modalities include:

- a) Video visits
 - Includes both:
 - Hosted video visits: synchronous video visits with a patient who is physically located and supported at a patient host site during the clinical encounter. Host sites are secure physical environments that organizations offer on-site to provide patients with convenient access to videoconferencing technology and, in some cases, clinical support services (nursing support, diagnostics through peripheral devices).
 - Direct-to-patient video visits: synchronous video visits with a patient in the home or another location of their choice (i.e. the patient is not at a patient host site). This includes situations where a patient is conducting the encounter independently using their own technology, or where an organization is providing support resources (e.g., nursing support, technology) that are with the patient in their location of choice (e.g., home).
- b) Audio call
- c) Secure messaging for bi-directional communication between patients and providers (e.g., through email, portal, or text message)

A *Virtual Visit Verification Program*, led by OH, has been established to assess solutions against provincial standards — the *Virtual Visits Solution Requirements*. This Verification Program enables more choice for providers in delivering virtual visits, while ensuring security and patient privacy. Providers are expected to only use verified virtual visit solutions. More information on the Verification Program, including a list of verified solutions, can be found [here](#).

2. **Patient empowerment and self-management:** Patients are able to access their own PHI and use digital self-care tools and programs to support self-management and remote monitoring of their condition(s). Patients can leverage a trusted digital identity to securely and seamlessly access digital tools and programs. Modalities include patient access channels, digital identities, mobile apps, remote monitoring platforms, web portals, etc.
 - a) Access to PHI will include at least three sectors and could include: Unlocking PHI stored in tethered, clinical information systems (e.g., EMR and HIS, lab test providers) and in provincial data repositories (e.g., Ontario Laboratories Information System (OLIS), Digital Health Drug Repository (DHDR)) by following standards for interoperability and using patient-friendly terminology.
 - The ministry and Ontario Health are providing support through funding and the release of the [Patient Portal Standards](#). It is expected that all OHTs use all available resources to provide digital access to PHI.
 - Work from the ministry and Ontario Health is also underway to provide individuals with direct access to data held in the Electronic Health Record.
 - b) Digital self-care tools and programs could include, but are not limited to:

- Chronic disease or mental health digital self-care programs linked to clinical support to enable patient self-management (e.g., Ontario Telemedicine Network (OTN) Telehomecare, Ottawa Heart Institute’s Remote Patient Monitoring (RPM) program).
- Light-touch models to reinforce health messages and monitor for deterioration in health (e.g., Ottawa Heart Institute’s Interactive Voice Response program).
- Digital self-care tools that could support and enhance health care delivery (e.g., surgical transitions, home peritoneal dialysis).

3. **Online appointment booking:** Patients are able to manage administrative activities digitally for all providers and sectors through OAB. The priority is to enable practice-level appointment booking, while considering appointment booking at the OHT-level as an area for future exploration.

To meet OHT year 1 expectations initially set out in the [2019 Ontario Health Teams: Guidance for Health Care Providers and Organizations](#), at minimum, OHTs are expected to achieve functionality in the following areas:

Year 1 Expectation	Met through the corresponding functionality requirement
Expanded virtual care offerings from baseline, and 2-5% of Year 1 patients who received care from the OHT had a virtual encounter in Year 1	1. a-c) Virtual visits through video, audio call, and secure messaging
10-15% of Year 1 patients who received care from the OHT digitally accessed their health information	2. a) Patient empowerment and self-management through access to PHI in at least three sectors.

To support these priority areas of the Ministry’s Digital First for Health strategy, and to enable you to enhance your Digital Health OHT maturity objective for patient choice, OHTs are encouraged to use the digital health and virtual care funding envelopes (<https://www.ontariohealth.ca/our-work/digital-standards/provincial-funding-opportunities>) to support implementation.

Additional resources to support OHTs with the adoption, implementation and maintenance of virtual care include: the Ontario Health developed [Virtual Care Maturity model](#), and materials developed to support the COVID-19 health system response which can be found [here](#) (#8. Virtual Care).

Since OHTs will be expected to offer the full spectrum of functionalities at maturity, further progress made in meeting the remaining functionality requirements (e.g., practice-level online appointment booking, digital self-care, inclusion of additional sectors or provider groups) is encouraged.

Rationale for Policy Direction

A policy for enhancing patient-facing digital health will:

- Ensure that all Ontarians have equitable access to choose digital health options for receiving care;
- Help patients and caregivers to access and control how and when they receive care and access their own PHI, enabling them to become better partners in managing their own health;
- Ensure that virtual visits are delivered using solutions that meet provincial privacy, security, interoperability, and technical requirements; and
- Support clinical decision-making and facilitate treatment, with the potential to reduce or offset the need for emergency visits or use of walk-in clinics.

Implementation Expectations

The ministry and digital health delivery organizations (e.g., OH, OntarioMD) will provide support and advice to early adopters. In general, OHTs are expected to proceed with implementation according to the following guidelines.

Implementation Guidelines	
Patient experience	<p>OHTs will aim to minimize the number of virtual care solutions (e.g., portals, apps) that their patient population needs to interact with rather than proliferating multiple solutions for sector or pathway specific needs. For example, many of the existing patient access channels that enable patients to access their own PHI also have additional functionalities for virtual visits (e.g., video, secure messaging) and OAB. Implementing solutions that have multiple functionalities may help to create a streamlined and integrated experience for patients and be a cost-effective approach.</p> <p>As a result, OHTs will prioritize solutions that offer multiple functionalities over implementation of individual solutions for each functionality requirement option or modality.</p>
Integrated access across multiple sectors	<p>OHTs are advised to prioritize investments in solutions that:</p> <ul style="list-style-type: none"> • Enable virtual care across the OHT in a minimum of three sectors; • Enable access to PHI across the OHT in a minimum of three sectors; and • Could enable virtual care across various programs and/or patient populations (e.g., for digital self-care).
Access to Funding	<p>OHTs must apply for funding to support patient facing digital health initiatives during FY2021-22, and FY2022-23 where available. It is expected that all OHTs submit applications for Online Appointment Booking, Patient Portals, and of the virtual care funding opportunities. This will enable OHTs to meet the expectations outlined in the 2019 Ontario Health Teams: Guidance for Health Care Providers and Organizations.</p>
Identity, access, and authorization	<p>The ministry is developing an approach for a provincial patient identity, authentication, and authorization (IAA) service to provide patients with a secure and trusted way to verify their identity online in order to access apps and services offered by different providers. When released, OHTs will be strongly encouraged to align with the applicable technical and operational IAA requirements.</p>

<p>Leverage existing expertise and best practice Operational impact</p>	<p>There are examples that highlight the potential impact of virtual care in improving both patient health outcomes and patient and provider experiences. The ministry will support OHTs in leveraging existing expertise and best practices to minimize duplicative development and support quality expansion of virtual care.</p>
	<p>Options for patient-facing digital health should complement clinical workflows and benefit the administration of clinical practice by creating operational efficiencies that remove bottlenecks in manual processes.</p>
<p>Access to provincial assets</p>	<p>HCPs will be expected to enable patient access to PHI by default or upon request, unless there are limitations from doing so as outlined in PHIPA.</p> <p>In terms of a minimum dataset to be made available to patients, short-term priorities include laboratory and drug information, with an emphasis on information held in provincial data assets (i.e., OLIS, DHDR, respectively).</p> <ul style="list-style-type: none"> • Subsequent priority areas include the clinical data repository (CDR). • Work from the ministry and Ontario is also underway to provide individuals with direct access to data held in the Electronic Health Record.
<p>Data management</p>	<p>HCPs are expected to commit to minimizing filtering and time lags for data release.</p>
<p>College guidelines</p>	<p>HCPs are expected to follow all applicable college guidelines with respect to the delivery of virtual care (e.g., from the College of Physicians and Surgeons of Ontario).</p>
<p>Provincial guidelines</p>	<p>Information on provincial digital health standards can be found here.</p>
<p>Complementary guidance offered through other digital health policies:</p>	
<p>Digital Health Investment and Value for Money Policy</p>	<p>Any procurements of patient-facing digital health solutions are expected to be aligned with the terms of the Digital Health Investment and Value for Money Policy.</p>
<p>Digital Health Information Exchange Policy</p>	<p>As a gateway that patients may use to digitally access both care services and PHI, patient-facing digital health solutions will be expected to employ APIs that adhere to widely adopted technical standards, namely:</p> <ul style="list-style-type: none"> • Messaging: HL7® FHIR® • Web applications: Open, RESTful (SMART on FHIR®)
<p>Digital Health Reporting and Performance Policy</p>	<p>OHTs will be asked to address reporting requirements that demonstrate performance in priority areas (e.g., consideration of the patient experience by considering investments in solutions that offer bundles of functionality), and leverage existing expertise and best practice.</p>

There is a need to consult with key stakeholders such as patients, caregivers, hospitals, primary care providers, long-term care homes, and home and community care providers to better understand the

current state, to validate the use of select solutions in achieving the desired end state, and to discuss implementation options and considerations. OHTs may also request to participate in evaluations of the use of technologies and standards and make recommendations on the applicability of province-wide adoption.

Functionality specific guidance:

Virtual Visits

- Verified virtual visit solution:
 - HCPs who are not using an approved OTN video solution are expected to use a virtual visit solution that has been assessed against provincial standards through the virtual visit solutions verification process. A list of verified solutions can be found [here](#).
- Physician remuneration:
 - Video visits:
 - Physician remuneration for video visits is available through the Ontario Virtual Care Program (OVCP) or through the temporary Ontario Health Insurance Plan (OHIP) fee codes (K codes) for use during the COVID-19 outbreak. Physicians must comply with the terms and conditions of the OVCP and/or OHIP for the associated provincial remuneration of the video visits delivered.
 - Further information on the Ontario Virtual Care Program can be found [here](#).
 - Further information on the temporary K codes can be [here](#).
 - The following information is intended to help provide clarity on how physicians should bill for video services during the COVID-19 outbreak:

Physician	Technology	Billing Codes
OVCP members ¹	Approved OTN video solution	OVCP codes ²
OVCP members	Non-approved video solution	Temporary K codes
Non-OVCP members	Any video solution (Recommended to use Verified Virtual Visit Solutions, can be found here .)	Temporary K codes

¹ The OVCP limits billing for video visits to patients in their location of choice (i.e. direct-to-patient video visits) to specialists, general practitioner (GP) focused designation practice, and primary care physicians in patient enrollment models serving rostered patients;

² Temporary K codes can be used if preferred.

- Secure messaging:
 - Physician remuneration for virtual visits via secure messaging is only available through the Ontario Health – Ontario Telemedicine Network’s (OH – OTN) eVisit Primary Care Pilot for primary care providers in established patient-provider relationships according to a pilot billing framework.
 - Further requirements may be provided as the pilot is enhanced and the remuneration framework is refined.

- Audio call:
 - Physician remuneration for virtual visits via audio call is available through the temporary OHIP fee codes for use during the COVID-19 outbreak (see [here](#) for more information) or via the OH – OTN eVisit Primary Care Pilot.

Quick Navigation to:

General Digital Health Policies	System-Specific Policies
<ul style="list-style-type: none"> • Digital Health Information Exchange Policy • Digital Health Investment and Value for Money Policy • Digital Health Reporting and Performance Guide • Digital Health Cyber Security Policy 	<p>Patient Choice</p> <ul style="list-style-type: none"> • Patient-Facing Digital Health Policy
	<p>Connected Frontline Providers</p> <ul style="list-style-type: none"> • Clinical Systems Policy • eServices Policy

Clinical Systems Policy

Quick Jump to:

- [Background](#)
- [Policy Direction](#)
- [Rationale for this Policy Direction](#)
- [Implementation Expectations](#)
- [Quick Navigation to Other Policies](#)

Background

A clinical system is an information system that allows providers to access and capture personal health information (PHI) for the purposes of providing care. Clinical systems also provide a platform to embed clinical best practices and standards based on leading evidence. These systems are typically different for each sector (e.g., HISs in acute care settings, EMRs in primary care and community-based specialist practices, etc.); and very few systems are implemented between sectors.

Across the province, efforts have been underway to both consolidate and update clinical systems to ensure that providers are able to deliver optimal care. Although progress has been made, implementations are typically carried out at the provider- or organization-level within each sector. In order to ensure that patients receive integrated, coordinated care, there is a need to develop principles to support OHTs when considering their clinical system strategy and future implementations.

OHTs will collaborate with the ministry on a plan for achieving better connected care for patients through improving the implementation and use of clinical systems that support the provision of high-quality patient care and robust information management practices.

Policy Direction

This “Clinical Systems Policy” (the policy) outlines the policy objectives that OHTs are encouraged to meet when planning, procuring, upgrading, implementing, and/or using a clinical system.

Procurement and Consolidation of Clinical Systems

Approach to New Procurements

The procurement of clinical systems must be carried out in accordance with the directives included within the [Broader Public Sector Procurement Directive](#), as appropriate, and in alignment with the [Digital Health Investment and Value for Money Policy](#) and the [Digital Health Cyber Security Policy](#). Procured systems should incorporate the most current version of provincial standards and work to upgrade to new versions as they are released. All new clinical systems procurements should be for shared instances between two or more organizations, with the objective of moving toward a smaller number of instances in each sector within the OHT.

Clinical systems procured by OHTs should leverage a mature and reliable hosting model (e.g., cloud-based, application service provider model). If an OHT intends to procure a locally-deployed clinical system, they would be expected to submit a supporting business case to the ministry for approval.

Any hospital within an OHT that is pursuing an HIS procurement and significant upgrade should ensure they have engaged with the relevant HIS Collaborative to ensure alignment with clinical, business, and technical standards where appropriate. The planned procurement should be for the applicable Provincial Reference Model (PRM) where one exists; if one does not exist, the OHT and hospital would be expected to work with the ministry to develop a new PRM for the vendor's solution. All EMR procurements should be for OntarioMD-certified products. Clinical systems procurements should include requirements to score vendors based on their ability to meet the requirements of applicable digital health policy directions (e.g., [DHIEX policy](#)).

Streamlining of the Clinical Systems Landscape

OHTs should prioritize streamlining their clinical systems landscape. Each OHT should consider developing a plan to move toward a smaller number of instances in each sector within the OHT and submit that plan to the ministry for approval. As part of this plan, the OHT should identify what opportunities exist to migrate away from existing local systems to centrally-hosted, cloud-based systems.

Alignment of OHT Clinical Systems to Provincial Standards

All clinical systems in an OHT should be implemented and operated to meet the most recent provincial technical standards where available, including but not limited to the following areas:

- Cyber security;
- Identity and Access Management;
- System performance and availability; and
- Backup, recovery and data management.

In developing an OHT-specific digital health plan, consideration should be given to ensuring that OHTs will connect clinical systems to digital health assets in adherence to the [Digital Health Information Exchange Policy](#).

OHTs should work to also align their clinical systems to any other existing provincial standards and contribute to provincial governance processes to develop clinical, technical, and business standards that can be embedded in clinical systems (e.g., future Ontario clinical standards governance body). Each OHT should ensure an efficient and effective process is in place to support the timely implementation of new clinical standards or changes to existing standards across all care sectors, in order to ensure the latest evidence is made available to frontline providers.

Any governance structure that an OHT has in place should have an active data oversight function that ensures appropriate availability, use and quality of data within their systems, and should be aligned to any applicable provincial data governance body. This data oversight function should include an audit function as appropriate. This oversight function would ensure that consistent, standardized, structured data and terminology (for both clinical and non-clinical data, e.g., standard patient and provider

identifiers) is implemented in clinical systems across the OHT, and that the OHT's data standards are aligned with any applicable standards established at the provincial level.

Use and Contribution to Provincial Systems

All members in an OHT should utilize and contribute patient data to any applicable existing or new provincial systems (e.g., provincial data repositories). For example, integration with OLIS should be deployed in all EMR systems in the OHT.

Rationale for this Policy Direction

This policy defines the policy objectives that OHTs are encouraged to meet in order to ensure their clinical systems:

- Allow HCPs to access relevant health information and clinical standards as appropriate for providing care and improving quality of services for OHT patients.
- Support patients by enabling them to access their own PHI in order to become more empowered to participate in their care and by making their PHI available in the course of health care encounters with their providers.
- Benefit the health system by enabling data to be extracted for the purposes of OHT performance evaluation, health-system planning, and population health.

Implementation Expectations

OHTs are encouraged to assess and monitor their clinical systems maturity across a number of dimensions, such as impact on patient outcomes, adoption of clinical standards and the ability to seamlessly share information, and in alignment with any applicable provincial direction. After identifying maturity in each of these dimensions, OHTs would work with the ministry to assess the most applicable and relevant supports in order to ensure they are able to meet the requirements defined in this policy.

OHTs would consult with all applicable sector stakeholders, including patients and providers from across the care continuum, to better understand the current state of the OHT's clinical systems landscape and to develop a plan for implementing the requirements outlined in this policy. OHTs may also be asked to participate in evaluations of their use of technologies and standards. They may also be called upon to develop recommendations for how any OHT-developed processes or technologies could be scaled for province-wide adoption.

In the future, the ministry may perform compliance audits to ensure OHTs' consistent use of the technologies and standards described in this policy.

Quick Navigation to:

General Digital Health Policies	System-Specific Policies
<ul style="list-style-type: none">Digital Health Information Exchange PolicyDigital Health Investment and Value for Money PolicyDigital Health Reporting and Performance GuideDigital Health Cyber Security Policy	<p>Patient Choice</p> <ul style="list-style-type: none">Patient-Facing Digital Health Policy <p>Connected Frontline Providers</p> <ul style="list-style-type: none">Clinical Systems PolicyeServices Policy

eServices Policy

Quick Jump to:

- [Background](#)
- [Policy Direction](#)
- [Implementation Expectations](#)
- [Contacting the eServices Program](#)
- [Quick Navigation to Other Policies](#)

Background

“eServices” are digital services to support clinical workflows across organizations to:

- Provide equitable and timely access to specialists and health and community services;
- Enable smoother transitions in care;
- Improve the patient experience by replacing fax and paper-based processes of sharing information; and
- Improve efficiency, timeliness and accuracy of communication between patients, caregivers and providers.

Examples of eServices include eReferral, eConsult, eOrdering, and ePrescribing.

In April 2020, the existing provincial eReferral and eConsult initiatives were brought together under a Provincial eServices Program. The eServices Program continues to advance work to reduce patient wait times and improve access to specialists through the expansion of eConsult and eReferral across the province. It will also leverage the learnings from supporting clinical workflows and technical considerations to inform integration of other eServices, such as eOrdering and ePrescribing, in the future.

eConsult and eReferral are the first initiatives in scope of this program due to their evidence-based approach and track record of success in improving access to specialists and services:

- Electronic consultations (eConsult) enables primary care providers (i.e., family physicians and nurse practitioners) to engage in a secure electronic dialogue with specialists (community-based or hospital-based) around patient care.
- Electronic patient referral systems (eReferral) digitizes and standardizes the traditionally paper- and fax-based referral process, which results in shorter wait times, fewer inappropriate referrals, and higher quality referrals.

This “eServices Policy” (the policy) guides OHTs to consider eServices (integration of eConsult and eReferral) to support providers in delivering effective, holistic, timely, collaborative, and cost-effective care. eConsults can increase access to specialist advice and avoid unnecessary referrals and eReferral systems can enhance the completeness of patient information to make specialist visits more effective – ultimately resulting in modernized and integrated patient care across the continuum. Over time, other types of eServices are planned to be incorporated. OHTs are expected to implement eServices as part of their efforts to support target populations and integrated care delivery.

Policy Direction

In accordance with expectations outlined in their funding agreements, OHTs are expected to adopt eConsult and eReferral as part of their Year 1 activities. This should be done through engagement with the Provincial eServices Program.

Implementation Expectations

The Provincial eServices Program helps reduce hallway medicine by enabling more rapid, appropriate access to specialist advice with the aim of avoiding the need for patients to be transferred to acute care. It also helps patients to connect to services after they leave hospitals to prevent readmission. The program is also a key initiative supporting the Digital First for Health Strategy's objective of enabling better, more connected tools for frontline providers.

OHTs are expected to work with the Provincial eServices Program to ensure their adoption of eServices aligns with provincial direction and to ensure a consistent approach to change management and implementation.

- eConsult: OHTs are expected to adopt eConsult via the Ontario eConsult Service, which is led by the Provincial eServices Program and is hosted on the OTNhub.
- eReferral: OHTs are expected to work with the Provincial eServices Program to identify the eReferral solution(s) that best meet their needs.

Developing standardized clinical pathways to determine how best to integrate eConsult and eReferral is a key component to the implementation of a successful, integrated program model. The eServices Program is working to integrate eReferral and eConsult service offerings within current priority pathways. The Program also looks to extend these pathways to all regions and OHTs in the province, to ensure equitable access to high-quality care across Ontario.

In order to expand the support model for priority pathways and communities of practice, the eServices Program is working to build on the existing procurement experiences to include an approach that allows all relevant vendors across the province to participate in the integrated network. Where providers in certain areas of the care continuum have already procured a vendor to complete a certain part of the consult and/or referral process (e.g., central intake to hospital procedure schedule and Operating Room booking) and where the applicable standards are being met by the participating vendor, those legacy systems will be considered for integration to allow for a fully integrated, end-to-end clinical workflow model.

The Provincial eServices Program will provide additional guidance for further expansion of eConsult and eReferral across the province.

Contacting the eServices Program

For further information about eServices and to sign up for eConsult and eReferral, OHTs should contact the eServices Program as follows:

- **eConsult:** eConsultCOE@toh.ca
- **eReferral:** eReferral@ehealthce.ca

Regional eServices deployment teams are available in each of the OH regions to support use of eConsult and eReferral.

Quick Navigation to:

General Digital Health Policies	System-Specific Policies
<ul style="list-style-type: none"> • Digital Health Information Exchange Policy • Digital Health Investment and Value for Money Policy • Digital Health Reporting and Performance Guide • Digital Health Cyber Security Policy 	<p>Patient Choice</p> <ul style="list-style-type: none"> • Patient-Facing Digital Health Policy <p>Connected Frontline Providers</p> <ul style="list-style-type: none"> • Clinical Systems Policy • eServices Policy

Acronym Glossary

Acronym	Definition
API	Application Program Interface
BPS	Broader Public Sector
CDR	Clinical Data Repository
CMHA	Canadian Mental Health Association
DHDR	Digital Health Drug Repository
DHIEX	Digital Health Information Exchange Policy
EMR	Electronic Medical Records
FHIR®	Fast Healthcare Interoperability Resources®
FIPPA	Freedom of Information and Protection of Privacy Act
FOI	Freedom of Information
GO-ITS	Government of Ontario Information Technology Standards
GP	General Practitioner
HCP	Health Care Provider
HIC	Health Information Custodian
HIMP	Harmonized Health Information Plan
HIROC	Healthcare Insurance Reciprocal Of Canada
HIS	Hospital Information System
HL7®	Health Level 7®
IAA	Identity, authentication and authorization
IPC	Information and Privacy Consumer of Ontario
IT	Information Technology
KPI	Key Performance Indicator
MGCS	Ministry of Government and Consumer Services
OAB	Online Appointment Booking
OH	Ontario Health
OH – OTN	Ontario Health – Ontario Telemedicine Network
OHIP	Ontario Health Insurance Plan
OHT	Ontario Health Team
OLIS	Ontario Laboratories Information System
OPS	Ontario Public Service
OTN	Ontario Telemedicine Network
OVCP	Ontario Virtual Care Program
PHI	Personal Health Information
PHIPA	Personal Health Information Protection Act
PRM	Provincial Reference Model
RPM	Remote Patient Monitoring
VOR	Vendor of Record



The Digital Health Service Catalogue

The Ministry of Health (MOH)
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Introduction

The Ministry of Health (the ministry) has developed Ontario's **Digital Health Service Catalogue** in collaboration with Ontario Health. It is designed to aid Ontario Health Teams (OHTs) with understanding the digital and virtual offerings in the province and match them to OHT patient and provider-facing business goals. This Catalogue is intended to support OHT clinical and administrative leadership teams with an understanding and overview of digital offerings for their providers and patients.

The Catalogue was developed through consultations with OHTs to provide the most relevant information on provincial digital health offerings and is subdivided according to the Digital Health Maturity Objectives listed in the [Digital Health Playbook](#). The Catalogue provides:

- ✓ Information about the **region and sector availability of each asset**.
- ✓ **Standard information for each asset**, such as functionality and value, integration with other technology systems, implementation considerations, next steps and contact information. Please note that headings have been eliminated in situations where data for specific categories are not applicable.
- ✓ **A new page for each asset that can be used as a handout** or resource in planning.

How to Use the Digital Health Service Catalogue



The Catalogue is a resource for OHTs to understand provincial or broadly available offerings for providers and patients across Ontario. The digital offerings included in this catalogue are just a start for OHTs and include those that are funded by the province without significant investment to get started.¹ Where the available offering has a specific use for certain communities (e.g. Indigenous communities, etc.), the information has been captured in the description. Beyond what's here, tools and services offered by vendors and delivery partners can also bring excellent value and support integrated care.



The Catalogue should be read in tandem with the other resources, which offer guidance on the ministry's digital health priorities and important considerations for OHTs as they develop their digital health plans.

- [The Digital Health Playbook](#) provides information on the ministry's Digital Health maturity objectives for OHTs, and guidance on how to develop digital health plans that support OHTs' local and target

¹ Please note that some provincially available tools may have some licensing or other considerations that may limit its usage within a sector. Further details of these limitations will be provided in the next iteration of the Digital Health Service Catalogue.

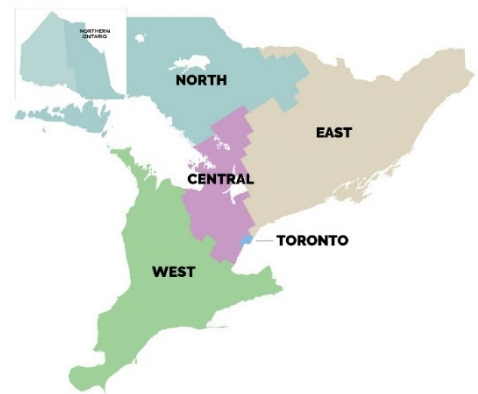
populations (e.g. Indigenous, Francophones, etc.) and align with the objectives and overall provincial digital health strategy.

- [The Digital Health Provincial Guidance Document](#) contains a set of minimum requirements for prospective OHTs and provincial guidance to support the selection, procurement, implementation, and evaluation of digital health tools.
- [Harmonized Information Management \(HIMP\) Guidance Document](#) contains information management and privacy considerations that should be considered while developing a digital health plan and a HIMP. General information about the HIMP Guidance Document can also be found in the Playbook.

As the demands on our health care system, the digital landscape, and OHT maturity continue to evolve, so will this resource. To provide feedback or comments on the Digital Health Service Catalogue, please contact: OHTdigital@ontario.ca.

For further assistance

Across Ontario, there are Ontario Health staff that are available to support the development of your OHT digital health plans. These teams are broadly connected to other delivery partners and work that is happening across OHTs and provincially in the digital/virtual space. For more information about any of the Catalogue inclusions and more, please connect with the team in your region:



- Central: OH-Central_DigitalVirtual@ontariohealth.ca
- East: OH-East_DigitalVirtual@ontariohealth.ca
- North: OH-North_DigitalVirtual@ontariohealth.ca
- Toronto: OH-Toronto_DigitalVirtual@ontariohealth.ca
- West: OH-West_DigitalVirtual@ontariohealth.ca

For any inquiries not related to digital health, OHTs should contact their relationship managers.

Quick Navigation to:

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Key Objective:
**Patient Centred
Care**

Patient Centred Care

What does success look like?

In the ideal state, OHTs can deliver care in a more patient-centred way by leveraging the use of digital and virtual tools. Patients have choice in how and when they navigate the system and access their care, manage their health status, and view their personal health information to better meet their needs.

The path forward:

To help Ontario Health Teams meet this objective, there are provincially available programs that can be leveraged to help change how you deliver care in a way that is grounded in patient needs and experience. Patients want to be able to have the option to see their providers virtually without long waits and travel required, they want to be able to book their appointments online, and they want the information they need to be proactive in their own health management, whether that means having the information needed to stay healthy, manage their conditions, or prevent complications and visits to the emergency department.

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Patient Centred Care

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[Immunization Connect Ontario \(ICON\)](#)

[Citizen Health Self-Management](#)

[InScreen](#)

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[My Cancer IQ \(www.mycanceriq.ca\)](#)

[OTNhub \(Ontario Telemedicine Network\)](#)

[Remote Care Management](#)

[Virtual Emergency Medicine and Critical Care](#)

[Breaking Free Online \(BFO\)](#)

[Internet-based Cognitive Behaviour Therapy \(iCBT\)](#)

Citizen Access to Health Information

Immunization Connect Ontario (ICON)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services

Functionality and Value for Ontario Health Teams

ICON / the Digital Yellow Card (DYC) provides a simple, secure mechanism for parents to view their or their child’s immunization records online anywhere, anytime and to submit updates to their child’s immunization records for validation by their health unit. Parents are empowered to be able to quickly and conveniently determine which immunizations their children need in the coming months per the Ontario publicly funded schedule. ICON is convenient, easy to use and available 24/7 to the public. To date, over 443,000 patients have submitted over 2.22 million immunizations via ICON and retrieved their immunization health records (yellow cards) over 705,000 times.

Health care providers administer about 85% of publicly funded immunizations, and most are reported to public health via the ICON/digital yellow card system. ICON reduces faxes and phone calls to public health, saving time and money for public health staff. Ensuring citizens are aware of the service is another strategy in population-health management for OHTs and could be included in their digital health plans.

ICON is a Ministry of Health asset, but in the future, primary care Electronic Medical Records (EMRs) will be able to integrate with the [Digital Health Immunization Repository](#) which will avoid the need for manual entry of immunization data.

Next Steps and Contact

This asset is owned by the Ministry of Health. For more information, links to Immunization Connect Ontario can be accessed via the respective [public health unit websites across Ontario](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Citizen Health Self-Management

InScreen

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Specialty Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓							

Functionality and Value for Ontario Health Teams

Provincial-level data is used to trigger mailed communication out to citizens when it is appropriate for eligible patients to get screening for colorectal, breast and cervical screening. Correspondence includes screening invitations, reminders and recalls. Notification are also provided to patients of screening results. Once screening is completed, physicians are notified via the labs that are completing screening tests. Physicians can also determine who has been screened via the [Screening Activity Report \(SAR\)](#) dashboard. Organized screening programs may find cancer earlier, leading to better health outcomes. Cancer screening detects pre-cancerous changes, or cancer at an early stage when there is a better chance of treating it successfully. Screening is for people who do not have any cancer symptoms.

Plans are in place to add a digital channel for correspondence over the next few years, and this may be an opportunity to integrate with [ConnectingOntario](#) if the person does not have a primary care physician. InScreen has information on the patient’s primary care physician, but only those in patient-enrollment models.

Integration with other Technology Systems

Several data sources inform InScreen, and could lead to a communication being triggered. These sources include a number of ministry datasets, Ontario Health Insurance Plan (OHIP) data, hospital endoscopy data, lab data (not Ontario Laboratories Information System (OLIS)), cancer registry data, and breast-screening data.

Next Steps and Contact

This asset is owned by Ontario Health. Contact OH-CCO_pmcs_requests@ontariohealth.ca for more information.

Quick Navigation to:

Click on the icons to navigate between sections.



Interactive Symptom Assessment & Collection Application (ISAAC)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓							

Functionality and Value for Ontario Health Teams

Interactive Symptom Assessment & Collection Application (ISAAC) is a digital tool that provides care teams with easy-to-use, evidence-based outcome and experience surveys. A validated patient-reported assessment tool screens for nine common symptoms, and allows clinicians to track these symptoms over time and across care settings. Patients respond to a short questionnaire that rates the severity of their current symptoms, and enables clinicians to better focus the discussion, and drill down on the concerns that are of priority to the patient. The system tabulates Patient Reported Outcome Measures (PROMs) and Patient Reported Experience Measures (PREMs), which can then be discussed with patients to inform their treatment and improve their outcomes.

In regional Cancer Centres across Ontario, patients complete an ISAAC assessment on a touch screen kiosk, and print results to share during their appointment. The system sends results to the hospital’s electronic health record, where available. In orthopedic programs, ISAAC is used to support hip and knee-replacement surgeries. ISAAC is also available on a mobile device such as a smart phone or tablet and supports iOS and Android mobile operating systems. The tool is available in both English and French.

Enhancements are coming to improve identity management and adaptability for other outcomes. Non-oncology opportunities exist for ISAAC such as mental health.

Integration with other Technology Systems

ISAAC is integrated with the patient record in a Hospital Information System (HIS), and is also integrated in some sites with local patient portals. ISAAC follows Admission Discharge Transfer (ADT) integration standards with HIS.

Implementation Considerations

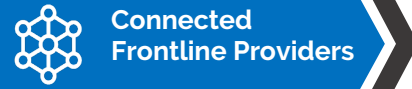
Technical Requirements: To onboard, sites are registered and a Service Level Agreement is signed by the site. Once the site is "created" in ISAAC, the Local Registration Authority process is followed to register admin staff with ISAAC. Patients are then registered with ISAAC manually or automatically from the hospital’s HIS (the latter requires Health Level 7® (HL7®) integration).

Next Steps and Contact

This asset is owned by Ontario Health. For any ISAAC implementation or demo requests, email isaac@ontariohealth.on.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



My Cancer IQ (www.mycanceriq.ca)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓		✓					

Functionality and Value for Ontario Health Teams

MyCancerIQ (www.mycanceriq.ca) is a publicly available online assessment tool that enables citizens to assess their cancer risk. Short online surveys are targeted to six areas: Kidney, Lung, Cervical, Colorectal, Breast, and Skin. Once completed, respondents are provided information on their risk, with information on how to modify their risk factors. This tool can be used in population health management and prevention efforts to direct citizens to perform risk assessments, and discuss modifiable risk factors with care providers. OHTs can direct their citizens/patients to the site so they can perform personal cancer risk assessments, and discuss the outcomes with their primary care physician.

Assessments for additional cancers may be added in the future. The tool can also potentially support assessments for other chronic diseases.

Implementation Considerations

Technical Requirements: www.mycanceriq.ca is accessible from desktops, tablets, and mobile devices (all major operating systems).

Next Steps and Contact

This asset is owned by Ontario Health, and can be accessed at www.mycanceriq.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



OTNhub (Ontario Telemedicine Network)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Specialty Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/ Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The OTNhub is a private and secure on-line service that supports the delivery of virtual care across the province and is offered at no cost to qualified health care providers in Ontario. The OTNhub is a trusted and secure province-wide virtual care platform to help mitigate barriers and enable all Ontario patients to have equitable access to quality health care when and where they need it.

OTNhub enables health care providers such as primary care providers, nurses, specialists, other regulated and unregulated health care professionals, community care providers, coordinators, and administrators across Ontario to find and organize access to patient host sites, specialized care, culturally sensitive care, French language services and emergent care using the OTNHub Directory. OTNhub Directory enables specialists to share their referral criteria and process, and enables referrers to find providers, programs, and hosted video visit sites. The community that is created through the use of the OTNhub enables collaboration between health care providers to improve access to care for patients.

Providers can organize, coordinate, and schedule a variety of virtual care appointments: direct to patient, hosted, group clinics, non-clinical learning, and administrative events. OTNhub members can manage clinical permissions and access for their users, as well as access utilization and reporting data on virtual care activity.

Integration with other Technology Systems

At the current time, the solution is not integrated with clinician point-of-care systems or other online appointment-booking tools.

Implementation Considerations

Technical Requirements: Technical Requirements are listed here at : <https://support.otn.ca/en/connect-help>. **ONE ID** is required. Register your healthcare providers and administrative support for eVisits at <https://otnhub.ca/>.

Change Management Requirements: Individual Member Organizations within OHTs must identify a Primary Contact for Service (PCS) to act as the main point of contact to receive communications and manage user accounts. Ontario Health (OTN) can provide eVisit (Video Visit) co-design guidance on workflows, change management, and best practices.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, see info@otn.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Remote Care Management

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The Remote Care Management program is available to provider organizations to remotely monitor patients and their ongoing health status. It utilizes a solution that captures biometric data and health questions to guide care planning, address patient education, and activate interventions to proactively address emerging issues. The associated provider tools and web-based portal enable patient engagement and monitoring.

Patient data is collected via i) kits with cell connectivity that include a tablet and Bluetooth devices (e.g., weight scale, blood pressure monitor and pulse oximeter); or ii) a mobile application that can be downloaded by a patient; or iii), direct provider entry during a patient interaction. Functionality exists to manage alerts, complete charting, review care plans, and see patient dashboards. The solution also offers evidence-based care pathways and health tip videos to promote patient self-management.

Ontario Health-supported remote monitoring programs are active across the province in numerous settings, and are invaluable for the monitoring, education, and self-management of patients with a number of chronic conditions, including more recently COVID-19.

A key benefit of leveraging the Ontario Health solution is the time saved in deploying a program and the ability to leverage the provincial volume pricing that is currently in place. Whether an OHT chooses to leverage the provincial solution, or build its own Remote Care Management Program, Ontario Health can support program design and implementation with expertise, templates, guidance materials, best practices and lessons learned.

Integration with other Technology Systems

The provincial remote monitoring solution is currently integrated with the [Health Report Manager](#) (HRM) to facilitate a push of summary reports from the solution out to clinicians. eFaxing reports is also an option. HRM integration is implemented through the Application Programming Interface (API), and there is potential to integrate with other solutions/platforms. Costs related to integration work need to be negotiated with a vendor.

Implementation Considerations

Technical Requirements: Sites must use Google Chrome as their browser, and Zoom for video.

Change Management Requirements: Prior to implementation, OHTs must complete a Design Discovery Assessment Document for review by Ontario Health to ensure the patient journey is documented and understood, including referral sources, enrolment/discharge criteria,

escalation paths, etc. The site can review and ask questions related to the pathway/program that it wishes to implement. A stakeholder engagement strategy/plan must also be developed to identify referral sources. Typically, a project manager or designated lead coordinates site-level activities. The implementation and configuration of the solution is free to users in Ontario, but users pay a per-patient per-month fee for each patient using the solution.

Privacy and Security Controls

A full Privacy Impact Assessment/Threat Risk Assessment has been completed for the provincial solution and processes. A summary of each will be provided to the site.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Virtual Emergency Medicine and Critical Care

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓						

Functionality and Value for Ontario Health Teams

[Virtual Emergency Medicine and Critical Care solutions](#) are used to provide patients who are at a local health care location (e.g. hospital, nursing station) with timely access to emergent and critical care by bringing specialized resources to their bedside that are not locally available, when necessary. These consults aid in decision making about stabilization, treatment and transport, help avoid inappropriate or unnecessary transfers, and reduce admissions and readmissions. They also enable distributed Rapid Response teams to collaboratively deliver comprehensive care, and enhance the readiness of emergency personnel for the arrival and treatment of patients. The result is improved patient outcomes, reduced costs, and higher satisfaction among referring physicians.

Virtual Emergency Medicine and Critical Care solutions enable timely treatment to patients at a local health care location (e.g. hospital, nursing station) by bringing specialized resources, not locally available, to their bedside when necessary. These virtual consults aid local health care providers in decision making about stabilization, treatment and transport, avoid inappropriate or unnecessary transfers, and reduce admissions and readmissions.

The ability to provide care virtually, enables collaborative comprehensive care and enhances the readiness of emergency personnel for the arrival and treatment of patients. The use of videoconferencing in emergent and critical situations results in improved patient outcomes, reduced costs, and higher satisfaction among referring, transporting and receiving teams.

Ontario Health maintains a dedicated videoconferencing application for Emergency Services with high availability (~99% uptime) and 24/7 technical support. The consultant software is available on PC, Mac, iOS, and Android platforms (mobile or desktop). The health care location where the patient is located leverages the existing Ontario Health (OTN) videoconferencing infrastructure and mobile videoconferencing carts.

Implementation Considerations

Technical Requirements: Patient sites must have a mobile videoconferencing cart (adjustable height), with a 12x zoom camera (180-degree pan side/side, 45-degree pan up/down, far-end camera control functionality).

Consultants must have the following accounts: [ONE ID](#), [OTNhub](#), and Emergency Services.

Change Management Requirements: Individual Member Organizations within OHTs must identify a Primary Contact for Service (PCS) to act as the main point of contact to receive

communications and manage user accounts. Ontario Health (OTN) can provide Video Visit co-design guidance on workflows, change management, and best practices. For more information, contact info@otn.ca.

Privacy and Security Controls

Regular privacy and security assessments are required to ensure that Video Visit products and services protect personal health information. For details, see <https://otn.ca/privacy-centre/>.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Breaking Free Online (BFO)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓			✓

Functionality and Value for Ontario Health Teams

Breaking Free Online (BFO) is digital self-management tool that delivers Cognitive Behavioural Therapy for Substance Use Disorder in a scalable and consistent manner. It does not directly interface with a clinician, but is rather used by clients in a self-directed way to prevent relapse, recidivism, and re-presentations to healthcare services.

BFO offers clients a comprehensive toolkit of psychoeducation, recovery resources, and evidence-based behaviour change techniques. It helps them achieve and maintain recovery from dependence on over 70 substances – including opioids, stimulants, prescribed medications of abuse, and alcohol – while also targeting concurrent mental difficulties such as anxiety and depression.

BFO uses several evidence-based behavioural change techniques (BCTs), including ‘recognize-avoid-cope’, which helps clients identify and cope safely with high-risk situations, and utilizes geofencing technology when used in conjunction with the Breaking Free Companion Canada App. Another BCT is ‘urge surfing,’ which supports clients waiting to start Medication Assisted Treatment, or during the titration and stabilization stage to help them stop using illicit substances.

Accessible 24/7 on any device and available in both official languages, the program is interactive, engaging and highly personalized to each client, and includes full voiceover to support those with lower levels of literacy or impaired concentration. The tool can be accessed at www.breakingfreeonline.ca. The program is currently paid for by the provincial government as part of the COVID-19 pandemic response.

Implementation Considerations

Technical Requirements: The solution is software-based, and does not require the purchase of additional hardware or the enhancement of existing IT infrastructure. BFO is compatible with both Android and iOS platforms, and can be used on desktop and laptop computers as well as portable devices such as tablets and smartphones.

Change Management Requirements: Service providers may opt to use BFO as an adjunct to in-person treatment. It can also be leveraged to support a range of delivery tasks, including managing wait lists, reinforcing medication-assisted treatment, facilitating one-to-one interventions or structured groupwork programs, supporting peer-mentoring initiatives, and strengthening continuing-care approaches.

Privacy and Security Controls

A full Privacy Impact Assessment/Threat Risk Assessment has been completed by Ontario Health for the solution.

Next Steps and Contact

This asset is owned by Breaking Free Group. For more information or to implement BFO, health service providers should obtain a service code by reaching out to nsmith@breakingfreegroup.com.

Quick Navigation to:

Click on the icons to navigate between sections.



Internet-based Cognitive Behaviour Therapy (iCBT)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
		✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

Internet-based Cognitive Behaviour Therapy (iCBT) offers free therapist-assisted cognitive behaviour therapy virtually for mood and anxiety disorders. To sign up, patients can self-refer themselves as part of the pandemic response. Patients complete an online assessment, and if eligible, are enrolled into the program and assigned a protocol based on their needs. The duration of protocols ranges from 4 to 12 weeks.

As part of the government’s Roadmap to Wellness strategy, planning is currently underway for the integration of iCBT into the Ontario Structured Psychotherapy Program. This integration will begin in 2021/22.

Implementation Considerations

Change Management Requirements: Minimum implementation is required since this is currently an online self-referral service. Service providers can give more information to help guide iCBT clinicians on how to discuss the service with their patients.

Standards Alignment

The iCBT program meets Ontario privacy and security policies.

Privacy and Security Controls

Security-risk assessments and privacy-impact assessments have been completed for this service, as well as for the vendor solutions providing the service.

Next Steps and Contact

This asset is owned by Mindbeacon & Morneau Shepell. Clinicians can direct their patients to the site or patients can access directly at <https://www.ontario.ca/page/covid-19-support-people#section-4>.

Quick Navigation to:

Click on the icons to navigate between sections.





Key Objective:
**Connected Frontline
Providers**

Connected Frontline Providers

What does success look like?

In the ideal state, frontline providers communicate and share information and clinical data in a manner that enables improved collaboration and efficiency in care planning and provision. Care is more efficient and transitions are streamlined. Shared instances of digital tools and digital tools that are connected and integrated and built on common standards enable real-time, team-based care.

The path forward:

It is now more critical than ever to optimize the use of clinical information. To help Ontario Health Teams meet this objective, provincial systems and data repositories have been made available to clinicians. Integrated data from all contributing sources in the patient's circle of care enables informed decision making, and often reduces the need for repeat testing or unnecessary appointments.

In this Section

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Connected Frontline Providers

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[Client Health and Related Information Systems \(CHRIS\)](#)

[Digital Health Drugs Repository \(DHDR\)](#)

[Ontario Laboratories Information System \(OLIS\)](#)

[Digital Health Immunization Repository \(DHIR\)](#)

[Integrated Assessment Record \(IAR\)](#)

[Clinical Consultation](#)

[eConsult](#)

[Teledermatology](#)

[TeleOphthalmology](#)

[Clinical Resources](#)

[KidneyWise](#)

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[Provincial Registries](#)

[Provincial Client Registry \(PCR\)](#)

[Provincial Provider Registry \(PPR\)](#)

[Provider Communication/Consultation](#)

[ONE Mail/ONE Pages](#)

Access to Data for Clinical Decision Making

The Provincial Clinical Viewers

Viewing a patient's clinical information from all sources in one consolidated view, using only one username and login, enables health care providers to make faster, more informed care decisions. [ConnectingOntario](#) and [ClinicalConnect](#), are used to view acute clinical information contained in the [Acute and Community Clinical Data Repository \(acCCR\)](#). These clinical viewers enable health care providers to easily engage and educate patients at the bedside or at the office via desktop and mobile devices. Workflows are streamlined, safety risks are avoided, and transitions in care are improved. Clinical access to existing information avoids the need to duplicate tests and procedures, saving time, system costs, patient discomfort, and patient travel. Most importantly, access to provincial-level clinical information, regardless of where in the province the information was obtained, means that all providers in the circle of care have a comprehensive view of a patient's health journey, regardless of their, or the patient's, OHT affiliation.

The following data repositories are available in both clinical viewers:

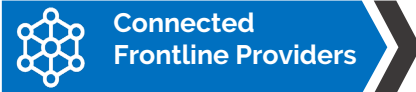
- **Acute and Community Clinical Data Repository (acCCR):** The acCCR is an Ontario Health data repository that allows authorized hospital and community-based health care providers to view clinical information originating from acute-care and community care sites that are contributing to the repository.
- **Diagnostic Imaging Common Service (DI-CS):** DI-CS provides consolidated access to diagnostic reports and images from the regional diagnostic imaging repositories so that users can view reports and images from across the province.
- **Digital Health Drug Repository (DHDR):** DHDR provides authorized health care providers with access to approximately 70% of provincially dispensed drug information, including publicly funded drugs, dispensed drugs, and publicly funded pharmacy services. It provides 100% access to dispensed monitored drugs, and most recently COVID-19 Immunization data.
- **Ontario Laboratories Information System (OLIS):** OLIS is a province-wide repository of lab information that can be accessed via the clinical viewers. OLIS accepts data feeds from labs in the province such as Ontario public health laboratories, community laboratories, and hospital laboratories.

Note: The Catalogue includes separate entries for DHDR and OLIS as offerings that OHTs can connect to directly, and not solely via the provincial clinical viewers. Refer to [DHDR](#) and [OLIS](#) for further information.

Data made accessible through the provincial clinical viewers is limited to that which has been contributed to Ontario Health by participating Health Information Custodians. Ontario Health takes reasonable steps to maintain the accuracy and integrity of this information. However, information that is accessible through the provincial clinical viewers may be only that portion of information that an individual has consented to release and may not necessarily contain all the information of any individual.

Quick Navigation to:

Click on the icons to navigate between sections.



A) ClinicalConnect

Regional Availability				
Central	East	Toronto	North	West
				✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

ClinicalConnect is a secure, web-based portal that provides regional access to a wide range of patient information for authorized providers in South West Ontario. ClinicalConnect includes access to the Clinical Data Repository (CDR), Diagnostic Imaging Common Service (DI-CS), Digital Image Repositories (DI-rs), [Digital Health Drug Repository \(DHDR\)](#), and the [Ontario Laboratories Information System \(OLIS\)](#) as described above. A full listing of data contributors to ClinicalConnect can be found here: <https://info.clinicalconnect.ca/CC/healthcare/data-integrations>.

Integration with other Technology Systems

ClinicalConnect integrates with ONE ID for identity management. Physicians in some regions have the option to electronically download hospital data to their electronic medical records (EMRs). In addition, hospital sites federated with ONE ID can ‘Single Sign On’ (SSO) directly to ClinicalConnect from their Hospital Information System.

Implementation Considerations

Technical Requirements: ClinicalConnect is available via desktop computers, tablets, or mobile devices. Minimum browser and system configuration requirements apply. Secure credentials must be used to log into the system (either those provided by Hamilton Health Sciences or their ClinicalConnect Local Registration Authority (LRA), or [ONE ID](#) credentials). For details, see <https://info.clinicalconnect.ca/CC/storage/documents/ClinicalConnect%20Technical%20Specifications%20Sheet.pdf>

Change Management Requirements: To access the ClinicalConnect you must be a Health Information Custodian (HIC) or authorized to view through a HIC. Legal Agreements and Privacy and Security Assessments must also be completed.

Privacy and Security Controls

All privacy and security requirements related to the provincial clinical viewer onboarding must be followed.

Next Steps and Contact

This asset is owned by Ontario Health. For more information <https://info.clinicalconnect.ca/CC/healthcare/contact-information> or email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



B) ConnectingOntario

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The ConnectingOntario clinical viewer is a secure, web-based portal that provides regional access to a wide range of patient information for authorized providers in the Greater Toronto Area and Northern and Eastern Ontario. ConnectingOntario benefits clinicians and care providers at more than 859 health care organizations, representing acute care, community support services, complex continuing care, long-term care, mental health and addictions, primary care, rehabilitation, and pharmacies. ConnectingOntario includes access to the Acute and Community Clinical Data Repository (acCCR), Diagnostic Imaging Common Service (DI-CS), [Digital Health Drug Repository \(DHDR\)](#), and [Ontario Laboratories Information System \(OLIS\)](#) as described above. A full listing of connected sites can be found at <https://ehealthontario.on.ca/connectingontario-data-summary/index.html>. ConnectingOntario identifies and collects priority data, and enables information exchange from multiple sources. It also provides access to seamlessly view clinical information online either through a provider portal or direct integration.

Integration with other Technology Systems

ConnectingOntario integrates with [ONE ID](#) for identity management. Contextual Single Sign On with select other electronic medical records (EMRs) and [Client Health and Related Information System \(CHRIS\)](#).

Implementation Considerations

Technical Requirements: ConnectingOntario is available via desktop computers, tablets, or mobile devices. Minimum browser and system configuration requirements apply. Users can log into the system with their ONE ID credentials, or through federated access using a clinical information system. For more information, see https://ehealthontario.on.ca/files/public/support/CO_ConfigurationRequirements_EN.pdf?v1601919239.

Change Management Requirements: To access ConnectingOntario, you must be a Health Information Custodian (HIC), or authorized to view through a HIC. Legal agreements and privacy and security assessments must be completed.

Privacy and Security Controls

All privacy and security requirements related to provincial clinical viewer onboarding must be followed.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, see <https://ehealthontario.on.ca/en/health-care-professionals/connectingontario>, or email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Electronic Child Health Network (eCHN)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The Electronic Child Health Network (eCHN) is the pediatric digital health record for Ontario. It is a secure portal for registered health providers from many different types of organizations to access medical information for pediatric patients under their care. Patient data is collected from over 70 hospitals across Ontario, and is reflected in a consolidated digital record. Thousands of clinicians rely on eCHN for the timely coordination of pediatric patient care and for pediatric referrals, regardless of location. Connection to eCHN is recommended for those OHTs providing acute pediatric care. Some information contained within eCHN is also available through [ConnectingOntario](#) and [ClinicalConnect](#).

Integration with other Technology Systems

eCHN can be integrated with a hospital information system (HIS), or accessed through a web browser.

Implementation Considerations

Change Management Requirements: Legal agreements are required.

Next Steps and Contact

This asset is owned by the Hospital for Sick Children (SickKids). For more information, see <https://www.echn.ca/contact/>.

Quick Navigation to:

Click on the icons to navigate between sections.



Client Health and Related Information Systems (CHRIS)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/ Municipal Services
	✓		✓		✓		✓

Functionality and Value for Ontario Health Teams

Client Health and Related Information Systems (CHRIS) is the provincial web portal and point-of-care system used by providers of Home and Community Support Services and funded Service Provider Organizations across the province. It offers an efficient pipeline for home care coordination, including: care planning, service provisioning and tracking, equipment and supply provisioning, and financial reconciliation services. It is used for patient registration, encounter tracking, and increasingly for OHT patient identification and registration.

CHRIS enhances OHT workflows in collaboration with tools such as the [Coordinated Care Plan](#), [eNotifications](#), and Encounter Notes. Interfaces between CHRIS and some electronic medical record (EMR) systems offer a major efficiency in the registration process, avoiding duplicate data entry and streamlining the intake process.

The upcoming CHRIS release offers additional features in support of OHT workflows. Registration will be made more efficient and streamlined, and a version of home care patient admission for OHT patients will allow providers to quickly roster patients. New enhancements will also enable all CHRIS users to view OHT geographic mapping for patient addresses. Finally, the existing Provincial Client View will be enhanced with the ability to view client notes, community services, and relevant client codes/patient risk factors (e.g., COVID-19).

Integration with other Technology Systems

As a mature provincial system, CHRIS has numerous integrations which enable clinical information from many sources to be available to providers as they plan care and make clinical decisions:

- CHRIS provides a system interface for patient registration and encounter tracking, integrated with popular hospital information system (HIS)/EMRs.
- Provincial eReferral interface (Fast HealthCare Interoperability Resources® (FHIR®) & Health Level 7® (HL7®) v2) supports Hospital, Primary Care Provider (PCP), Home and Community Care (HCC) (Local Health Integration Networks (LHINs), Bed Census Summary (BCS) & OHT), Service Provider organization (SPO), Emergency Medical Services (EMS) and Client Service Assistant (CSA) integrations.
- Provincial eNotification interface (HL7®v2) supports Hospital, PCP (via [Health Report Manager \(HRM\)](#)), HCC (LHINs), BCS & OHT), SPO, Emergency Medical Services (EMS), and CSA integrations.

- Provincial Extensible Markup Language (P-XML) integration with major SPO vendors (current integrations include Procura, GoldCare and AlayaCare).
- Bi-directional communication with [Provincial Client Registry](#) (PCR - HL7®v3): query and contribution.
- Contribution to [ConnectingOntario](#) Clinical Data Repository (CDR) and ClinicalConnect.
- Authentication with [ONE ID](#).
- Authentication with Microsoft identities.
- Quarterly submissions to Home Care Database (HCD), Management Information System (MIS) expense reporting database and other provincial repositories.
- Integration with Ontario Drug Benefit to authorize cards.
- Integration with Health Card Validation (Ministry of Health service).
- Integration with Sunnybrook's MyChart patient portal.
- Contextual launch with Single Sign On for ConnectingOntario and [ClinicalConnect](#).
- Contextual launch of Caredove for community service referrals.

Implementation Considerations

Technical Requirements: As a web user interface, there are no technical requirements for implementing CHRIS. CHRIS can be accessed using a modern web browser platform such as Google Chrome or Microsoft Edge. However, system integration work such as development and conformance testing is required to adopt any of CHRIS's electronic interfaces ([eReferral](#), [eNotification](#), P-XML, etc.).

Change Management Requirements: Organizations looking to adopt CHRIS will be engaged in a joint business change session with the CHRIS business, aimed at mapping CHRIS functions to existing business processes, and proposing efficiencies where needed.

Standards Alignment

CHRIS created an Ontario data exchange standard for homecare-related service referrals, equipment orders, and electronic billing. CHRIS has also implemented an eReferral provincial standard, FHIR® (Fast Healthcare Interoperability Resources®) specification, and adheres to provincial user-identity standards leveraging ONE ID. Finally, CHRIS complements provincial Electronic Health Record (EHR) initiatives with home-care data contributions to the Provincial Client Registry and ConnectingOntario.

Privacy and Security Controls

A joint Privacy Impact Assessment and Threat Risk Assessment must be completed, and a Master Data Sharing and Services Agreement (MDSSA) must be executed. End-user education must be completed in compliance with the CHRIS Acceptable Use Policy.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact CHRISProgram@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Digital Health Drugs Repository (DHDR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓				✓	

Functionality and Value for Ontario Health Teams

The Digital Health Drug Repository (DHDR) provides authorized health care providers with access to provincially dispensed drug information including publicly funded drugs, dispensed drugs and pharmacy services, as well as 100% of the dispensed monitored drugs in the province. DHDR contains drug information, such as dispensed date, dosage form, quantity, etc., publicly funded pharmacy services and in the future, COVID-19 vaccination information.

Providers that are well informed and have access to the information they need can focus on diagnosis and treating patients. Patients have a better experience when they are asked fewer repetitive questions and have a decreased risk of adverse drug events through the elimination of remembering lengthy medication histories. Sharing of patient clinical drug information also enables collaboration between health care providers.

Direct interaction between DHDR and primary care Electronic Medical Records (EMRs) will go live this year.

Integration with other Technology Systems

The medication data repository is integrated with both [ConnectingOntario](#) and [ClinicalConnect](#) to enable clinicians to view labs through provincial clinical viewer access. Beginning in May 2021, some OntarioMD (OMD)-certified EMRs will also be able to directly integrate with DHDR, allowing clinicians to view the dispensed drug information through their EMRs utilizing a single sign on and eliminating additional [ONE ID](#) authentication challenges.

Implementation Considerations

Technical Requirements: Authorized users can currently access DHDR via the provincial clinical viewers. In the future, additional access channels will include, EMRs or direct integration. ONE ID must be used as the authenticator. See <https://ehealthontario.on.ca/en/health-care-professionals/dispensed-medications>.

Change Management Requirements: To successfully connect to view medication data, a DHDR interface must be developed, connectivity established, and conformance testing completed. Provincial privacy and security requirements must be met, and legal agreements must be completed.

Privacy and Security Controls Privacy and Security Controls

As DHDR is in the electronic health record (EHR), specific privacy requirements related to collection, use and disclosure in the EHR must be followed. All privacy and security requirements related to provincial clinical viewer onboarding must be followed.

Next Steps and Contact

More information regarding the ministry’s provision of access to information about publicly funded drugs and pharmacy services, as well as all monitored drugs, can be found at: www.ontario.ca/mydruginfo.

Quick Navigation to:

Click on the icons to navigate between sections.



Ontario Laboratories Information System (OLIS)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓				✓	

Functionality and Value for Ontario Health Teams

The Ontario Laboratories Information System (OLIS) gives authorized health care providers access to lab test orders and results from hospitals, community labs, and public health labs. As patients move among hospitals, family physicians, home care, and long-term care settings, OLIS makes viewing patients’ current and past test results easier, and enables treatment decisions to be made at the point of care. OLIS can store over 68,000 unique types of test results including Hematology, Pathology, Chemistry, Microbiology, Blood Bank, and most recently COVID-19. OLIS provides comprehensive and complete lab test history, enables treatment monitoring, supports chronic-disease management, and reduces duplicate testing (since health care providers can view test results conducted across the province). It also provides cost savings by reducing administrative time spent sending lab results, and by reducing duplicative testing. OLIS also plays an integral role in supporting Ontario's fight against the coronavirus by storing and reporting critical COVID-19 test results.

There are potential plans to integrate OLIS with the [Provincial Provider Registry](#) and the [Provincial Client Registry](#) in a future enhancement, which will improve data quality and lead to further patient safety by reducing errors associated with patient and provider misidentification.

Integration with other Technology Systems

This repository is integrated with both [ConnectingOntario](#) and [ClinicalConnect](#) to enable clinicians to view labs through provincial clinical viewer access. All OntarioMD (OMD)-certified electronic medical records (EMRs) are also directly integrated with OLIS, allowing clinicians to view their EMRs without ONE ID authentication, as a single sign on. Most recently, in response to the coronavirus pandemic, COVID-19 results can be viewed by patients through the “COVID-19 Results Patient Viewer.”

Implementation Considerations

Technical Requirements: Authorized users can access OLIS via the provincial clinical viewers, EMR, or direct integration. [ONE ID](#) must be used as the authenticator. See <https://ehealthontario.on.ca/en/health-care-professionals/lab-results>.

Change Management Requirements: In order to successfully connect to view lab results, an OLIS interface must be developed, connectivity established, and conformance testing completed. Provincial privacy and security requirements must be met, and legal agreements must be completed.

Privacy and Security Controls

As OLIS is in the electronic health record (EHR), specific privacy requirements related to collection, use and disclosure in the EHR must be followed. All privacy and security requirements related to provincial clinical viewer onboarding must be followed.

Next Steps and Contact

This asset is owned by the Ministry of Health. For more information, go to <https://ehealthontario.on.ca/en/health-care-professionals/lab-results>.

Quick Navigation to:

Click on the icons to navigate between sections.



Digital Health Immunization Repository (DHIR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓			✓		

Functionality and Value for Ontario Health Teams

The Digital Health Immunization Repository (DHIR) is a centralized repository of standardized electronic immunization data. The DHIR contains provincially available information regarding immunizations, the Canadian Vaccine Catalogue and infectious-disease outbreaks. It is a comprehensive, integrated public-health information system that helps point-of-service providers and public-health professionals in Ontario, provincially and locally, (and patients) with comprehensive immunization information that is accessible in real time to support clinical practices and to engage the public as active partners in managing their health.

The DHIR primarily supports data sharing for public health purposes; Ontario’s 36 public health units access the repository. Comprehensive immunization information accessible in real-time supports health care providers in clinical practice and is critical to the efficiency and effectiveness of public health. The public is also able to access and update their immunization records in the DHIR through a web-based tool called [Immunization Connect Ontario/Digital Yellow Card \(ICON/DYC\)](#).

Integration with other Technology Systems

The DHIR is accessible to public health via their internal systems and accessible to citizens via the web-based tool ICON.

Standards Alignment

DHIR Point of Care System Access FHIR® Application Programming Interface (API), also known as DHIR Release 4, is built on the FHIR® (Fast HealthCare Interoperability Resources®) standard Release 4 base specification is designed for provider application use.

Next Steps and Contact

This asset is owned by the Ministry of Health. For patient access to the DHIR, links to Immunization Connect Ontario can be accessed via the respective [public health unit websites](#) across Ontario.

Quick Navigation to:

Click on the icons to navigate between sections.



Integrated Assessment Record (IAR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
			✓	✓	✓	✓	

Functionality and Value for Ontario Health Teams

Ontario's Integrated Assessment Record (IAR) is a centralized repository of clinical assessment data collected from multiple community-care sectors, including home and community care, Community Mental Health (CMH), Community Addictions (CA), Long-Term Care Homes (LTCH), and inpatient Mental Health (MH). As a patient moves through the continuum of care, authorized Health Service Providers (HSPs) can upload, share, and access consented assessments in a secure and timely manner, thereby promoting a collaborative and client-centric approach to care.

Integration with other Technology Systems

Various software vendors are integrated with IAR to enable the uploading of assessments, which can then be shared and viewed.

Implementation Considerations

Technical Requirements: Secure web-based access is required.

Change Management Requirements: The business must determine which OHT team members require access to IAR.

Next Steps and Contact

This asset is owned by Ontario Health. For more information contact ccim@ontario.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Clinical Consultation

eConsult

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓		✓		✓	

Functionality and Value for Ontario Health Teams

The Provincial eConsult service is hosted on the [OTNhub](#). Registered primary care physicians and nurse practitioners can use this service to request specialist advice for particular patient cases through a secure web-based tool. The program enables timely access to non-urgent questions (average response time: one day).

Collaboration between clinicians enables primary care providers to obtain support and practical advice from specialists (107 province-wide speciality groups and over 1,000 active specialists), maximize their scope of practice, and avoid specialist referrals when possible. Providers can learn and manage patient cases at the family-practice level, where patient trust is often highest. Patients receive optimal care in their local setting, and often avoid travel and the waits associated with additional appointments. Not only is the program an added convenience for patients and providers, but it also supports equitable access when in-person specialist visits are challenging for patients (e.g., remote locations or mobility challenges).

Work is currently underway to integrate the eConsult Service with select electronic medical record (EMR) systems. This will ensure that providers and specialists within an OHT can support each other as a priority, local communities of practice in specific geographies and regional speciality groups are being developed. This local provider collaboration will enable more timely access for OHT target populations.

Integration with other Technology Systems

The Ontario eConsult Service on OTNhub is currently integrated with several EMR vendors. For more information on currently available EMR vendors or to access eConsult via EMR contact emr@ontariomd.com.

Implementation Considerations

Technical Requirements: Primary Care providers, nurse practitioners, and specialists should have a [ONE ID account](#), and be registered for [OTNhub](#) to request/respond to eConsults.

Change Management Requirements: Clinical champions are an asset to the adoption of an eConsult program. Regional eServices deployment teams are available to assist with adoption and program setup.

Standards Alignment

Ontario Health is currently working with the eConsult Centre of Excellence to ensure this asset meets Fast HealthCare Interoperability Resources® (FHIR®) standards.

Privacy and Security Controls

Ontario Health has completed privacy and security assessments of eConsult. For details, see <https://support.otn.ca/en/members/privacy-toolkit>.

Next Steps and Contact

This asset is owned by Ontario Health. Specialists who are interested in providing eConsult advice can contact the Ontario eServices Program which is under joint leadership from the eConsult Centre of Excellence and the eHealth Centre of Excellence: eConsultCOE@toh.ca. For more information on deployment email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Teledermatology

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓		✓			✓	✓	

Functionality and Value for Ontario Health Teams

Teledermatology enables primary care providers to securely transmit images of a patient's dermatological condition (and other relevant health information) to an Ontario-based dermatologist. The dermatologist reviews the file, and electronically communicates a diagnosis and treatment plan to the referrer. This enables faster access to dermatologists, and often fills the gap in situations where there are not enough local dermatologists available.

Implementation Considerations

Technical Requirements: Access to Teledermatology is provided as part of [OTNhub](#). To become a member, go to <https://otnhub.ca/> and click on “Sign Up”. Once the OTNhub account is active, please email info@otn.ca to request access to Teledermatology.

Either physicians or Nurse practitioners are eligible to use this service. Ontario Dermatologists can request specialist access by email info@otn.ca.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



TeleOphthalmology

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓	✓	✓				

Functionality and Value for Ontario Health Teams

TeleOphthalmology connects primary care providers with ophthalmologists, enabling timely and easily accessible retinal screening. The referring physician sends patients to one of several TeleOphthalmology host sites within Ontario. The resulting images are uploaded on Ontario Health's secure retinal screening platform, and then securely sent to an ophthalmologist for a review, diagnosis, and treatment recommendations. The host site receives the screening report, and follows up with the patient and referring physician to coordinate the necessary care.

TeleOphthalmology programs usually focus on underserved and vulnerable groups and/or regions, and are typically run from community health centres, family health teams, and local hospitals. Benefits include improved rates of retinal screening, more timely and convenient access to screening and follow-up care, and optimization of vision healthcare resources. The contract with the current vendor expired in December 2021. Ontario Health is in the process of procuring another solution.

Implementation Considerations

Technical Requirements: TeleOphthalmology requires Firefox as the web browser.

Change Management Requirements: Implementation requirements include:

- Funding to purchase a screening camera;
- A staffing plan to use new or existing resources;
- Change-management support to engage with partners and patients to identify those in need of retinal screening; and
- Workflow redesign to embed retinal screening into existing clinical workflows and programs.

Privacy and Security Controls

Regular privacy and security assessments are required to ensure that products and services protect personal health information. For details, see <https://otn.ca/privacy-centre/>.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact eCareSupport@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Clinical Resources

KidneyWise

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Specialty Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
		✓					

Functionality and Value for Ontario Health Teams

The KidneyWise Clinical Toolkit promotes patient-centric primary care for people with chronic kidney disease (CKD) across Ontario. Using clinical algorithms, it helps primary care providers identify people at risk, and offers guidance regarding testing, diagnosis, and management. It also helps identify patients who will benefit from a referral to a nephrologist. By combining consistent standards and guidelines with systems that measure and track performance, KidneyWise supports optimal kidney care in Ontario.

Implementation Considerations

Change Management Requirements: Registration is required (name and email address).

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact ORRSsupport@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Provincial Assessment Platform

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓		✓

Functionality and Value for Ontario Health Teams

The Provincial Assessment Platform enables users to conduct standardized international Resident Assessment Instrument (interRAI) assessments for Ontario patients being referred for and/or receiving home and community-care services. Assessments can be conducted with patients online or offline, using computers or mobile devices. All assessment information can be securely shared across the platform with other OHTs to reduce duplication of assessment. This solution is currently used by home care province-wide, and is well established and cost effective. It supports and informs care plans by capturing patient complexity and resource utilization, and identifying risks. Patient progress can be tracked to ensure the attainment of service goals.

Ontario Health is currently planning to build a patient-facing interface that will be accessible via a portal. This will offer patients the opportunity to contribute and participate in their own health care record. Our roadmap also includes the expansion of Community Mental Health assessments, as well as [ONE ID](#) authentication.

Integration with other Technology Systems

The Assessment Platform is integrated with Client Health and Related Information System ([CHRIS](#)), through which assessment information is shared with relevant users via Health Partner Gateway (HPG), Canadian Institute for Health Information (CIHI), and provincial repositories. Assessments are also contributed to the Integrated Assessment Record for viewing by other health service providers directly through the Assessment Platform.

Implementation Considerations

Change Management Requirements: Implementation requirements include business process design to incorporate the use of standardized assessments across the OHT, as well as education regarding the use of assessments and the solution.

Standards Alignment

The Assessment Platform is interRAI- and integrated assessment record (IAR)-compliant.

Privacy and Security Controls

A joint privacy assessment is required, including a Privacy Impact Assessment. A legal agreement also must be signed.

Next Steps and Contact

This asset is vendor owned but managed by Ontario Health. For more information, contact AssessmentProgram@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Coordinated Care Planning

Coordinated Care Plan (CCP)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The Coordinated Care Plan (CCP) is a well-established patient-centric assessment and care planning tool that is based on the Health Quality Ontario Care Plan standard (v2.1). It was originally developed for use within the former Health Links, facilitating coordination among community-care workers and primary-care providers, but it has since evolved into a broader collaborative tool for patients, their families/caregivers, and healthcare providers.

CCP captures information from all healthcare partners (including patients), and streamlines it into a single patient record. This supports the creation of a holistic care plan across various sectors, ensuring optimal patient care. The care plan is a living document; partners are advised of updates via email alerts.

Ontario Health is currently in the process of separating CCP creation through a Client Health and Related Information System ([CHRIS](#)) tenant (allowing creation directly through Health Partner Gateway (HPG)), and access through CHRIS/HPG. This will then be offered as a standalone product.

Integration with other Technology Systems

The CCP is integrated with CHRIS. It is shared with participating providers via HPG, the [ConnectingOntario](#) Clinical Viewer, and provincial repositories. In the future, it will possible to integrate CCP with other systems through a CCP Fast HealthCare Interoperability Resources® (FHIR®) Application Service Provider (API).

Implementation Considerations

Technical Requirements: To access CCP, the Web portal requires [ONE ID](#), Microsoft Identity, or HPG Identity. CCP API, a future optional interface for system integration, will require participating systems/vendors to implement a FHIR® Release 4 interface.

Change Management Requirements: The business-process design should incorporate the use of CCP across the OHT.

Standards Alignment

The CCP aligns with the Health Quality Ontario Care Plan standard (v2.1). Its API will be based on FHIR® Release 4.

Privacy and Security Controls

A joint privacy assessment is required, including a Privacy Impact Assessment. A legal agreement must also be signed.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact CHRISProgram@ontariohealth.ca. Onboarding is provided through Home and Community Care Support Services.

Quick Navigation to:

Click on the icons to navigate between sections.



Event Notification

Health Report Manager (HRM)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Specialty Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓		✓	✓				

Functionality and Value for Ontario Health Teams

Health Report Manager (HRM) is a digital health solution that enables primary care clinicians using an OntarioMD-certified Electronic Medical Records (EMRs) to securely receive important patient reports electronically from other participating health care settings (primarily hospitals, Home and Community Care Support Services, and independent health facilities). HRM electronically delivers medical record reports (e.g. discharge summaries) and transcribed diagnostic imaging reports from sending facilities directly into patients' charts, within a clinician's EMR. Reports sent through HRM also include [eNotifications](#). By transmitting hospital reports directly to physicians' EMRs, silos are broken down, and smooth transitions are supported across the care continuum. Further, HRM functionality and adoption have become a centrally-available and cost-effective mechanism for the secure transmission of data.

Integration with other Technology Systems

HRM integrates with OntarioMD-certified primary care EMRs to provide patient reports directly into the point of care system. Acute care sites and speciality clinics are able to send reports to primary care providers via HRM.

Implementation Considerations

Technical Requirements:

- Specification 4.1A: An EMR specification of 4.1A or higher is required for connection to HRM. It is the EMR vendor's responsibility to update your practice's EMR to version 4.1A
- Static Internet Protocol (IP) address: A static external IP address from a commercial Internet Service Provider (ISP) is required for connection to HRM. HRM infrastructure employs a network firewall that will only allow known, trusted IP addresses to connect. If your practice is unsure about whether you have a static IP address or not, you should reach out directly to your ISP for assistance.
- Basic Connectivity Testing: As part of onboarding, a tool will be provided to capture your IP address.
- Technical Contacts: Your clinic can identify the project lead at your practice and/or EMR vendor contact, or, if you have one, your third-party IT service provider who will be involved in the implementation of HRM.
- End Users: The practice must determine which clinicians will enroll in HRM.

Change Management Requirements: To support improved workflow, hospitals within an OHT should be 'live' as sending facilities for HRM and eNotification. Primary care providers within an OHT should be enabled to receive medical reports and eNotifications through HRM.

Standards Alignment

To send reports through HRM, interested specialty clinics need to build an interface following HRM's Health Level 7[®] (HL7[®]) - Fast HealthCare Interoperability Resources[®] (FHIR[®]) specification. This interface will allow facilities to create messages that follow a standard format, and can deliver their clinical report content. Acute care hospitals can also contribute data to HRM by following the Acute and Community Clinical Data Repository (acCCR) Data Input Standard that is based on HL7[®] v2.

Privacy and Security Controls

A guide on HRM is located at: [https://www.ontariomd.ca/hrmgeneral/guide/omd%20-%20hrm%20pia%20summary%20v0%201%20\(aug%2014-13\)%20final.pdf](https://www.ontariomd.ca/hrmgeneral/guide/omd%20-%20hrm%20pia%20summary%20v0%201%20(aug%2014-13)%20final.pdf).

The privacy policy is located at:

<https://www.ontariomd.ca/hrmgeneral/guide/final%20ontariomd%20hospital%20report%20manager%20privacy%20policy%20v0%203%2020130829.pdf>.

Next Steps and Contact

This asset is owned by OntarioMD. For more information, contact support@ontariomd.com.

Quick Navigation to:

Click on the icons to navigate between sections.



eNotification

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓	✓	✓		✓		✓

Functionality and Value for Ontario Health Teams

eNotification is one type of report or notification routed through OntarioMD's Health Report Manager (HRM) to participating primary care providers. eNotification enables real-time electronic communication of patient admission and discharge from hospitals, as well as transport from community paramedics to various healthcare providers such as primary care, Home and Community Care Support Services, and Public Health.

eNotifications are augmented with community information provided through Ontario Health's Client Health and Related Information System ([CHRIS platform](#)), as well as with information on complex chronic patients (where available) prior to being sent to electronic medical records (EMRs). This integration of community and primary-care patient information means that primary care providers are notified of their patients' interactions in real time, and are able to react and be proactive, aiming to reduce exacerbations of patient conditions and hospital visits.

Patients benefit from eNotifications by receiving faster follow-up care from their primary care providers. Continuity of care between acute and primary care settings is improved because primary care providers are notified of Emergency Department and in-patient unit visits sooner, and are empowered by timely and accurate patient information.

For primary care clinicians, eNotifications provide quicker access to the latest patient information (including significant interaction with acute and home care/community care), and are needed for making decisions about appropriate follow-up care. They enable clinicians to improve their ability to meet the recommended ministry guideline of follow-up with patients within seven days post-discharge. For home-care service coordination, eNotification is an excellent tool for staying informed as part of the circle of care, thereby avoiding missed appointments when patients are admitted to hospital.

eNotifications have been approved by the Ministry of Health for expansion to all hospitals in the province through Ontario Health's CHRIS platform and [HRM](#). For those hospitals not connected, this could be a deliverable for the OHT digital health plan.

Integration with other Technology Systems

HRM integrates with OntarioMD-certified EMR's, and eNotifications are an additional feature of HRM. The eNotification tool is now integrated with most hospitals in Ontario, and home-care providers are relying on hospital event notifications to implement a reliable patient treatment schedule. Primary care providers will receive eNotifications automatically as hospitals enable eNotifications through HRM.

Implementation Considerations

Technical Requirements: eNotification to home and community care requires participating hospitals to implement the eNotification Health Level 7® (HL7®) v2 Admit Discharge Transfer (ADT) specification. For notifications to primary care, HRM is a prerequisite.

Change Management Requirements: To support improved workflow, hospitals within an OHT should be ‘live’ as sending facilities for HRM and eNotification. Primary care providers in an OHT should be enabled to receive medical reports and eNotifications through HRM.

Standards Alignment

Based on HL7® v2 ADT and Observation Result (ORU) specifications.

Privacy and Security Controls

Find the HRM Privacy Impact Assessment summary here:

[https://www.ontariomd.ca/hrmgeneral/guide/omd%20-%20hrm%20pia%20summary%20v0%201%20\(aug%2014-13\)%20final.pdf](https://www.ontariomd.ca/hrmgeneral/guide/omd%20-%20hrm%20pia%20summary%20v0%201%20(aug%2014-13)%20final.pdf)

and the HRM privacy policy here:

<https://www.ontariomd.ca/hrmgeneral/guide/final%20ontariomd%20hospital%20report%20manager%20privacy%20policy%20v0%203%2020130829.pdf>

Next Steps and Contact

This asset is owned by Ontario Health and OntarioMD. For more information, contact

CHRISProgram@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Patient Referrals and Care Transitions

eReferral - Acute Care to Home and Community Care

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Specialty Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓		✓		✓	✓	

Functionality and Value for Ontario Health Teams

Direct integration with Client Health and Related Information System ([CHRIS](#)) enables hospitals to transmit electronic referrals to Home and Community Care Support Services. The eReferral channel is bi-directional, facilitating the exchange of information in two ways: Home-care services receive precise patient information from the hospital, including the planned discharged date, and the hospital receives information regarding the progress of the patient’s admission to Home and Community Care, which helps them prepare for the patient’s discharge.

This efficient exchange of administrative and clinical information supports faster and more efficient patient transitions. It reduces administrative workloads, and empowers practitioners to make care decisions based on comprehensive data. It also circumvents the issue of incomplete referrals, thereby avoiding related waste.

Integration with "Acute Care to Home and Community Care" is built on the Health Level 7® (HL7®) v2 REF specification. There is a planned extension of the HL7® v2 REF specification for Bundled Care sites to cover registration needs for Bundled Care patients.

Integration with other Technology Systems

Various Hospital Information System (HIS) vendors have implemented the eReferral HL7® v2 REF interface with their electronic medical record (EMR), either directly or through a system-integration engine.

Implementation Considerations

Technical Requirements: System integration work is required to implement a system-to-system interface with each participating provider.

Change Management Requirements: Implementation requires a redesign of the patient-intake workflow to leverage the electronic data flow.

Standards Alignment

The HL7® v2 REF specification was developed with input from the Provincial eReferral working group (2012-2013). The provincial Fast HealthCare Interoperability Resources® (FHIR®) eReferral standard has been in place for a year, and is a foundational component of the eReferral program.

Privacy and Security Controls

New providers will be onboarded based on a participation agreement that includes a joint Privacy Impact Assessment/Threat Risk Assessment exchange with the Ontario Health deployment team.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact CHRISProgram@ontariohealth.ca. Hospitals can contact the deployment team to get in the pipeline.

Quick Navigation to:

Click on the icons to navigate between sections.



eReferral - Emergency Medical Services (EMS) to Home Care

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓					✓		✓

Functionality and Value for Ontario Health Teams

The integration between Client Health and Related Information System ([CHRIS](#)) and an Emergency Medical Services (EMS) point-of-care system allows most EMS to notify Home and Community Care Support Services when they perform a patient transport. This is enabled via the eNotification functionality.

Alternatively, EMS may determine that the patient does not require emergency services, but instead needs to be referred to Home and Community Care for a home-care assessment and specialized home-care services. In these cases, EMS can send an electronic referral to Home and Community Care.

Integration with other Technology Systems

The eReferral (Health Level 7® (HL7®) v3 REF specification) from Community Paramedics to Home and Community Care has been implemented with EMS organizations currently supported by the InterDev system vendor. The specification is also open for implementation with other providers (e.g., Ornge).

Standards Alignment

The provincial Fast HealthCare Interoperability Resources® (FHIR®) eReferral standard has been in place for a year, and is a foundational component of the eReferral program.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



eReferral - Primary Care to Home Care

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓	✓	✓		✓		✓

Functionality and Value for Ontario Health Teams

Primary care providers have the opportunity to refer their patients to specialized home-care services coordinated by home and community-care organizations. Primary care providers benefit from electronic receipt confirmation, status updates, and referral-outcome notifications right in their electronic medical record (EMR), eliminating missed or lost referrals. At the same time, home and community-care providers benefit from receiving patient clinical information electronically, thereby reducing data-entry time required to document patient records, and eliminating registration errors.

Both types of providers benefit from a streamlined electronic communication process that enables the exchange of clinical documents as part of the eReferral workflow, and reduces “back and forth” communication with patients and their families. Time is saved, and practitioners are empowered to make care decisions based on comprehensive patient information. This accuracy and efficiency means that patients get the right care faster.

The next iteration of the eReferral Fast HealthCare Interoperability Resources® (FHIR®) interface will include support for the following FHIR® Release 4 functionalities:

- Acute-care referrals to Home and Community Care; and
- Acutecare referrals to OHT Registration.

Integration with other Technology Systems

“eReferral from Primary Care to Home and Community Care” has been integrated with a popular eReferral platform and with leading EMRs that offer the Referral toolbar. The electronic interface is also open to integrations with other vendors/EMRs, since it is aligned with the eReferral Provincial standard.

Implementation Considerations

Technical Requirements: System-integration work is required to implement a system-to-system interface with each participating provider. In the case of primary care, the integration can be funneled through the eReferral platform integrated with their EMR.

Change Management Requirements: Implementation requires a redesign of the patient-intake workflow to leverage the electronic data flow.

Standards Alignment

The “eReferral Primary care to Home and Community Care” pathway is built on the Health Level 7® (HL7®) FHIR® Release 4 standard. The provincial FHIR® eReferral standard has been in place for a year, and is a foundational component of the eReferral program.

Privacy and Security Controls

New providers will be onboarded based on a participation agreement that includes a joint Privacy Impact Assessment/Threat Risk Assessment exchange with the Ontario Health deployment team.

Next Steps and Contact

This CHRIS interface asset is owned by Ontario Health. For more information, contact CHRISProgram@ontariohealth.ca. The Ontario eServices Program managed under joint leadership from the eHealth Centre of Excellence and the eConsult Centre of Excellence works with regions to support the primary care to CHRIS connection and can be reached here: eReferral@ehealthce.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



eReferral - Primary Care to Specialist

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓			

Functionality and Value for Ontario Health Teams

eReferral digitizes the process for health care providers to request care, service, or support on behalf of their healthcare client. Referral status and appointment details are updated directly in a number of primary care electronic medical record (EMR) solutions. Patients receive automatic email notifications regarding their referral status and appointment information. For patients, this means faster and more efficient access to specialty care and services, and increased involvement and transparency during the referral process. For providers, it enables the targeting of referral destinations for target patient populations, and reduces the administrative burden booking appointments and tracking down lost and incomplete referrals.

Integration with other Technology Systems

End-to-end referral flows are currently supported via integrations with a number of OntarioMD-verified EMR systems, Ontario Health’s Client Health and Related Information System ([CHRIS](#)), and other eReferral and central intake solutions. Additional integrations are underway, including integrations with additional hospital information systems, eReferral platforms, and client-management systems used in the mental-health and addiction sector.

Implementation Considerations

Change Management Requirements: Implementation facilitators are required to support the identification of priority pathways and clinical workflows for those pathways. They should also identify, as well, clinical and organizational champions.

Standards Alignment

A standards-based approach is used to support the multi-vendor eReferral landscape in Ontario, and is a core component of the eServices program.

Privacy and Security Controls

Auditing features are available for privacy and security.

Next Steps and Contact

This program is managed by the Ontario eServices Program under joint leadership from the eHealth Centre of Excellence and the eConsult Centre of Excellence and can be contacted here: eReferral@eHealthce.ca. For more information on regional pathways and deployment email the [Ontario Health Regional Digital contacts](#).

Quick Navigation to:

Click on the icons to navigate between sections.



Health Care Provider Identity, Authentication and Authorization Services

ONE ID and Federated Identity Service

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

ONE ID is Ontario Health's provincial health care provider identity platform, providing identity validation, authorization and authentication services to ONE ID protected health care systems. The ONE ID program includes the following:

1. Identity, Authorization and Authentication (IAA) Service – Use ONE ID’s online tool and processes to issue credentials for access digital services offered by Ontario Health and other health-solution providers.
2. Federated Identity Services – For larger organizations, federation provides the ability to use an organization’s existing credentials to log into Ontario Health services, such as, the clinical viewer.
3. ONE ID for Service Owners – Integrate your healthcare service or application to enable ONE ID IAA to protect your applications.

ONE ID IAA Service

ONE ID provides an online tool to perform the identity validation, authorization and authentication of health care professionals and their staff through established processes and standards.

A ONE ID credential offers the following: access to a variety of Ontario Health enabled services, a trusted identity solution, multifactor authentication and online profile management.

Registration for a ONE ID account can be achieved one of two ways:

1. In-Person/Virtual via Registration Agent – Registrants visit with a ONE ID approved registration agent to obtain their ONE ID account.
2. Online College-Based – Physicians can request a ONE ID account once they log in to the College of Physicians and Surgeons of Ontario website.

Implementation Considerations

Technical Requirements: ONE ID credentials do not have minimum technical requirements, as it is a web based service.

Change Management Requirements: OHTs can participate in the ONE ID IAA service by setting up Local Registration Authorities (LRAs) to perform the online registration and service enrolment activities for their staff. Service sponsorship and legal agreements are required prior to implementation.

ONE ID Federated Identity Services

Enables users from trusted organizations to access services, such as the provincial clinical viewer, by leveraging their organization's login credentials.

Organizations who wish to become a trusted Identity Provider must be able to:

- Securely authenticate their users and manage their credentials;
- Meet the privacy and security standards; and
- Support communicating/receiving security assertion markup language (SAML) and/or open authorization (OAuth) information (service dependent).

Implementation Considerations

Technical Requirements: ONE ID technical specifications for both SAML and OAuth/OpenID Connect (OIDC) are available at <https://ehealthontario.on.ca/en/health-care-professionals/one-id-federation> and <https://ehealthontario.on.ca/en/standards/one-id-openid-connect-specification>.

Change Management Requirements: System integration work, such as, development and testing is required to integrate with ONE ID SAML and/or OAuth federated services.

ONE ID for Service Owners

Application owners can protect their services with ONE ID. In this way, the capabilities of the ONE ID IAA service would be enabled. ONE ID removes the complexities of trying to integrate a service, independently, across various health care sectors and organizations, by taking advantage of the existing registration agent network, accounts and organizations already using ONE ID.

Implementation Considerations

Technical Requirements: ONE ID technical specifications for OAuth/OIDC are available at <https://ehealthontario.on.ca/en/standards/one-id-openid-connect-specification>.

Change Management Requirements: System owners are responsible for defining any service entitlements. System integration work, such as, development and testing is required to integrate with ONE ID OAuth/OIDC.

Privacy and Security Controls

All privacy and security requirements related to provincial clinical viewer onboarding must be followed.

Next Steps and Contact

This asset is owned by Ontario Health. For more information about the ONE ID program please see:

- IAA Service: <https://ehealthontario.on.ca/en/health-care-professionals/one-id>
- Federated Identity Services: <https://ehealthontario.on.ca/en/health-care-professionals/one-id-federation>
- For Service Owners: <https://ehealthontario.on.ca/en/health-care-professionals/one-id-application-federation>.

Quick Navigation to:

Click on the icons to navigate between sections.



Provincial Registries

Provincial Client Registry (PCR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The Provincial Client Registry (PCR) allows identity records created by multiple health-information systems to be associated with one another through a single patient identifier, enabling the creation of an integrated Electronic Health Record (EHR). This facilitates the sharing of clinical information across all points of service, and enables healthcare providers to search for patient records created at organizations across the province. The result is a more complete picture of a patient’s health, and reduced errors associated with patient misidentification.

PCR currently obtains its demographic data from the Ministry of Health’s Registered Persons Database, as well as many other participating health sites across the province. The PCR service recently implemented the Fast HealthCare Interoperability Resources® (FHIR®) Release 4 query, and plans a future release for the FHIR® update, and notification web services to support standard EHR integrations.

Integration with other Technology Systems

Ontario Health services that are integrated with PCR include Diagnostic Imaging Common Service (DI-CS), [Digital Health Drug Repository \(DHDR\)](#), Consent Management Technology Asset (CMTA), Monitoring Control & Technology Program (MCTP), [ConnectingOntario](#), and the [Wait Time Information System \(WTIS\)](#).

Implementation Considerations

Technical Requirements: Technical Requirements/Prerequisites for PCR can be found at <https://ehealthontario.on.ca/en/health-care-professionals/provincial-client-registry>.

Change Management Requirements: Implementation requirements include all tools, templates, and training materials needed for successful integration, such as the site evaluation template, gap/fit analysis, sample project plan, agreements and schedules, network connectivity guide, interface mapping tools, data consumption and acquisition on-boarding guides, testing guide, go-live readiness, and operational support guides.

Standards Alignment

PCR uses unique identifiers to link records (e.g., health-card number, medical-record number, date of birth, and other demographic information), and serves as the authoritative source for

patient identity by establishing a common identity across all points of service. The registry encourages ongoing data quality of source systems by providing contributors with reports and tools to remediate data quality issues.

Privacy and Security Controls

As PCR is in the EHR, specific privacy requirements related to collection, use and disclosure in the EHR must be followed. All privacy and security requirements related to service onboarding must be followed.

Next Steps and Contact

This asset is owned by Ontario Health. Authorized health care providers access PCR via the clinical viewers ([ClinicalConnect](#) or [ConnectingOntario](#) clinical viewers) to support retrieval of their patient’s electronic health record. Access can also be gained via the eHealth portal for those without access to the provincial clinical viewers, or in some cases via the hospital information system (HIS) where the hospital already has a direct integration in place with the PCR. For more information, go to <https://ehealthontario.on.ca/en/health-care-professionals/provincial-client-registry>.

Quick Navigation to:

Click on the icons to navigate between sections.



Provincial Provider Registry (PPR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

The Provincial Provider Registry (PPR) facilitates the unique and accurate identification of regulated organizations and provider persons who offer health services in Ontario, or who participate in the collection, use, and/or disclosure of personal health information (PHI). PPR is the authoritative source of information that aggregates provider identity data from the Ministry of Health’s Corporate Providers Database and from regulatory colleges (under the Regulated Health Professions Act or RHPA) to provide a comprehensive provider profile. It enables the identification of regulated provider persons and organizations that provide health services in Ontario, including details such as licensing status, specialties, and practice locations.

PPR supports users by facilitating their electronic referral workflows, and helps them keep their local provider dictionaries current. Searching for providers in the PPR is quick, easy, and accurate. Less time is spent manually obtaining and updating information, leading to increased efficiency and cost savings. The PPR service recently implemented the Fast HealthCare Interoperability Resources® (FHIR®) Release 4 query, and plans a future release for the FHIR® update. It also plans to release notification web services to support standard electronic health record (EHR) integrations.

Integration with other Technology Systems

Examples of Ontario Health services that are integrated with PPR include User Registry (Authentication) and Monitoring Control & Technology Program (MCTP).

Implementation Considerations

Technical Requirements: Technical Requirements/Prerequisites for PPR can be found at <https://ehealthontario.on.ca/en/support/provincial-provider-registry>.

Change Management Requirements: Implementation requirements include all tools, templates, and training materials needed for successful integration, such as the site-evaluation template, gap/fit analysis, sample project plan, agreements and schedules, network connectivity guide, interface mapping tools, data consumption and acquisition on-boarding guides, testing guide, go-live readiness, and operational support guides.

Privacy and Security Controls

Specific privacy requirements related to collection, use and disclosure of data in the PPR must be followed. All privacy and security requirements related to service onboarding must be followed.

Next Steps and Contact

This asset is owned by Ontario Health. For more information
<https://ehealthontario.on.ca/en/health-care-professionals/provincial-provider-registry>.

Quick Navigation to:

Click on the icons to navigate between sections.



Provider Communication/Consultation

ONE Mail/ONE Pages

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

ONE Mail uses state-of-the-art encryption and malware filtering to enable Ontario healthcare providers to securely transmit personal health information (PHI), personal information (PI), and other data within the province’s healthcare community. It can be beneficial to service providers as it allows communication of patient information securely between team members and other hospitals when there is a transfer of care and repatriation. Users can access email, and contacts from their own office, their smartphone or anywhere else using web-based access. It is the preferred secure email system for a large and growing number of clients, including all major hospitals in Ontario.

ONE Mail has two offerings:

- ONE Mail Partnered:** An encrypted email service for large organizations. It uses an organization's existing email structure, and routes their mail through Ontario Health’s infrastructure to securely send PHI or PI to other ONE Mail users.
- ONE Mail Direct:** A secure email service designed specifically for small organizations and individual healthcare professionals. *Note: ONE Mail Direct will be retired as of fall 2021 and an independent vendor has been selected to provide an equivalent service to ONE Mail Direct clients who wish to continue to participate in the ONE Mail Partnered Network. After fall 2021, only the participants on the ONE Mail partnered Network will be listed in or have access to the ONE Pages directory below.*

ONE Pages (the ONE Mail Directory) is a directory service (i.e., address listing) that facilitates communication among healthcare professionals. It is available to all registered users of organizations who receive services from Ontario Health, and is the authoritative list of individuals who can securely send and receive PHI through ONE Mail.

Integration with other Technology Systems

ONE Mail uses [ONE ID](#) for identity management. Mailboxes can be used with numerous desktop email applications (such as Outlook), and various browsers and mobile devices. In desktop software such as Outlook, ONE Pages is available through the global address list (GAL).

Implementation Considerations

Technical Requirements: ONE ID credentials or federated access is required to log in using a clinical information system. Minimum browser and system-configuration requirements apply.

Change Management Requirements: Legal agreements are required prior to implementation.

Next Steps and Contact

This asset is owned by Ontario Health. For more information or to enroll for ONE Mail partnered or for more information, email onemailinfo@ontariohealth.ca or go to <https://ehealthontario.on.ca/en/health-care-professionals/one-mail-partnered>.

Quick Navigation to:

Click on the icons to navigate between sections.





Key Objective:
**System Self-
Management**

System Self- Management

What does success look like?

In the ideal state, OHTs have the ability to manage themselves and improve their performance through advanced analytics and strong information-management practices. They have the information to facilitate population health management and optimize measurement and efficiency of reporting.

The path forward:

To help Ontario Health Teams meet this goal, the ministry and Ontario Health are developing new and innovative models for safely and appropriately using data for planning. Tools exist or are under development that are intended to help providers better understand their patient populations and how they can be proactive in their care. In addition, numerous reports are regularly generated that can help Ontario Health Teams understand their current state.

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System Self-Management

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[Screening Activity Report \(SAR\)](#)

[Wait Times Information System \(WTIS\)](#)

[Clinical Resource](#)

[Drug Formulary](#)

[eClaims](#)

[Electronic Canadian Triage and Acuity Scale \(eCTAS\)](#)

[Indigenous Relationship and Cultural Safety Courses \(eLearning\)](#)

[OntarioMD Privacy and Security Training Module](#)

[Public Digital Health Reporting](#)

[OntarioMD Reports](#)

[Sites Connected to the Provincial Viewers](#)

Analytics for Practice and System Planning

Insights4Care Dashboard (i4C)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
		✓					

Functionality and Value for Ontario Health Teams

The i4C Dashboard (formerly known as the Electronic Medical Record (EMR) Quality Dashboard) is an EMR-integrated tool that provides clinicians with a real-time view of how their practice population is performing across an array of primary-care indicators, and that enables them to take immediate action based on that data. This tool helps clinicians proactively monitor and screen their patient population, and supports them in improving the quality and consistency of EMR data integration with other Technology Systems.

The i4C Dashboard is currently available through two EMR vendors.

Implementation Considerations

Technical Requirements: See <https://www.ontariomd.ca/emr-certification/library/specifications>.

Change Management Requirements: The i4C Advisory Service offers change-management support delivered by OntarioMD’s EMR experts and quality-improvement advisors to assist clinician practices in their adoption and use of the i4C Dashboard. They also help clients understand and maximize the impact of data-quality best practices, and enhance clinical and practice management.

Standards Alignment

The i4C Dashboard complies with the *Digital Health Access, Privacy and Security Policy* and the *Clinical Systems Policy*.

Next Steps and Contact

This asset is owned by OntarioMD. For more information, contact support@ontariomd.com.

Quick Navigation to:

Click on the icons to navigate between sections.



iPort and iPort Access

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓					

Functionality and Value for Ontario Health Teams

iPort and iPort Access are platforms that give healthcare decision-makers access to powerful business-intelligence tools for Cancer and Access-to-Care data, allowing them to make better-informed business decisions.

- iPort:** Provides secure access to the Provincial Drug Reimbursement Program, Systemic Treatment-Quality Based Program (QBP) (formerly Systematic Treatment Funding Model (STFM)), Regional Cancer Program, Cancer Surveillance, Pathology, Radiation, Systemic, Specialized Services Oversight, Symptom Management, Psychosocial Oncology, and Palliative data.
- iPort Access:** Provides secure access to Wait Times for Emergency Room (ER), Surgical Efficiency Target Programs (SETP), Surgery, and Diagnostic Imaging data.

Report visualization is available on both platforms, enabling trends to be identified. Users can customize reports to suit their needs, and drill down on specific areas for further analysis.

Implementation Considerations

Technical Requirements: iPort and iPort Access are integrated with [ONE ID](#). Users require a ONE ID account.

Change Management Requirements: Implementation requirements include ONE ID registration, a Local Registration Authority (LRA) who has been delegated by the CEO of your organization, and user training.

Privacy and Security Controls

The platform has robust security controls and audit/logging.

Next Steps and Contact

This asset is owned by Ontario Health. For more information on iPort contact OH-CCO_Informatics@ontariohealth.ca and for more information on iPort Access contact atc@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Ontario Renal Reporting System (ORRS)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓							

Functionality and Value for Ontario Health Teams

The Ontario Renal Reporting System (ORRS) is a data-collection and reporting platform for kidney disease. It is purpose-built as per the Ontario Renal Network's Ontario Renal Plan. Data collected and reported through ORRS is used for funding, capacity planning, and performance management. It enables providers to better leverage Quality Based Proposal (QBP)-based funding, and understand their patients' journeys throughout the kidney-care experience.

ORRS allows for manual and file-based data entry. In the future, it will be moved to the cloud to improve availability and performance.

Integration with other Technology Systems

ORRS is integrated with [ONE ID](#).

Implementation Considerations

Technical Requirements: Must have a ONE ID account.

Change Management Requirements: Ontario Health's implementation team can consult and guide OHTs through the integration process. If the OHT chooses file-based data entry, some customization of their information system may be required.

Privacy and Security Controls

All users of ORRS sign an agreement relating to use of the solution.

Next Steps and Contact

This asset is owned by Ontario Health. For more information on the Ontario Renal Reporting System contact ORRSsupport@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Screening Activity Report (SAR)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓		✓					

Functionality and Value for Ontario Health Teams

The Screening Activity Report (SAR) uses Ontario Health’s (formerly Cancer Care Ontario) eReports web portal to facilitate the early detection of colorectal, breast, and cervical cancer. It provides patient enrollment model physicians with a comprehensive screening report and a dashboard that displays the screening status of patients, and supports follow-up discussions. Reports are refreshed monthly for all patient enrollment model primary care physicians. A community version of SAR is also available to support Indigenous cancer screening.

Further integrations are planned for the SAR with primary care Electronic Medical Records (EMRs).

Integration with other Technology Systems

SAR integrates with the [InScreen](#) platform and [ONE ID](#) for Identity Management. ONE ID registration is required for the primary care physician or their delegate to access their SAR. There is also the potential to integrate it with primary-care EMRs.

Implementation Considerations

Technical Requirements: ONE ID is used for identity and access management to SAR.

Next Steps and Contact

This asset is owned by Ontario Health. Contact OH-CCO_pmcs_requests@ontariohealth.ca for more information.

Quick Navigation to:

Click on the icons to navigate between sections.



Wait Times Information System (WTIS)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓						

Functionality and Value for Ontario Health Teams

The Wait Times Information System (WTIS) is a key component of Ontario’s strategy to manage and improve wait times, and is mandated for OHTs performing surgical or diagnostic-imaging procedures. It is a web-based system dedicated to collecting wait-time data from acute-care facilities across Ontario (hospitals, independent health facilities, and surgeons’ offices). Data is also captured from the Canadian Institute for Health Information’s “National Ambulatory Care Reporting System” (NACRS), and used to monitor emergency-room performance in near real-time. WTIS supports manual data entry by facilities, as well as automated data capture from other information systems.

Wait-time data provides critical insight into health-system performance, and is published monthly in a variety of performance reports available to stakeholders (e.g., Ministry of Health, hospitals, and surgeons’ offices). Data for surgery, diagnostic imaging, and emergency rooms are publicly reported on the Health Quality Ontario (HQO) website, and is leveraged to improve access, efficiency, and quality of services for Ontarians. Clinicians use the information to prioritize access to services and to plan a clinical course of care, and analysts use it to develop evidence-based recommendations for health-system planners.

Continued improvements are planned with regards to data quality automation tools, reporting capabilities, and integration with [ONE ID](#). Enhancements are also planned for the integration platform.

Integration with other Technology Systems

WTIS is integrated with the Provincial Client Registry and Hospital Information Systems (HIS).

Implementation Considerations

Change Management Requirements: Organizations should identify coordinators who will implement "train the trainer" models for ongoing data reporting, data quality, user registration, and data-compliance operations. Organizations will also require clinical and back-office systems and resources for reporting required data, and expanding the collection of WTIS data.

Standards Alignment

HIS integration complies with the Health Level 7® (HL7®) V2 messaging standard.

Privacy and Security Controls

All organizations collecting information on WTIS are required to sign several agreements, including a WTIS Agreement, Data Sharing Agreement, and an Acceptance of End-User License Agreement.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact atc@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Clinical Resource

Drug Formulary

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability / Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓					

Functionality and Value for Ontario Health Teams

Accessed through the [Cancer Care Ontario \(CCO\) public website](#), Drug Formulary is an online public resource that provides information regarding the safe use of chemotherapy drugs. It serves as a reference for clinicians, administrators, and patients, and is highly relied upon as the trusted source for best practices, standardized language, and the safe use of cancer drugs in Ontario. Content is maintained by Ontario Health formulary pharmacists.

New enhancements are planned to support improved usability with drug regimen information.

Integration with other Technology Systems

Drug Formulary is integrated with the Oncology Patient Information System (OPIS), which is used for chemotherapy treatment at several high-volume systemic therapy hospitals across the province. Drug Formulary is also integrated with the CCO eClaims Resource Library and notification is received whenever an update on any New Drug Formulary Program (NDFP) funding policy is uploaded. The formulary pharmacists use these notifications to update the documents in the Drug Formulary system.

Next Steps and Contact

This asset is owned by Ontario Health. To access the Drug Formulary go to <https://www.cancercareontario.ca/en/cancer-treatments/chemotherapy/drug-formulary>.

For more information, [email the Drug Formulary Team](#) or contact OH-CCO_DrugFormulary@ontariohealth.ca directly.

Quick Navigation to:

Click on the icons to navigate between sections.



eClaims

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓							

Functionality and Value for Ontario Health Teams

eClaims is a web-based application that facilitates the adjudication of patient enrolments and treatment claims for intravenous (IV) cancer drugs funded by the New Drug Funding Program. It uses a digital rule-based solution to automatically enroll and adjudicate cancer drugs against clinically validated standards. Adjudication is in real-time, with some funding decisions requiring manual adjudication by design. eClaims is deployed in over 90 hospitals in Ontario, and has approximately 800 users (pharmacists, pharmacy technicians, physicians, finance-department staff, and hospital administrators). It currently processes approximately 2,500 enrollments and 27,000 treatment requests per month. 80% of claims are adjudicated automatically using eClaim’s inRule technology.

Benefits of eClaims include accelerated case-by-case approvals, and the application of clinically approved standards for the provision of cancer drugs to patients. eClaims also promotes improved transparency regarding drug adjudication and patient-enrolment policies, which ultimately improves data quality. Patient information is centralized (enrolments, treatments, supporting clinical documentation, etc.), and can be securely accessed by providers within the circle of care. Finally, eClaims offers excellent reporting functionality. It provides descriptive self-service operational reports to inform quality-of-care analysis, evidence-informed analysis, and the linking of data to other administrative datasets.

Work is currently underway to expand the eClaims tool to support additional oncology-based programs, i.e. positron emission tomography (PET) and chimeric antigen receptor (CAR)-T Cell Therapy. A Fast HealthCare Interoperability Resources® (FHIR®)-based solution, as an additional eClaims integration option for non-Oncology Patient Information System (OPIS) sites, is currently being assessed. There is opportunity to expand eClaims beyond oncology programs for blood services, take-home cancer drugs, and for lab and genetic data.

Integration with other Technology Systems

eClaims integrates with the OPIS and with the Computerized Provider Order Entry (CPOE) of some Hospital Information System (HIS) solutions using Health Level 7® (HL7®) v3. In addition to the HL7® standards that are in place today, non-OPIS CPOE hospitals have requested a FHIR® interoperability option to improve integration between eClaims and their CPOE.

Implementation Considerations

Change Management Requirements: eClaims is integrated with the OPIS CPOE. For Non-OPIS CPOE, there are three eClaims data-submission options currently available for hospitals: HL7®,

Data Submission Portal (DSP), and manual data submissions. Sites migrating to non-OPIS CPOE as part of the OPIS Transition Project have requested a FHIR® solution from Ontario Health as an improved interoperability option for eClaims integration.

Privacy and Security Controls

eClaims is included in regular audit reviews each fiscal year as a financial system that is used for the adjudication of a large volume of cancer drugs with a high dollar value.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact [OH-CCO InfoPDRP@ontariohealth.ca](mailto:OH-CCO_InfoPDRP@ontariohealth.ca).

Quick Navigation to:

Click on the icons to navigate between sections.



Electronic Canadian Triage and Acuity Scale (eCTAS)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
	✓	✓					

Functionality and Value for Ontario Health Teams

The Canadian Triage and Acuity Scale (CTAS) provides well-established guidelines used by emergency-department (ED) nurses to triage patients. The triage process assesses how urgently patients need to be seen by a physician, and helps define the order in which they should be seen.

Ontario’s electronic version of CTAS (eCTAS) is a cloud-based triage system that nurses can access online using their browser or via an interface with their Hospital Information System (HIS). It helps improve patient safety by ensuring the consistent application of CTAS guidelines across the province, and by making current public-health information readily available to triage nurses (i.e., provincial updates on infectious-diseases, country precautions, screening questions, and region-specific notifications). eCTAS provides decision support, and acts as a key enabler of the evolution towards live ED reporting, as it receives data immediately after the triage event (patient volumes, presenting complaints, triage scores, vitals, and clinical documentation).

Research shows that eCTAS offers significant value, improving triage accuracy by 16%. It is currently used by over 1,000 front-line nurses in emergency departments across the province, and is available to OHTs with an emergency-care offering that is staffed with triage nurses trained in the application of CTAS guidelines.

Ontario Health continues to improve eCTAS functionality with the goal of it becoming the standard solution for infection control and screening within Ontario’s health system. The clinical algorithm and triage assessment process are continually being enhanced, and hospitals will soon be able to view aggregated clinical data in a dashboard. New triage data elements are also being made available to downstream data consumers.

Integration with other Technology Systems

eCTAS is fully provisioned by Ontario Health, and can be integrated with existing hospital systems. It was designed to accommodate several integration options during onboarding:

- **Option 1 – Application:** The ability to use the eCTAS website without any system integration. Users access eCTAS using their browser. They can perform infection screening, triage assessment, and print out the triage record.
- **Option 2 – Application-complex:** The ability to use the eCTAS website with HIS integration. Features are in addition to the above option. Patient triage information can flow bidirectionally between eCTAS and the hospital’s HIS.

- **Option 3 – Web service:** The ability to use eCTAS’s decision-support clinical algorithm via an Application Programming Interface (API) using the HIS.
- **Option 4 – Certification:** The eCTAS decision-support clinical algorithm as well as the triage data set is built into the hospital triage system. The triage record is submitted to eCTAS.

Implementation Considerations

Technical Requirements: As eCTAS supports several integration options, technical requirements can vastly differ based on the option selected. We are integrated with [ONE ID](#). Application or Application-Complex OHT sites would log into eCTAS with a Google Chrome browser using their ONE ID account.

Change Management Requirements: An OHT with emergency care services (e.g., urgent care centre, emergency department, etc.) interested in eCTAS implementation should contact Cancer Care Ontario’s (CCO) Access to Care team to enquire about eligibility, availability, and requirements for implementation. These requirements and level-of-change management efforts can vary significantly based on the hospital’s selected clinical and technical integration.

Standards Alignment

eCTAS aligns with the following Ontario Health policies: Digital Health Information Exchange Policy; Digital Health Investment and Value-for-Money Policy; Digital Health Access, Privacy and Security Policy; Digital Health Reporting and Performance Policy.

Privacy and Security Controls

There are number of agreements that need to be signed as a part of onboarding, including the Participation Health Information Network Provider (HINP) Agreement, Data Sharing Agreement, and Acceptance of End-User License Agreement.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, contact eCTAS@ontariohealth.ca.

Quick Navigation to:

Click on the icons to navigate between sections.



Indigenous Relationship and Cultural Safety Courses (eLearning)

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓	✓	✓	✓	✓	✓

Functionality and Value for Ontario Health Teams

In 2015, Ontario Health, Cancer Care Ontario launched the Indigenous Relationship and Cultural Safety (IRCS) courses, which stress the importance for frontline healthcare professionals to understand and apply First Nations, Inuit and Métis cultural safety to provide effective person-centred care. The courses address a key recommendation from the recent Truth and Reconciliation Commission of Canada report, to provide skills-based training in cultural competency, conflict resolution, human rights, and anti-racism.

Since the Indigenous Relationship and Cultural Safety courses launched in 2015, there have been over 47,000 course enrollments and over 38,000 course completions, which is approximately an 80% completion rate. This self-learning program has been certified by the College of Family Physicians of Canada for up to 19.5 Mainpro+ credits. The courses are available free of charge and available at <http://elearning.cancercare.on.ca>. Online courses are available to help healthcare workers and students improve the healthcare experience of indigenous patients. Registration is required.

Course offerings and content are updated on a regular basis.

Implementation Considerations

Technical Requirements: IRCS courses are accessible using standard desktop/laptop/mobile platforms.

Change Management Requirements: Free course registration is required.

Next Steps and Contact

This asset is owned by Ontario Health. For more information, go to <http://elearning.cancercare.on.ca>.

Quick Navigation to:

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OntarioMD Privacy and Security Training Module

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓		✓					

Functionality and Value for Ontario Health Teams

Clinicians, as health information custodians (HICs) under *the Personal Health Information Protection Act* (PHIPA), need to be kept up to date on this privacy legislation and educate themselves and their staff on how to fulfill their obligations to protect Personal Health Information (PHI) on an ongoing basis. OntarioMD, known across the health sector as OMD, has offered an online Privacy and Security Training Module to meet this need since the fall of 2017. The training module offers education on key topics for clinicians in OHTs such as safeguarding PHI from breaches and security incidents, and how to comply with PHIPA obligations. The training is more important than ever as clinicians move to quickly adopt new virtual care tools. Family physicians earn 2 Mainpro+ credits for completing the training. Specialists can claim 2 credits/hour under the Royal College Maintenance of Certification (MOC) Program as a Section 2: Personal Learning Project.

Close to 4,000 clinicians and their practice staff have completed the training, which is available in both French and English at [OntarioMD.ca](https://www.ontariomd.ca). The module is updated with the latest information and can be accessed from any internet-connected device. OMD continues to develop new collateral that cover important privacy and security topics. The availability of new resources is shared with clinicians through OMD’s Digital Health eTips newsletters.

Implementation Considerations

Technical Requirements: Accessible using any internet-enabled device.

Change Management Requirements: Registration for an [OntarioMD.ca](https://www.ontariomd.ca) account is required.

Next Steps and Contact

This asset is owned by OntarioMD. For more information go to <https://www.ontariomd.ca/products-and-services/privacy-and-training-resources>.

Quick Navigation to:

Click on the icons to navigate between sections.



Public Digital Health Reporting

OntarioMD Reports

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
		✓					

Functionality and Value for Ontario Health Teams

OntarioMD makes status reports available on the uptake and active use of their several featured products. As these products are widely available to OHTs and the clinicians within them, it is strongly recommended that providers take advantage. These reports can be used by OHTs to assess and monitor their current state and identify any gaps or opportunities that may exist.

OntarioMD Stakeholder Report: This interactive OntarioMD Report will enable you to analyze and present data in different ways, including looking at usage by region and sub-region, applying filters based on specific areas of interest, and identifying trends visually. The PDF version of the reports will still be available on the [Publications](#) page. Access at: <https://www.ontariomd.ca/pages/ontariomd-stakeholder-report.aspx>.

Sending Facilities Live on Health Reports Manager (HRM): This report lists HRM sending facilities, including hospitals and specialty clinics across Ontario. Sending facilities are generally listed by individual site if they contribute to HRM from multiple locations (e.g., Niagara Health System). In some cases, they are listed as one facility, the hospital or clinic corporation sending reports from multiple locations. Sending facilities will, at times, update the report types they send through [HRM](#).

More sending facilities means that more data is flowing between sending facilities and primary care providers. The number and types of reports indicate the size and scope of this data flow. Continued work between sending facilities in an OHT to standardize reports makes it easier for receiving providers to understand, categorize, and file into the Electronic Health Record (EHR) system. HRM Report standardization and categorization is one of the foundational pieces of work that must be done before physicians can integrate their Electronic Medical Record (EMR) instances. Access at: <https://www.ontariomd.ca/products-and-services/health-report-manager/sending-facilities>.

New Contributors to HRM: OntarioMD also provides a listing of facilities and new reports being contributed via HRM, software vendors who will soon be able to send reports through their systems, and upcoming hospital migrations. For details, go to <https://www.ontariomd.ca/products-and-services/health-report-manager/coming-soon>.

Quick Navigation to:

Click on the icons to navigate between sections.



Sites Connected to the Provincial Viewers

Regional Availability				
Central	East	Toronto	North	West
✓	✓	✓	✓	✓

Sector Availability/Applicability							
Speciality Care	Acute	Primary care	Community Service Sector	Mental Health and Addictions	Home Care	Long Term Care	Social/Municipal Services
✓	✓	✓					

Functionality and Value for Ontario Health Teams

Onboarding to view, data contribution where applicable, and meaningful use of the data in the provincial clinical viewers are some of the easiest ways that OHTs can evolve their digital maturity while improving patient care and system efficiency. Understanding the uptake of the provincial clinical viewers by health service providers in an OHT or given geography is the first step towards a gap analysis. There are several reports that are updated frequently, and freely available for OHT consumption.

Acute Care Clinical Information available via the Provincial Clinical Viewers:

<https://ehealthontario.on.ca/connectingontario-data-summary/index.html>

Home and Community Care Information available via the Provincial Clinical Viewers:

https://ehealthontario.on.ca/connectingontario-data-summary/ccac_data_summary.html

Ontario Laboratories Information Systems Data Contributors:

<https://ehealthontario.on.ca/files/public/support/DataContributorsOLIS.pdf>

Information Available on dispensed medications through the Digital Health Drug Repository:

https://ehealthontario.on.ca/connectingontario-data-summary/DHDR_data_summary.html

Diagnostic Imaging Common Service Data Contributors:

https://ehealthontario.on.ca/connectingontario-data-summary/DICS_data_summary.html

Organizations Viewing Data from the Acute and Community Clinical Data Repository (acCDR):

https://ehealthontario.on.ca/connectingontario-data-summary/Sites_Viewing_Connecting_Ontario.html

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Click on the icons to navigate between sections.

