# OCHIS: Value-Based Innovation Framework — a new way of doing business Canada 2020, March 28, 2018, Ottawa

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Ministry of Health and Long-Term Care



# **Today**



**Health as an Economic Driver** 

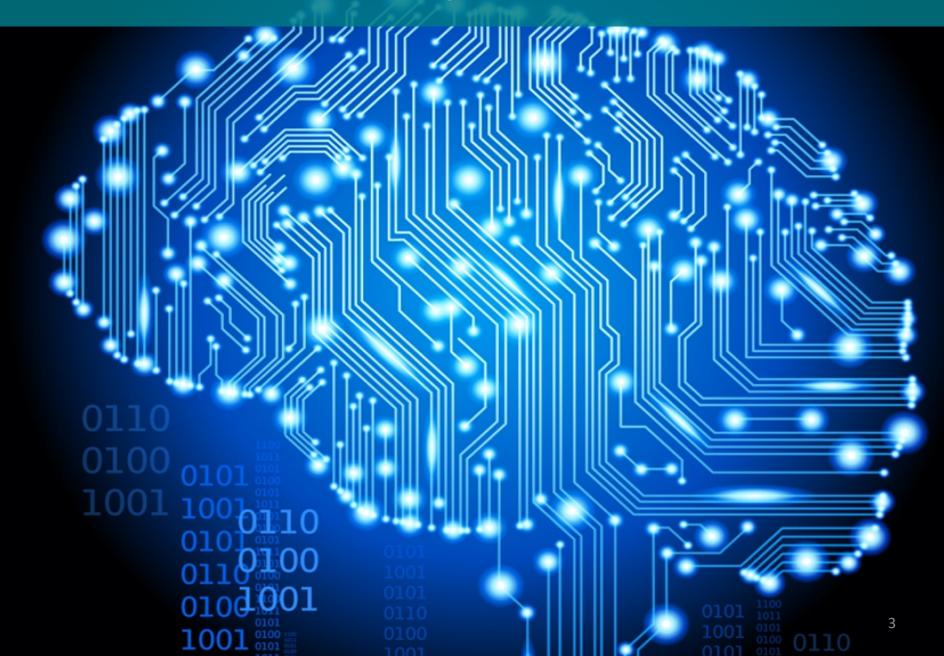


**Impact of Our Work** 



Call to Action: Think Big, Act Local, Do it Now

# The Health Innovation Imperative

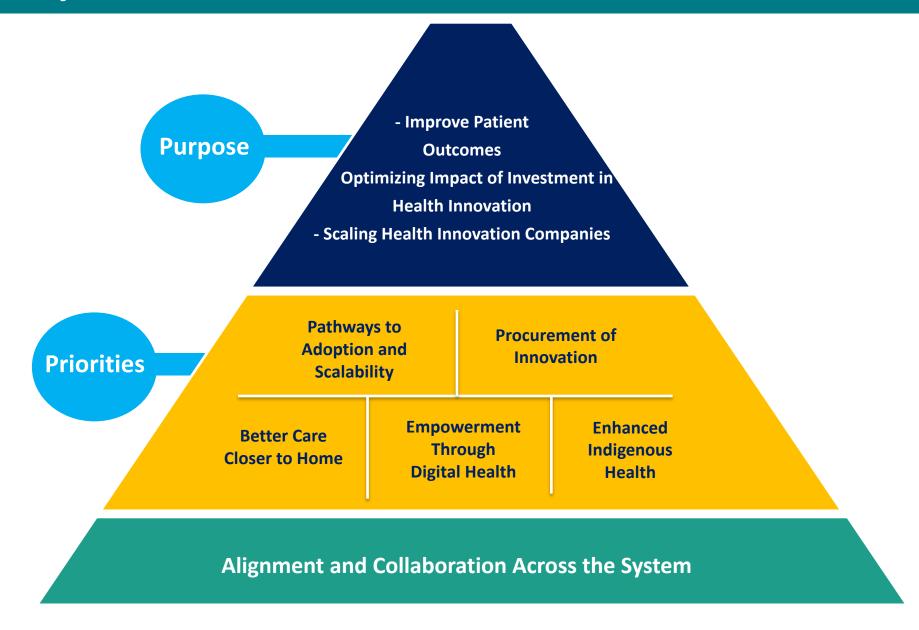


# **OCHIS Purpose**

The Office of the Chief Health Innovation Strategist was created in September 2015 to drive collaboration across the health system and accelerate the adoption and diffusion of new innovative health technologies and processes that:

- Improve patient outcomes
- Optimize the impact of investment in health innovation
- Scale health innovation companies

# **Catalyst for Collaboration and Commercialization**



### **Patients Are Our Focus**

- In alignment with Ontario's *Patients First: Action Plan for Health Care,* OCHIS will support the move towards patient-centred **value-based care**.
- We have established a **value-based innovation framework** a new way of doing business.



From a patient perspective, in two years, what will I see that's different as a result of your work

# **OCHIS Update: Value-Based Innovation as a** *Framework*

Our value-based innovation **framework** supports **value-based care and creates jobs in Ontario** through health innovation. It incorporates all OCHIS activities.

Improving patient Optimizing investment in Scaling health innovation health innovation outcomes companies Value-Based Innovation **Empowering Demand** Generating Evidence and **Empowering Innovators** Facilitating Evaluation Drivers Innovation **Enhanced EXCITE VBIP** HTF Capabilities **Brokers** Collaboration and Alignment Across the Health System

# Innovation Brokers are Building Capacity in Ontario's Health Technology Marketplace

#### Where we started:

- Health innovators struggling to navigate a complex health system, and leaving Ontario for greener pastures
- Health service providers unsure how to engage industry and articulate needs in a way that can drive innovative solutions

#### What we did:

- Recruit field-based brokers working with Ontario's innovators and health care providers to broker deals, advise start-ups and building receptor capacity
- Recent Highlights:
  - Brokering joint ventures between Ontario SMEs and multinationals
  - Developing a procurement myth-busting toolkit for hospitals

# Where we are going:

- Program-focused call for three new Innovation Brokers in 2018, including a Broker dedicated to serving Indigenous communities
- Expansion of services to a broader audience

# MaRS Excellence in Clinical Innovation Technology Evaluation (EXCITE) is Building Evidence for Adoption of Innovative Technologies

#### Where we started:

- A program with excellent potential as an entry point to the health system for innovators, featuring evidence generation in Ontario's world-class research community
- A program with no ministry process in place to accept its outcomes

#### What we did:

- Working with MaRS EXCITE and across the executive leadership team to create a streamlined pathway to implementation for EXCITE graduates
- Executing a demonstration project featuring EXCITE's first graduate: At-home sleep-apnea testing

### Where we are going:

- Working on a general process for executing the EXCITE value proposition
- Spinning off EXCITE as a standalone consulting service for innovators

# Value-Based Innovation Program (VBIP)

The Value-Based Innovation Program (VBIP) supports the Value-Based Innovation **framework** for leveraging Ontario's health system as a demand driver for innovative services and technologies that support health system priorities.

#### **VBIP** will enhance health outcomes and health service delivery by:

- Using modern, value-based procurement techniques that recognize and reflect the needs of patients, caregivers, and health service providers
- Partnering with health industry leaders and calling openly for solutions to complex health challenges
- Breaking down the silos of healthcare delivery across the patient journey through health system funding reform
- Sharing the risks and benefits of new technologies and processes with industry and health service providers, seeking new approaches to financing innovation.

# The Value-Based Innovation Program (VBIP) is Empowering Demand Drivers through Value-Based Care

#### Where we started:

- Health service providers and industry struggling to innovate on a full patient continuum level in the current health system
- Barriers caused by procedure-based health services and outputs not outcomes
- A modern approach to funding and procurement taking hold in Ontario

# What we did:

- Working with the executive leadership team to champion value-based care and global best practices in value-based procurement as a standard in Ontario
- Launched two proof-of-concept projects:
  - Province-wide procurement of Implantable Cardiac Defibrillators
  - Reducing post-surgical infections through an outcomes-based procurement

# Where we are going:

- Call for applications to HSPs and LHINs for regional, full patient continuum projects in spring 2018
- Offer VBIP as a service, integrated into all of our programming

# The Health Technologies Fund is Building a Marketplace of Ontario-Based Solutions that Provide Better Care Closer to Home

#### Where we started:

- Health service providers unsure how to engage industry on innovative projects, and unable to bear any risk to their budget
- Innovators unable to open the door to conversations with Ontario's health service providers, selling their products everywhere but here

#### What we did:

- \$20M fund to support collaboration and commercialization, allowing health service providers to test innovative ideas and allowing Ontario companies to generate the evidence they need for procurement and adoption
- Incredible value in collaboration: 230 applications = at least 230 conversations
- Successful projects are emerging, showing us what Ontario's health system is capable of when empowered to innovate

# Where we are going:

 Round 3 call for application announced on March 16 will support digital Home and Community Care priorities

# **Round 1: Health Innovation Teams**



With: Michael Garron Hospital, Markham Stouffville Hospital, University of Toronto, NextUp Care



With: Winterlight Labs,
Baycrest Centre for Geriatric
Care





Respect, Learning, Independence
With: Step Up! ABI Recovery, Waterloo
Wellington LHIN, Health Quality Ontario,
Wilfrid Laurier University, Alaunus



Family Medicine -Family Health

Team



With: Philips Healthcare, QoC Health, ThoughtWire Corp., CLOUD DX, XAHIVE Inc.



Toronto



With: CLOUD DX, Women's College Research Institute, Markham Stouffville Hospital



With: Boehringer Ingelheim Canada Ltd., Aetonix Systems Inc., Samsung Canada, Winchester District Memorial Hospital, Priority Business Services Inc., Women's College Hospital, Champlain LHIN



With: Pathcore Inc.



With: Verto Inc., North York Family Health Team



With: GE Healthcare Canada, University of Windsor-World Health Innovation Network, The Ottawa Hospital

Integration Network



... a place where people care.
With: Hogan Pharmacy Partners
Ltd., PointClickCare, University of
Windsor-World Health Innovation
Network, McMaster University,
Northwest Pharmacy



With: Stella's Place, NexJ Health Inc., Centre for Addiction and Mental Health, St Joseph's Healthcare, University Health Network, Toronto General Hospital, The Royal's Institute of Mental Health Research, Children's Hospital of Eastern Ontario Research Institute Inc., St. Michael's Hospital, St. Joseph's Healthcare Hamilton



With: Brantford Police Service, HealthIM, Nipissing University, Brantford General Hospital

# **Round 2: Health Innovation Teams**



With: BrainFx, ThoughtWire Corp.,
Wilfrid Laurier University

# Kingston Health Sciences Centre

Centre des sciences de la santé de Kingston

With: ArcheOptix, Queen's University



With: NexJ Health



With: m-Health Solutions

#### Holland Bloorview

Kids Rehabilitation Hospital

With: Komodo OpenLabs, John McGivney Children's Centre, McMaster University, University of Toronto



With: Bedside Clinical Systems



With: ManagingLife



With: Eve Medical, Women's College Hospital - Institute for Health System Solutions and Virtual Care, N'Mninoeyaa Aboriginal Health Access Centre, Access Alliance, Roche Diagnostics, Mount Sinai Services



With: InputHealth Systems Inc., St. Michael's Hospital Centre for Excellence in Economic Analysis Research, London Health Sciences Centre, Rogers Communications, St. Joseph's Health Care London



With: Fig.P Software, Cardiac Care Network of Ontario



With: Bayshore HealthCare Ltd.,
MedChart Inc., Sunnybrook Health
Science Centre/Odette Cancer
Program, Princess Margaret Cancer
Centre, University Health Network,
Royal Victoria Regional Health Centre,
Windsor Regional Hospital, Cancer
Care Ontario

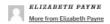


Erie St. Clair Local Health Integration Network Réseau local d'intégration des services de santé d'Érié St. Clair

With: World Health Innovation
Network, Odette School of Business,
University of Windsor, Victorian Order
of Nurses (VON), ParaMed Home
Health Care, Homecare Intelligence
Inc.

# **HTF Impact**

#### 'I am here today because of this': A hightech solution to one of Ontario's biggest health care challenges



Published on: December 27, 2017 | Last Updated: December 27, 2017 6:24 PM EST





Rick O'Neil had just about given up on life when he was asked whether he would try some new technology to keep him in touch with medical professionals and others.

Source: Ottawa Citizen





Our collaboration with @Revera\_Inc discussed on @CTVNews #MachineLearning #Alzheimers



Source: CTV News

# Digital tablet helps Stouffville senior breathe easier, manage condition

Unveiled at Markham-Stouffville Hospital, technology will save on hospital trips, stays

1EWS 09:41 AM by Tim Kelly Markham Economist & Sun





Source: YorkRegion.com

# **Driving Value-Based Innovation through Digital Health**

### Where we started:

- Public and private sector innovators struggling to navigate a fragmented digital health ecosystem
- Limited access to actionable data for patients, providers, and planners alike
- Opportunities to leverage Ontario's extensive digital health infrastructure

#### What we did:

- Collaborating across the sector to develop a Digital Health Action Plan that recognizes the role of innovation and technology in value-based care
- Investing in a Digital Health Centre of Excellence to generate high quality evidence on the value of digital health solutions
- Launching Project SPARK through UHN to expand access to provincial digital health assets

# Where we are going:

 Supporting execution of the 10 point Digital Health Action Plan, with a focus on innovation and value-based care

# **Ontario's Digital Health Action Plan**

Ontario's Digital Health Action Plan is modernizing Ontario's health system and making health care more convenient, high-quality and sustainable.

#### **Consumer-facing initiatives**



Expand patient access to their information

 (a. Digital Yellow Card; b. Expansion of patient tools such as MyChart)



2. Make care available in more places
(a. Virtual care visits; b. Digital self-care)



3. Stimulate innovation in consumer health



4. Improve public engagement and transparency

#### Health-system facing initiatives



5. Share integrated patient records with authorized users



6. Improve care quality by sharing Ontarians' medication records



7. Make it easier for providers to communicate with one another (a. eReferral; b. eConsult; c. HRM; d. eNotifications)



8. Support information flow and decision-making through improvements to EMRs



9. Maximize the value of hospital information system investments



10. Build digital capacity in the home and community care sector

#### Critical enablers of success (examples)

- i. Evolve digital health governance
- ii. Create centres of excellence
- iii. Enhance investment management

- iv. Formalize Digital Health by Design
- v. Strengthen identity and access management

# **Digital Health**

Empower Ontarians through digital health by building a dynamic market of tools and supports to navigate and personalize their path to health and wellness.



**API Policy.** A policy to guide digital health delivery partners to enable access to their digital health assets via APIs.



**HIS Renewal.** Published HIS requirements and the establishment of HIS Collaboratives and service delivery hubs to allow hospitals to obtain high-quality, vendor-managed, cloud-based HIS services and to move out of the IT business, so that hospitals' primary focus remains on the delivery of high-quality clinical care.



**Encouraging Data Standardization and Interoperability.** Need to be ambitious to work towards a data standard like FIHR so more innovation can occur and scale.

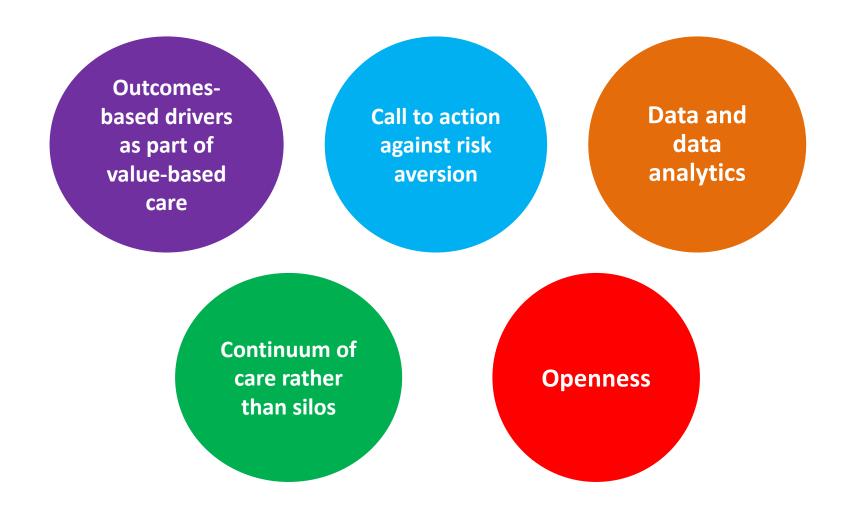


eReferral. Projects to be scaled across 8 Local Health Integration Networks in Ontario

# **Pan-Canadian Approach**

- Alberta, British Columbia and Quebec championing health innovation as an economic driver
- Justin Reimer, Assistant Deputy Minister, Innovation and Strategic Operations, Alberta Health at Government of Alberta
- Heather Davidson, ADM, Partnerships and Innovation Division, Ministry of Health, Province of British Columbia
- Quebec Life Sciences Strategy a similar role and office to OCHIS will be set up in Quebec

# Call to Action: Think Big, Act Local, Do it Now



### **How Do We Measure Success?**

#### **Improving Patient Outcomes:**

 Qualitative and quantitative measures of improved patient experiences and outcomes – following technology adoption and diffusion

#### **Health System Change:**

- Number of HSPs actively testing, adopting and scaling health technologies and processes
- Capture short-term and long-term system performance improvements resulting from adoption and diffusion of new innovation
- Increase in funding, procurement, and care pathways that are updated to support and use innovation

#### **Scaling Health Innovation Companies:**

- Innovators guided and advised through adoption, validation, and piloting of their products and ideas
- Number of jobs that have been created
- Growth of company sales and exports

# Recap



**Health as an Economic Driver** 



**Impact of Our Work** 



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# **Thank You!**



