

Ministry of Health

# Data and Digital Supports for OHTs

Greg Hein, Assistant Deputy Minister,  
Digital Health Division

# Purpose

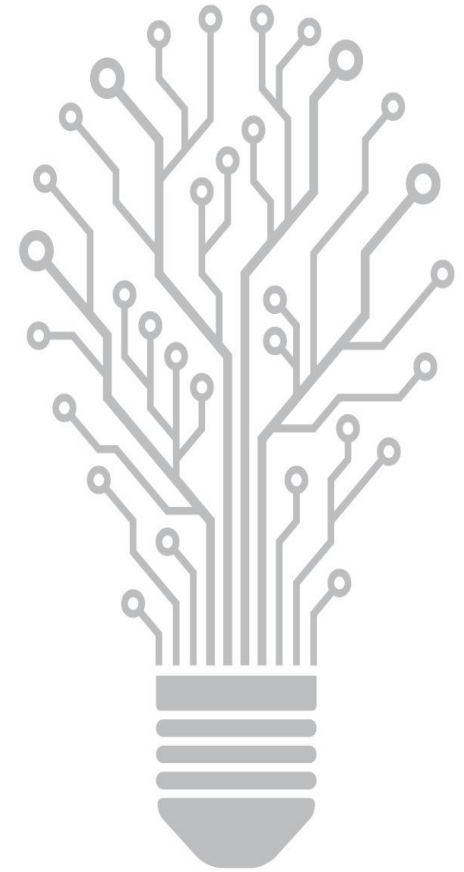
This presentation will provide an overview of the province's Digital First for Health strategy and outlines some of the initiatives that will support OHTs in delivering integrated care.

**Invited Speaker:  
Dr. Sacha Bhatia**

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# CREATING TOMORROW'S HEALTH SYSTEM TODAY

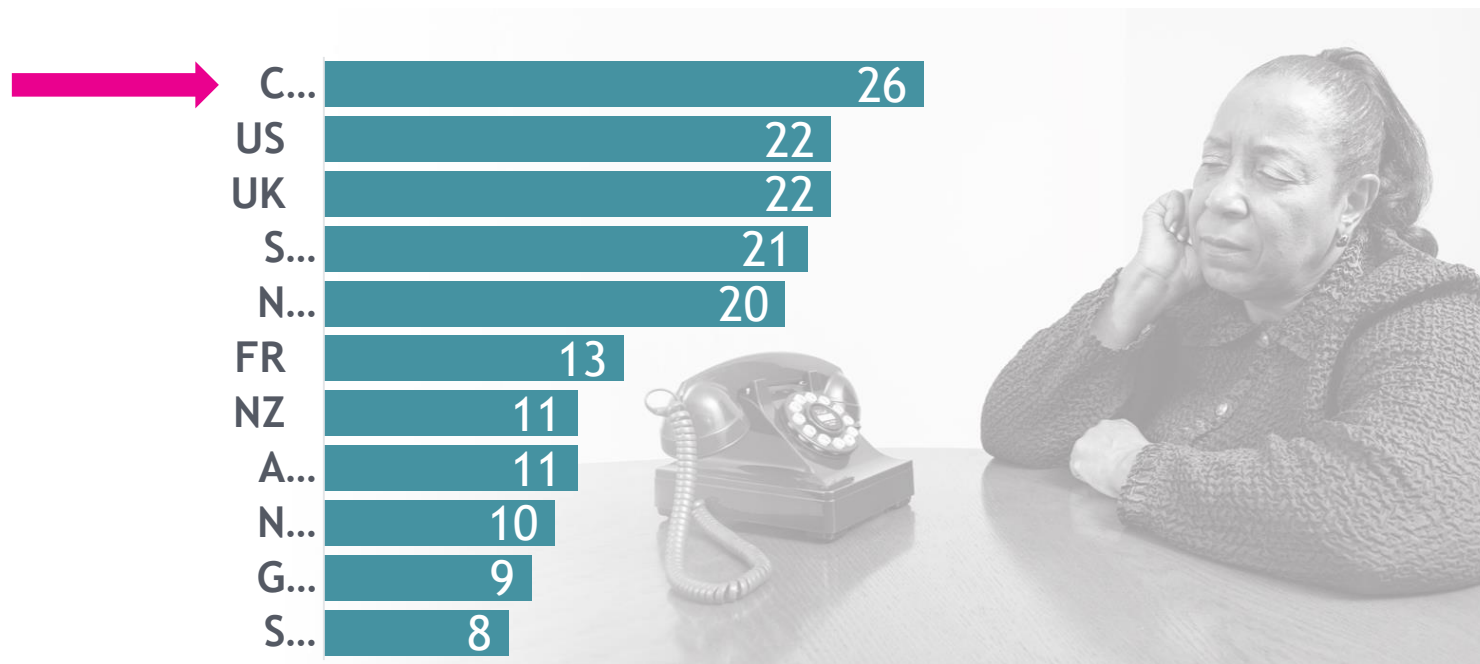


# “Hallway Healthcare”



## Older Adults Reporting Did Not Hear Back From Regular Doctor on Same Day When Contacted with a Medical Concern

Percent (%)



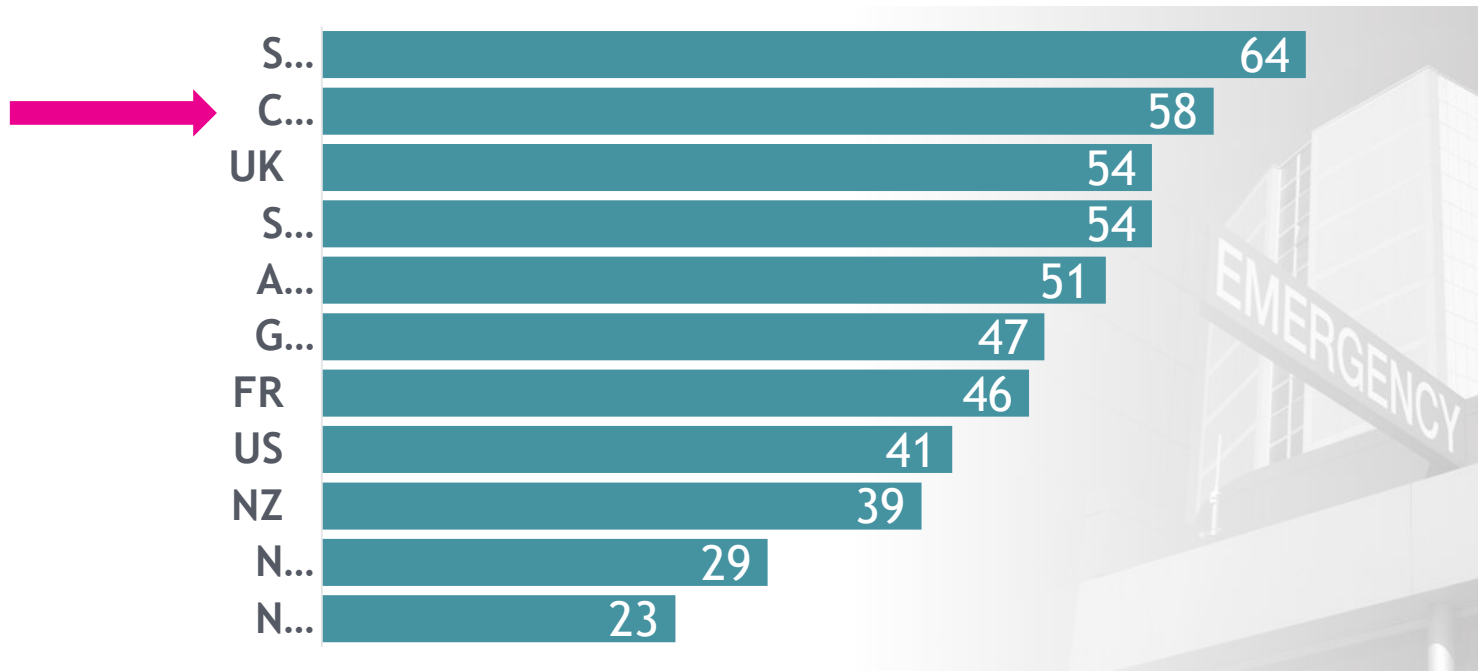
Source: 2017 Commonwealth Fund International Health Policy Survey of Older Adults

Definition: Did not always or often hear from regular doctor on same day, when contacted doctor with a medical concern. Possible responses: "always," "often," "sometimes," and "rarely or never".

Population: Excluding adults who did not report having a regular doctor or place of care and who never tried to contact their doctor.

# Older Adults Who Had Difficulty Getting After-hours Care Without Going to the ED

Percent (%)



Source: 2017 Commonwealth Fund International Health Policy Survey of Older Adults

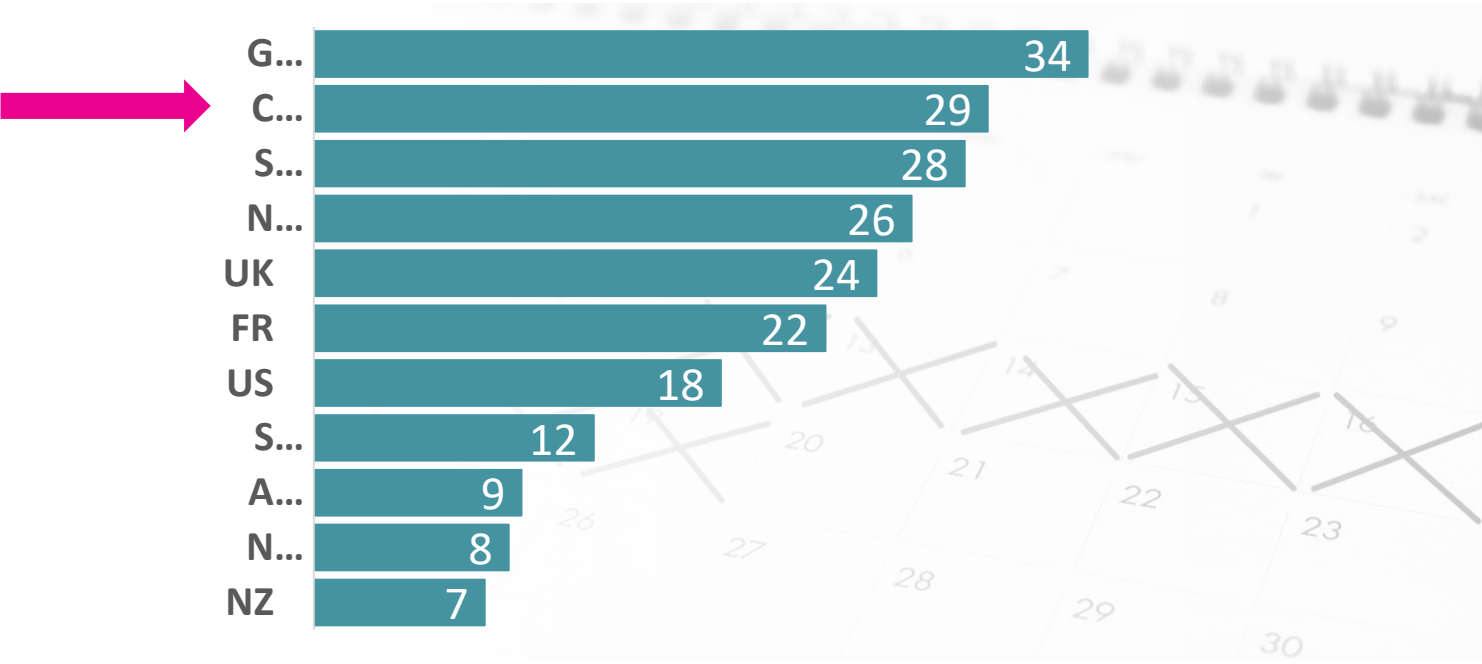
Definition: "Somewhat" or "very difficult" to get after-hours care.

Population: Excludes adults who did not need after-hours care.

ED, Emergency Department.

# Older Adults Who Waited 6 days or More for an Appointment

Percent (%)

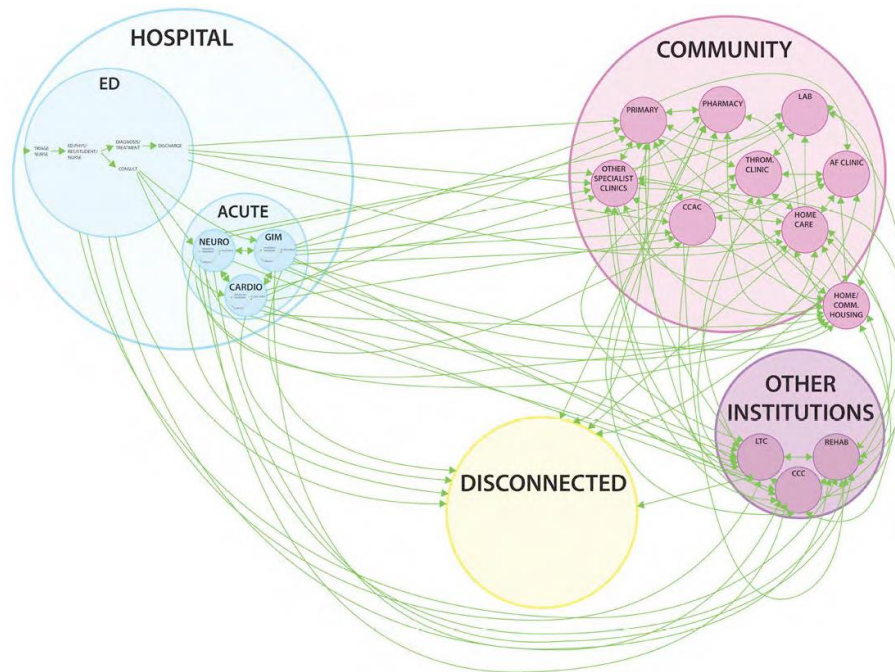


Source: 2017 Commonwealth Fund International Health Policy Survey of Older Adults

Long wait time: Waited six days or more for an appointment to see someone when sick.

Population: Excludes adults who did not need to make an appointment.

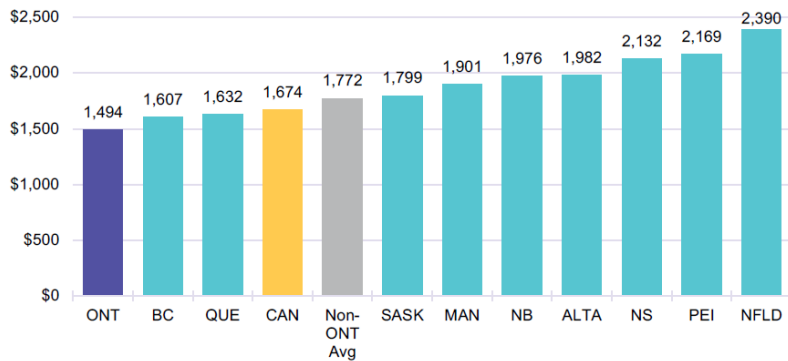




## Journey of a Patient with Atrial Fibrillation

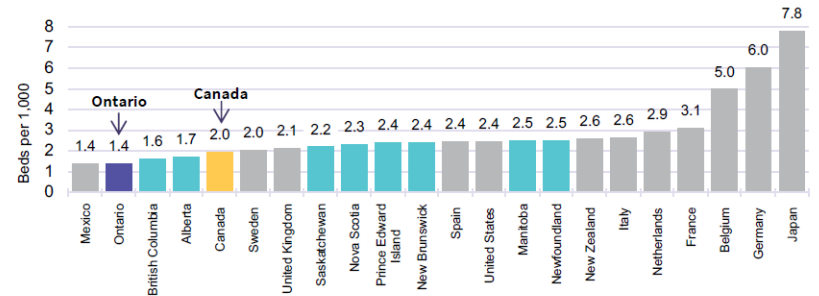
# Fiscal pressures force us to innovate

**Figure 1a**  
Hospital Expenditure, \$ per Capita by Provincial Governments, 2019

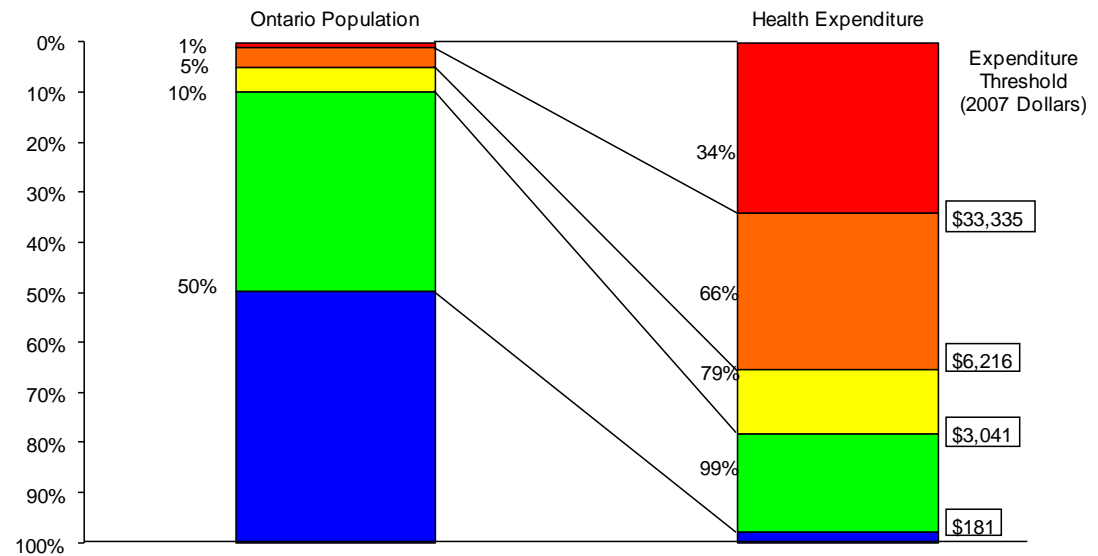


Source: CIHI National Health Expenditure Database, 2019 forecast, Canada includes Territories

**Figure 8**  
Acute Hospital Beds per 1,000 Population, 2015, 2016, 2017, 2018  
Ontario vs. Other Provinces and Other Countries (Quebec data not available)

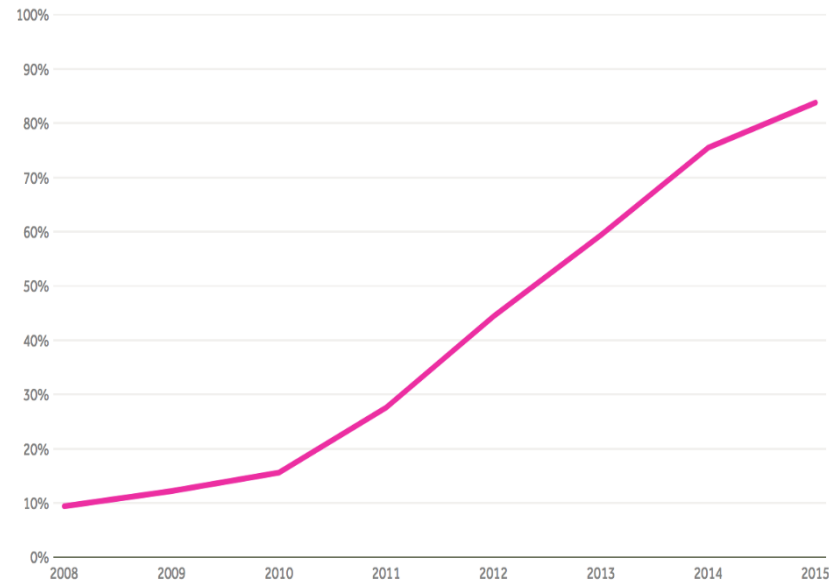


**Figure 1. Health Care Cost Concentration:  
Distribution of health expenditure for the Ontario population,  
by magnitude of expenditure, 2007**



Complexity  
can be costly.

Percent of non-federal acute care hospitals with adoption of at least a Basic EHR with notes system, 2008-2015



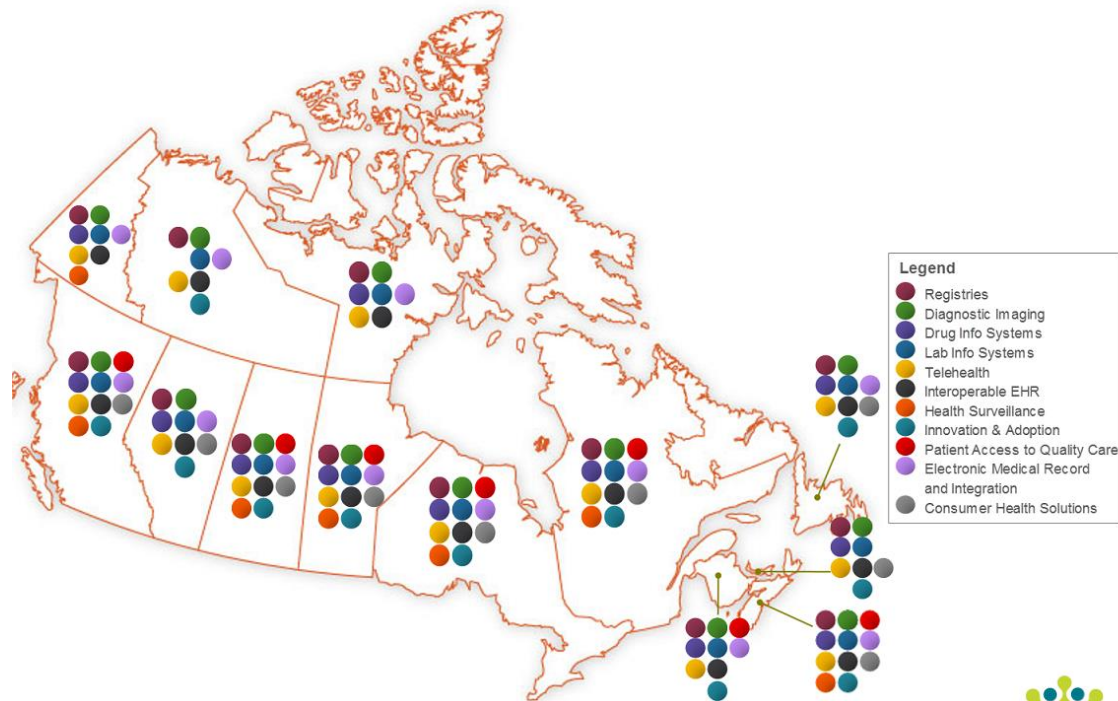
Note: Significant change from previous year ( $p < 0.05$ ) for 2011-2015

Source: [Henry, J., Pylpochuk, Y., Searcy T. & Patel V. \(May 2016\). Adoption of Electronic Health Record Systems among U.S. Non-Federal Acute Care Hospitals: 2008-2015. ONC Data Brief, no.36. Office of the National Coordinator for Health Information Technology: Washington DC.](#)

Peterson-Kaiser  
Health System Tracker



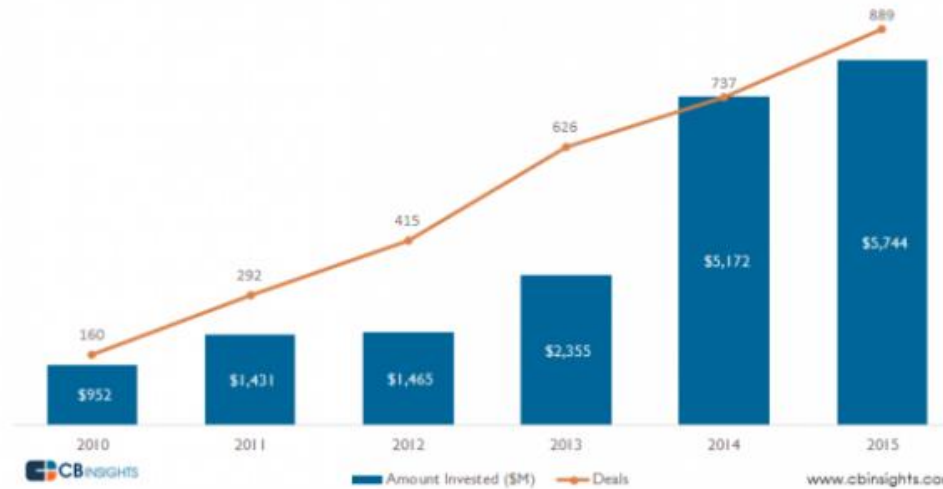
## Active/complete projects as of September 30, 2016

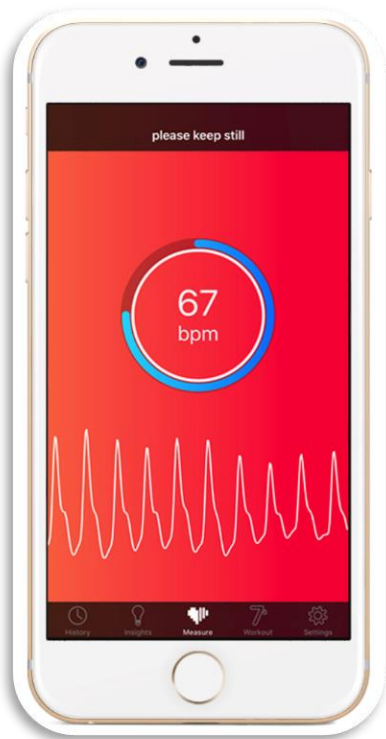


## DIGITAL HEALTH CONTINUES TO PICK UP STEAM

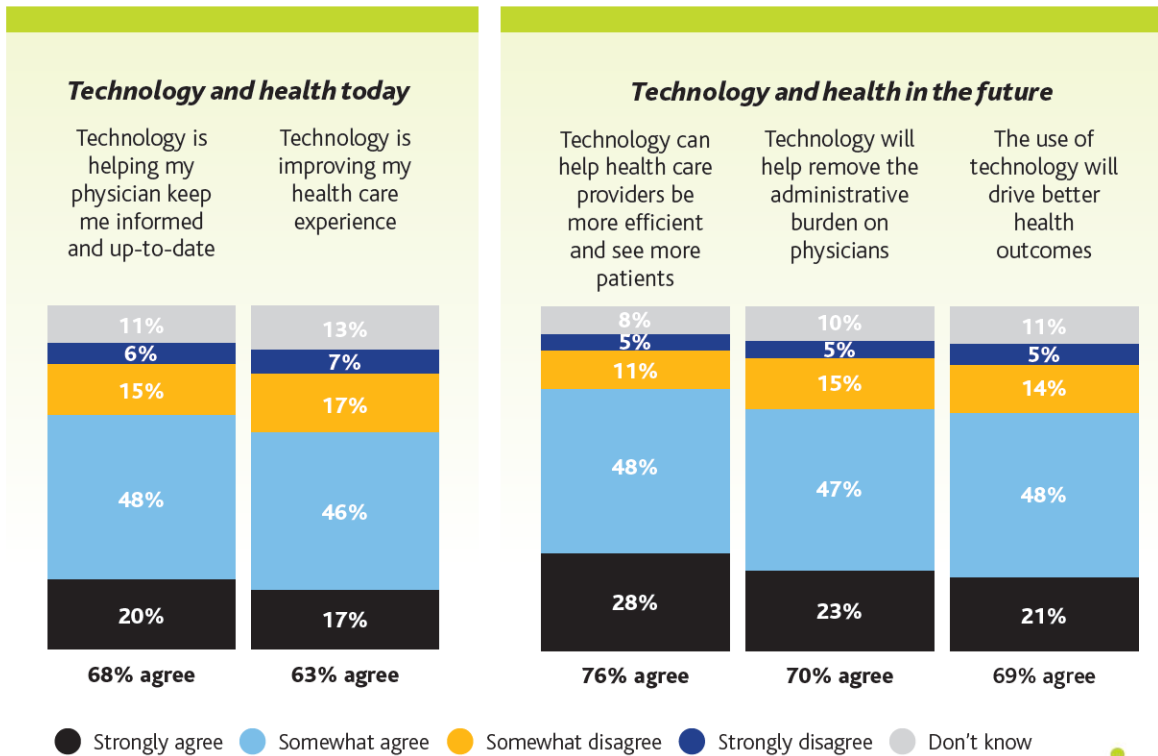
Digital health as a whole continues to grow, with nearly 900 deals being closed in 2015 as well as more than \$5.7B invested

Digital Health Funding Trends: Deals and Dollars Invested  
2010 - 2015





# How Canadians feel about technology

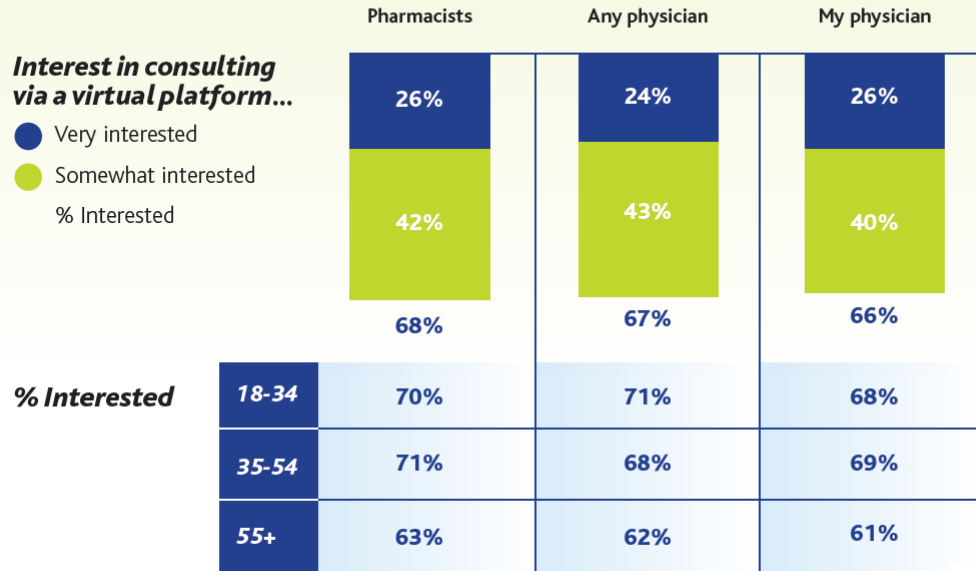




# Canadians are interested in Virtual Care

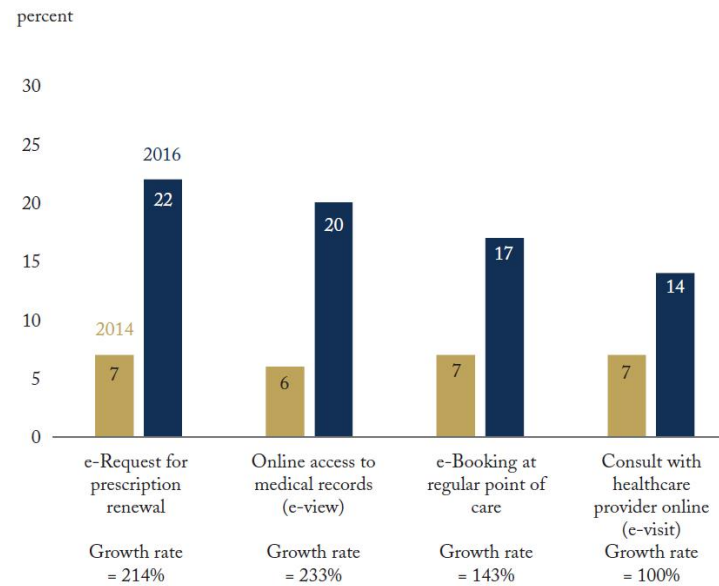
## Interest in virtual care

Roughly two-thirds of Canadians are interested in consulting with various health care providers through a virtual platform. While younger Canadians show greater interest, 6 in 10 of those 55+ are interested.



	% Likely	% Make Life Better
They'll be able to track their upcoming specialist appointment through a system that will show where they are in the queue	<b>79%</b>	<b>79%</b>
They'll be able to have access to and contribute to their complete medical history and be able to share it with their doctor anytime	<b>77%</b>	<b>83%</b>
They'll be able to see their health professional virtually through a digital platform	<b>71%</b>	<b>65%</b>
Everything about their health – from blood work to medication to fitness to sleeping patterns – will be monitored through a centralized platform	<b>62%</b>	<b>69%</b>
The data from my Fitbit/wearable device will be connected with my medical/hospital data	<b>60%</b>	<b>66%</b>

Access to and interest in consumer digital health services (percent of Canadians who can access)

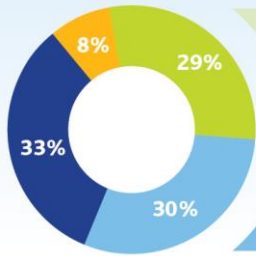


Source: Canada Health Infoway.

# Yet there are concerns...

## Direction of the health care system

Canadians are divided on whether the health system will improve or worsen in the next 10 years, with nearly equal proportions believing it will improve, worsen or stay the same. The main reason to think the health system will improve is advancing technology/innovation.



- Improve
- Stay the same
- Worsen
- Don't know

Among those who believe the health system will improve in the next 10 years, the **top reason why is advancing technology/innovation** (28%), which is well ahead of next highest mention more funding/support/policies/attention/efforts from the government (16%)

"Better technology and innovations will make things easier. More doctors should be available."

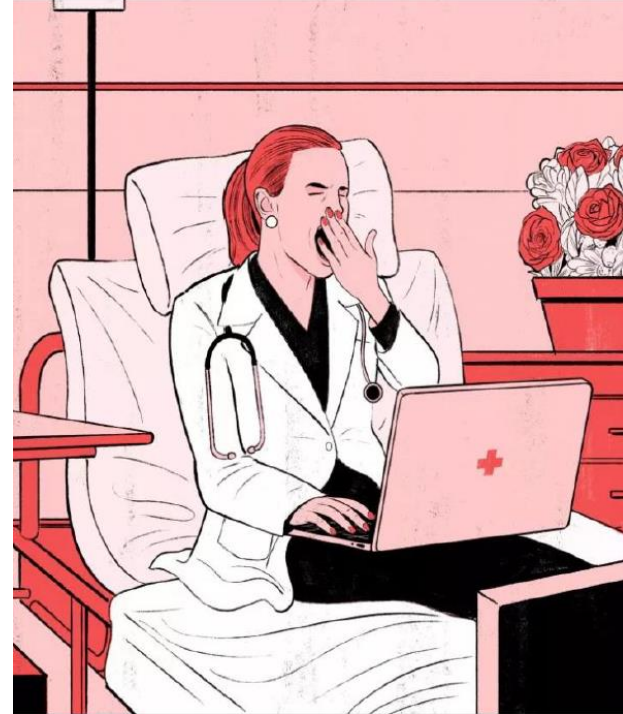
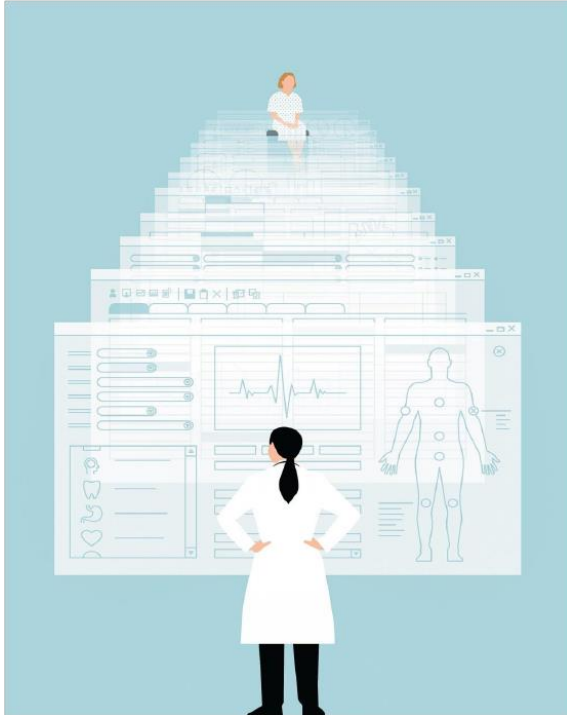
"Technology will be integrated into it especially people being able to talk to doctors on the internet."

The human connection and compassion are lost with virtual platforms **77%**

Personal privacy is at risk with virtual visits **75%**

Virtual care opens the door to private health care in Canada **71%**

# Has Digital Health Improved Things?



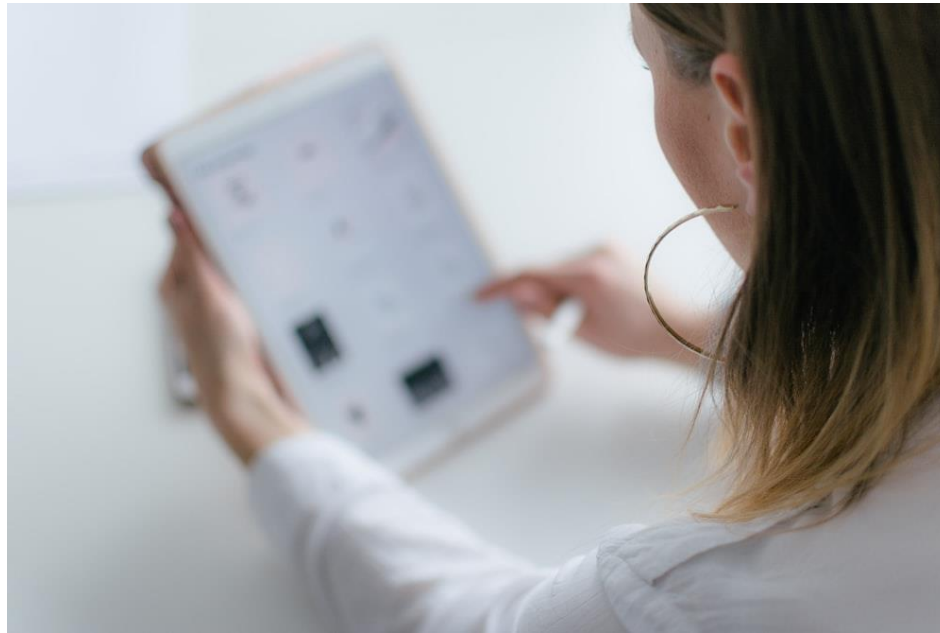
**DIGITAL HEALTH  
TRANSFORMATION  
IS COMING, BUT IT  
NEEDS TO BE DONE  
RIGHT.**

# Our Definition of Virtual Care

**Virtual Care (noun): “any interaction between patients and/or members of their circle of care, occurring remotely, using any forms of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care.”**

# We see Digital Tools as part of Service Re-Design in Healthcare

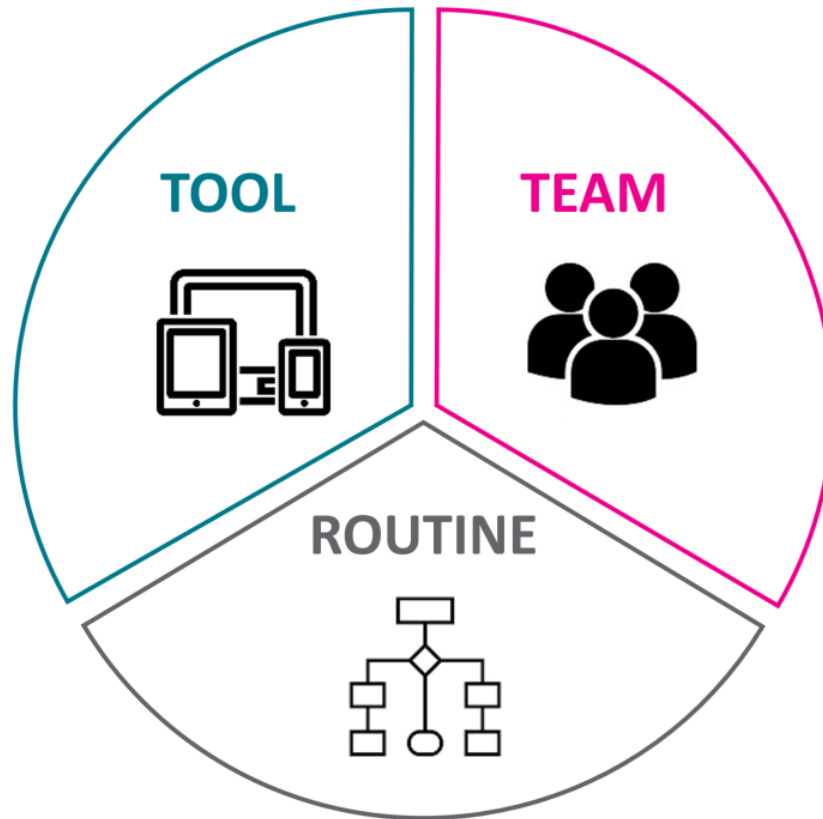
Aims to create services that are useful, useable, desirable, efficient, and effective



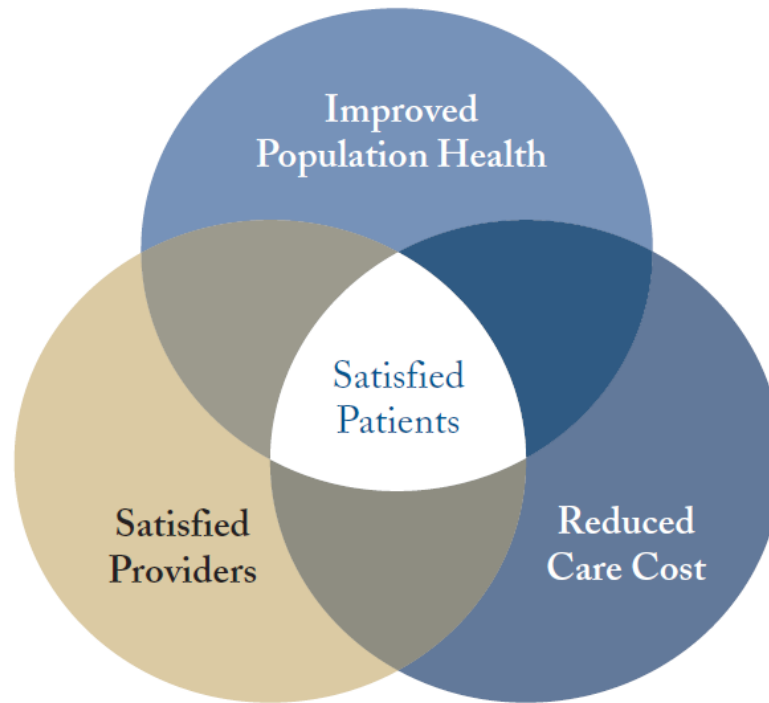
Saco, R. M. & Goncalves, A. P. Service design: an appraisal. *Des. Manag. Rev.* 19, 10–19 (2008).







## Quadruple Aim



- See what's possible
- Learn about some practical approaches to the design and evaluation of virtual care services
- Hear from experts of their experiences implementing some of these services (the good, the bad, and the ugly)
- Workshop with experts on some common challenges implementing virtual services
- Have fun!



**OHT Presentations:  
North York Toronto  
Health Partners**



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# Digital Health Planning

February 19, 2020

# Welcome to NORTH YORK

TORONTO . CANADA



## North York Toronto Health Partners

Patient and Family Advisors

1100 FHO

Bathurst FHO

Discovery FHO

Fairview FHO

Lawrence Park FHO

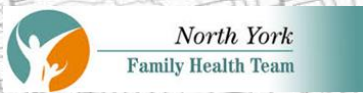
New Family Medicine FHO

North York FHO

NYGH FMTU FHO



Freeman Centre for  
Advanced Palliative Care



Temmy Latner Centre  
for Palliative Care



# Planning for Digital



## Understanding current capabilities and needs

- Inventory current systems, data and agreements
- Assessing digital resource capacity
- Interviews with OHT partner organizations to identify value prop



## Aligning with OHT vision

- Digital strategy/roadmap aligned with Y1 projects
- Expand access to existing solutions while planning for the future
- Embedding digital resources into Y1 projects



## Developing Digital Governance

- Establishing a digital committee
- Role of the committee and decision making structure



# Planning Opportunities

## Building trust between OHT members

- High level of engagement during formulation and approval of digital plan
- Establishing a governance process that involves joint decision making

## Ensuring alignment of digital plan with needs of Y1 populations

- Embedding digital resources from organizations into Y1 projects

## Availability of resources and funding to support digital planning

- Leverage internal resources to support project work

## Concern regarding digital alignment across OHTs

- Working with OHT digital collaborative
- Rely on input from members who are participating in multiple OHTs
- Include OH resources in planning process

# Future Challenges

## Variety of systems and levels of digital capability/capacity across organizations

- Standardize on existing platforms where possible (local and provincial)
- Adopt new standardized solutions in areas like identity management
- Engage other provincial partners to provide resources to support implementation of the digital plan

## Data Sharing Agreements do not cover full range of use cases

- Amend existing DSAs or develop new agreements, until provincial guidance and standards are available

## Funding to execute digital roadmap (technology, licenses, training and support)

- Work with OHT members to develop a budget to fund priority digital health initiatives
- Develop strategic partnerships with vendors to reduce technology and implementation costs

# Future Challenges

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## Digital technology procurement

- Work with OH and MOHLTC to address current limitations presented by legacy regional procurements

## Capacity/expertise to support implementation change management

- Develop a robust change management plan that includes clinical and patient champions to co-design digital health solutions
- Leverage and expand existing resource capacity within the OHT
- Engage provincial partners to support digital implementation and change management

## Varying degrees of patient's digital maturity

- Leverage the caregiver and volunteer supports where available

# **OHT Presentations: Huron Perth & Area OHT**

# Digital Health and Information Management – Huron Perth & Area Ontario Health Team

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# Digital Health Planning Process

## Huron Perth & Area OHT

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Digital Health leads for HPA-OHT produced a “Digital Asset Inventory” to track the following across the partner organizations:

- Electronic medical record platform;
- Integration with regional/provincial digital assets (i.e. MyChart, ClinicalConnect, OLIS, HRM etc.);
- Primary contact or lead for digital/IT initiatives and support.

Participation in several team meetings, informal discussions with stakeholders, brainstorming and analysis of provincial digital health landscape.

Consultation with neighboring OHT’s (in the approval stage) in an effort to identify cross OHT technology.

In consultation with HPA-OHT members, reviewed draft digital health plans and solicited feedback.

# Challenges in the Planning Process

## Huron Perth & Area OHT

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Over 65 partners within the HPA-OHT.

- Many different digital health platforms;
- Significant variability of adoption level of integration with regional/provincial platforms (i.e. MyChart, ClinicalConnect, OLIS, HRM etc.);
- Many valuable perspectives from healthcare partners;
- Be open to change, respect opinions/ideas and better understand the many digital workflows that exist.

Carving out ample time for proper consultation, meetings, planning and tight timeline for application completion.

- Organizations have made the OHT development work a priority
- Gaining momentum to share costs and onboard a central coordinator for OHT activities

Difficulty in communicating effectively with entire HPA-OHT partners

- In the process of finding better solutions for document sharing, video conferencing, communication.





# Challenges Moving Forward...

## Huron Perth & Area OHT

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### Governance, Data Sharing and Standards, Policies

- Establishing the Digital Advisory Group and it's role within the overall accountability structure
- Finalizing the Digital Advisory Terms of Reference (currently in draft)
- Completion of a comprehensive data sharing agreement to enable rapid technology adoption
- Alignment and standardization of cross sector policies (i.e. cybersecurity, data access, privacy/confidentiality, acceptable use)

### Establishing Consensus on Specific Digital Health Platforms

- Selecting digital platforms that bring the “biggest bang” in terms of value across all sectors within the HPA-OHT (i.e. acute and primary care patient portals, KPI/dashboard tools, shared clinical viewers)

### Resources

- Building capacity within the HPA-OHT to strategize, plan, adopt and sustain integrated digital health solutions
- Mobilizing resources (human and technology) will be challenging without additional funding

### Communication

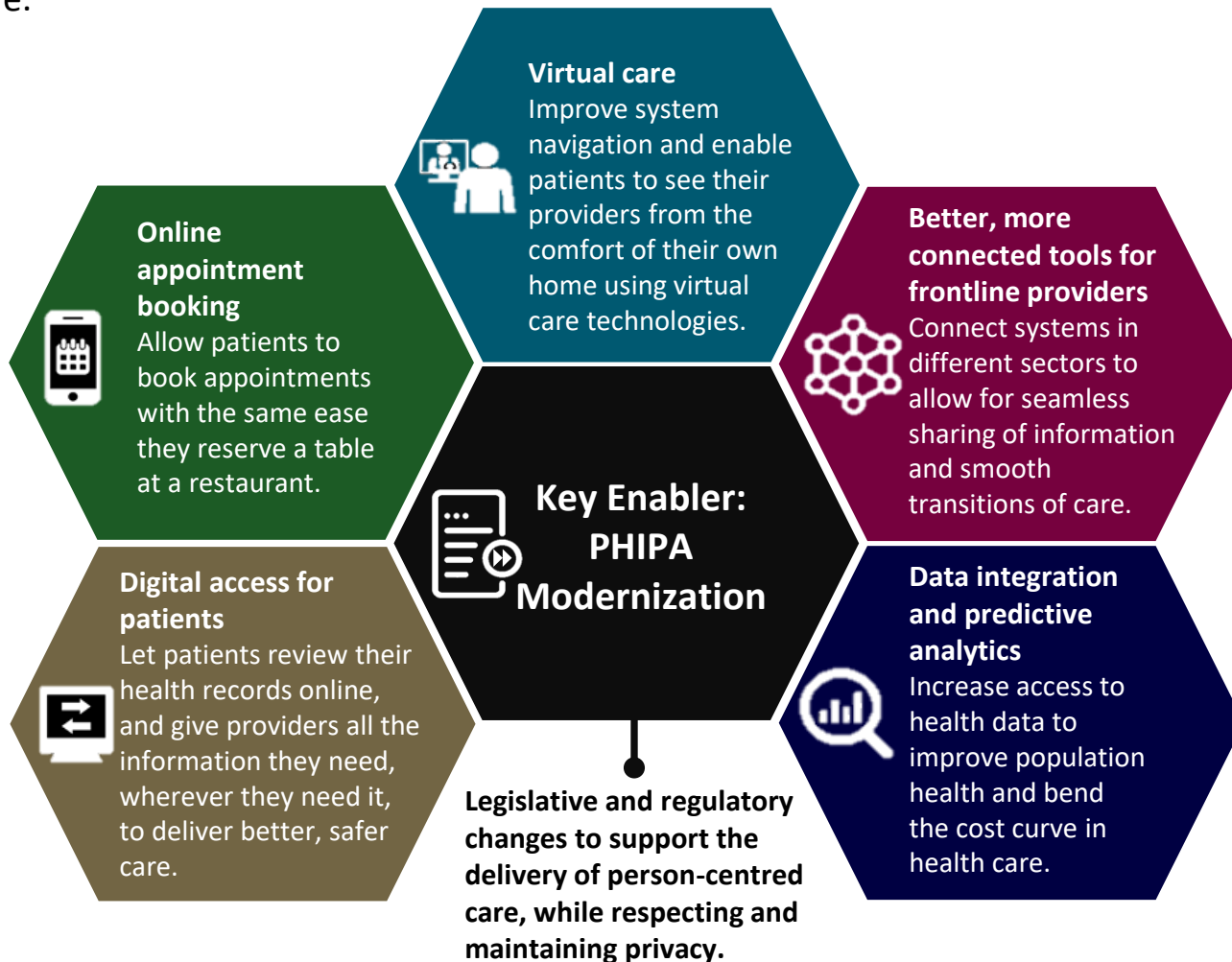
- Developing seamless communication within the HPA-OHT to inform, recommend and expedite digital health adoption
- Continued cultivation of fluid communication with other OHT's with “systems thinking” as crucial to the success of the OHT model

# Supporting OHTs through Digital First for Health and information management

Addressing common gaps observed  
across OHT applications

# 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 critical to enable system integration and the sharing of information throughout the health care system so that patients receive seamless care.



# Towards an open, standards-based framework

Whether the ministry is expanding virtual care offerings, increasing patient portal adoption rates, publishing a Digital Health Information Exchange policy, or facilitating clinical systems renewal, the underlying principle of the Digital First for Health strategy is creating an open, standards-based framework.

This framework sets the standards necessary to support private sector innovation, creating opportunities for the adoption of made-in-Ontario solutions. Rather than building provincial systems (i.e., repositories) the ministry is trying to establish an open marketplace, which would enable Ontario's healthcare technology companies to be on a level playing field with all healthcare innovators.

The formation of OHTs will create a new market for Ontario-based innovators as each OHT has autonomy within a strong, standards-based approach to develop and implement digital health plans that meet their needs.

- This includes the ability to procure new digital health solutions as a means to support care provision and enhance the patient experience.
- Through the standards-based approach, Ontario's innovators will have a clear path to developing and selling solutions within Ontario's health care system.

# Digital health maturity model

Current

Year 1

Maturity

## Year 1 expectations

- Expanded virtual care offerings from baseline, and 2-5% of Year 1 patients who received care from the Ontario Health Team had a virtual encounter in Year 1;
- 10-15% of Year 1 patients who received care from the Ontario Health Team digitally accessed their health information;
- Harmonized Information Management plan in place;
- Increased adoption of relevant digital health tools amongst the Ontario Health Team partners (e.g. ONE-ID, provincial clinical viewers, eConsult); and
- Plan is in place to streamline and integrate point-of-service systems consistent with provincial frameworks and to use data to support enhanced patient care and population health management.

## Mature state outcome statements

- 1. Ability for patients to have digital choices** such as virtual care, online appointment booking and digital access to patient health records, that improve utilization by empowering patients to better manage their health and create alternatives to in-person care.
- 2. Ability for frontline providers to communicate and share information**, including shared patient records among all care providers within and beyond OHTs, clinical standardization, complemented with the tools embedded within clinical systems needed to enable real-time, team-based care and drive quality improvement at scale.
- 3. Ability for the OHT to manage itself and improve performance**
  - Advanced analytics** and strong information management practices to enable population health management and ongoing quality improvement.
  - Reporting and measurement** to the ministry, agency and other parties as required.

A draft of the components of the maturity model was included in the pre-reading material

# Improving virtual care and health system navigation

Through the modernization of the province's virtual care program we will enable OHTs to better leverage virtual care to enhance their practice and better accommodate patient needs.



✓ **Changing how virtual care is compensated:** A multiphase approach including legislative changes to support virtual home care visits and continued work with the OMA will enable connections to virtual care through multiple channels (e.g., phone, mobile, online).

The ministry's proposed health care navigation service aims to modernize and streamline existing services to improve the way patients navigate the health system.

## ***Current State***

*Confusing and Hard to Navigate.*

- × Too many phone numbers to remember and keep track of.
- × Multiple websites that provide health care service information.
- × Limited to no ability to connect patients to virtual care services.



## ***Potential Future State***

*Better Connected Care and More Choice.*

### **Core Navigation Services:**

- One Telephone Number to Call.
- A mobile app for the province.
- A reliable health service information directory.
- Ability to chat with a nurse.
- A digital symptom checker.
- Access to information to support connecting to virtual care services.



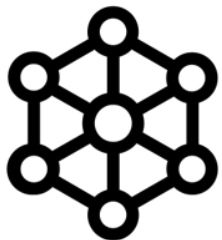
*\*Note: diagram is for illustrative purposes only.*

# Supporting interoperability and leveraging provincial solutions

The ministry's Digital Health Information Exchange Policy will increase interoperability between the diverse digital health systems and services that are in use across OHTs and the province.

1. **Connectivity to digital health assets via APIs**, where appropriate, so that patients and health care providers may exchange recognized and meaningful data using their choice of digital tools.
2. **Establishment of a minimum data set** to ensure continuity of care across sectors and various care and practice settings.
3. **Modernization of digital health assets according to prescribed technical standards** including establishing and adopting consistent, system-wide standards for data exchange, data content and health terminology.

The ministry and delivery partners are exploring opportunities to streamline how OHTs can gain access to a suite of existing solutions which support integrated care delivery.



- ✓ Improving onboarding requirements to reduce redundancy (i.e. fewer forms)
- ✓ Packaging provincial digital health solutions into bundles vs “a la carte” offerings
- ✓ Local change management and adoption support
- ✓ Single help desk for technical support
- ✓ Integrating reporting requirements

# Improving information management in OHTs

## Information management objectives for OHTs

- ✓ Have digital access to patient information, and be able to view an integrated patient record
- ✓ Enable patients to have full and unfettered access to their own health information
- ✓ Easily share information across providers for direct patient care, and population health planning
- ✓ Easily share patient records across partners and with the ministry for the purposes of clinical and financial accountability (i.e. without having to seek express consent from a patient)

**OHTs are facing various information management challenges**, specifically when it comes to:

- Sharing information between health information custodians (HICs) and non-HICs without express consent;
- Disclosing personal health information (PHI) to partners within an OHT for population health planning purposes without express consent; and
- Sharing PHI between the ministry and OHTs to enable health system planning, funding and accountability without express consent.



The ministry is exploring options to address the above challenges through PHIPA Modernization that will clarify and improve patients' rights to access their own PHI, including work to enable Ontario Health Teams to share information for both health care and planning purposes and define interoperability standards to improve information exchange between digital systems.



# Breakout discussions

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# Breakout discussions

The ministry is committed to supporting OHTs by better understanding how they plan to meet expectations for data and digital, and what data and digital supports they require at a provincial level to succeed.

Breakout discussions will be organized around the following themes:

- 1) Expanding patient digital choices;
- 2) Offering better, more connected provider tools; and
- 3) Using analytics and decision-making supports.

Each table will focus on at least one theme. With support from a facilitator, each group will discuss (a) the problem and challenges they're facing related to the theme, (b) what they're doing right now to address these challenges, and (c) how the ministry can provide better supports for data and digital.

# **Wrap up and concluding remarks**

# What's next for data and digital?

The ministry and its delivery partners will continue to drive changes through the Digital First for Health strategy.

The feedback that you provide today will inform our plans as we look to work with you to address your barriers and ensure the success of your local digital health and information management plans.

As local experts, we encourage you to identify digital health solutions that are meaningful to you and your community. It is important that we are kept aware of your efforts – both the positive and the negative – so that the ministry and our delivery partners can ensure you continue to get the necessary supports for success.