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Centre for the

Study of **L**iving

Standards:

Invitational Series on

Living Standards

The eHealth Story in Ontario: An Insider's Perspective

Ray Hession

January 19, 2017

Background

1. 2000 – First Ministers' meeting

2. 2004 – Future of Medicare Act
   a. Single payer
   b. OHQC

3. 2010 – Excellent Care for All Act
   a. HQO
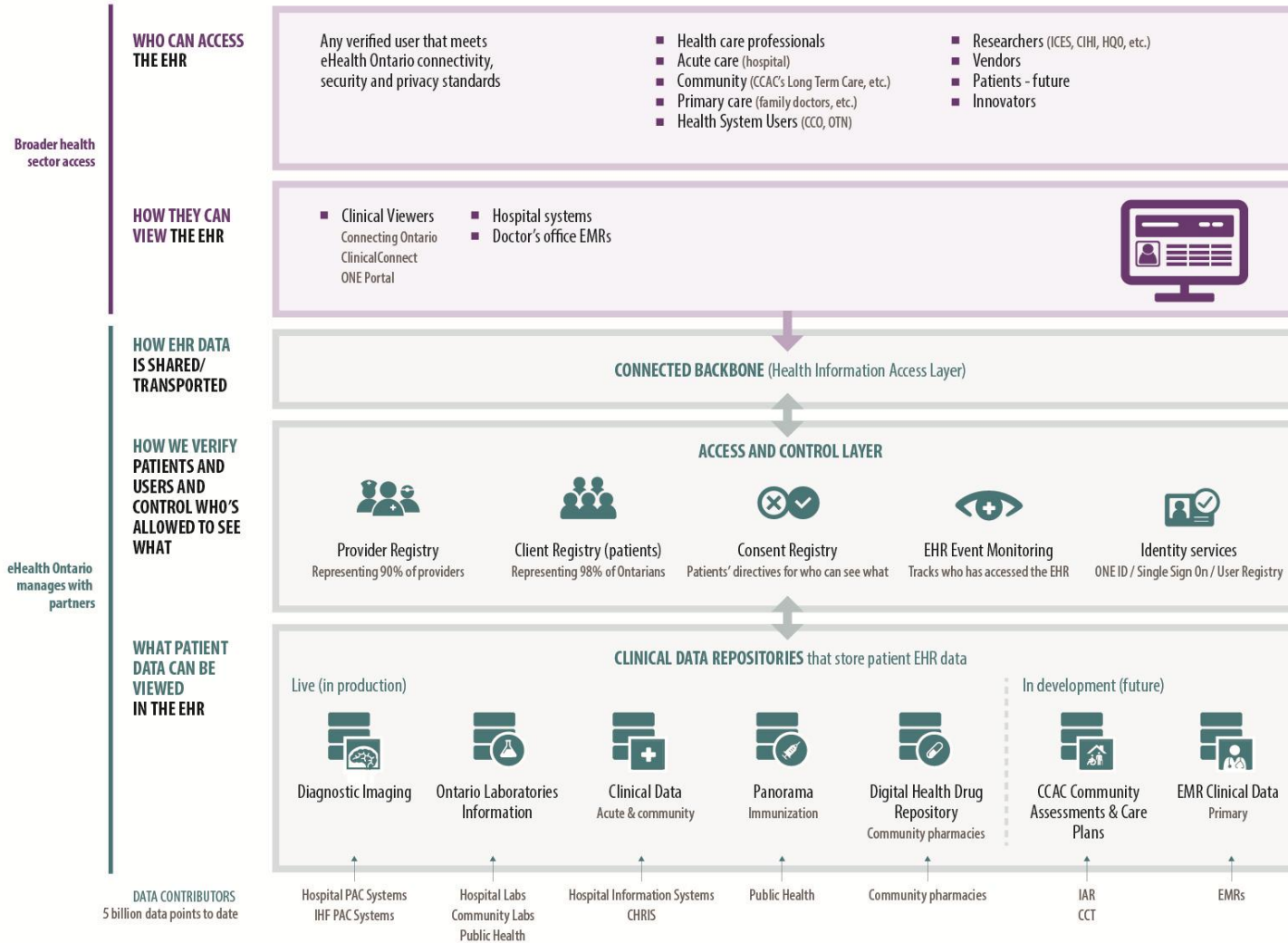   b. CQI

4. 2016 – Patients First Act

eHealth Ontario's role

- The agency's role is to deliver a **comprehensive, patient-focused, secure and private Electronic Health Record (EHR) system** for Ontarians.

- An EHR includes all of a patient's health information: a record that is **up-to-date, complete, and accurate**

- The system is working today, with networks to **connect health organizations and sole practitioners across the province**, and repositories which securely store billions of records, all anchored by solid security and privacy protocols.

- Having access to digital medical records puts clinicians in a better position to provide the best possible care.

Benefits of EHRs

- **Better coordinated care** — teams of health care providers — primary care physicians, specialists, nurses, technicians, and other clinicians can all access the same patient info

- **Eliminates the need for duplicate tests**, can prevent unnecessary admittance to the hospital, and **saves the system money**

- More complete patient information **enables clinicians to make well-informed treatment decisions more quickly and safely**

- **EHRs can encourage and enable to actively participate in managing their own health**

  - Many patients now expect to see their health care information – EHRs make it possible

Elements of the EHR

WHO CAN ACCESS THE EHR	Any verified user that meets eHealth Ontario connectivity, security and privacy standards	■ Health care professionals ■ Acute care (hospital) ■ Community (CCAC's Long Term Care, etc.) ■ Primary care (family doctors, etc.) ■ Health System Users (CCO, OTN)	■ Researchers (ICES, CIHI, HQO, etc.) ■ Vendors ■ Patients - future ■ Innovators

Broader health sector access

HOW THEY CAN VIEW THE EHR

■ Clinical Viewers
  Connecting Ontario
  ClinicalConnect
  ONE Portal

■ Hospital systems
■ Doctor's office EMRs

HOW EHR DATA IS SHARED/TRANSPORTED

CONNECTED BACKBONE (Health Information Access Layer)

HOW WE VERIFY PATIENTS AND USERS AND CONTROL WHO'S ALLOWED TO SEE WHAT

ACCESS AND CONTROL LAYER

eHealth Ontario manages with partners

Provider Registry	Client Registry (patients)	Consent Registry	EHR Event Monitoring	Identity services
Representing 90% of providers	Representing 98% of Ontarians	Patients' directives for who can see what	Tracks who has accessed the EHR	ONE ID / Single Sign On / User Registry

WHAT PATIENT DATA CAN BE VIEWED IN THE EHR

CLINICAL DATA REPOSITORIES that store patient EHR data

Live (in production)

In development (future)

Diagnostic Imaging	Ontario Laboratories Information	Clinical Data Acute & community	Panorama Immunization	Digital Health Drug Repository Community pharmacies	CCAC Community Assessments & Care Plans	EMR Clinical Data Primary

DATA CONTRIBUTORS
5 billion data points to date

Hospital PAC Systems IHF PAC Systems	Hospital Labs Community Labs Public Health	Hospital Information Systems CHRIS	Public Health	Community pharmacies	IAR CCT	EMRs

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Progress report

92,350 HEALTH CARE PROFESSIONALS CAN NOW ACCESS PATIENT EHRs.

EHR includes

- Cardiovascular reports
- Visit details
- Neurophysiology reports
- Infection control information
- Hospital discharge summaries
- Diagnostic imaging reports (e.g., X-rays)
- Respiratory reports
- Allergy information
- Medication profile (from hospital)
- Lab reports
- Emergency dept. reports
- AND MORE

SECURE DIGITAL LAB RESULTS

- BLOOD GLUCOSE
- CHOLESTEROL
- CULTURES

Ontario laboratories information system (OLIS) is capable of storing over **68,000 unique types of test results.**

DATA CONTAINED IN OLIS

Currently, there are over 3.1 billion results in OLIS.

97% COMMUNITY LAB RESULTS

92% TOTAL LAB RESULTS
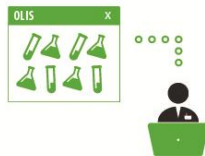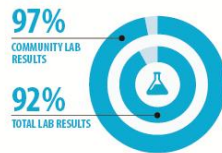
15.4 million+ searches for patient records by **65,000 health care professionals** in the last 12 months.

OLIS

ACCESS TO NEURO SPECIALISTS 24/7

Neuro trauma patients, including victims of stroke, have **access to a neuro specialist 24 hours a day, 7 days a week.**

55,000+ NEURO CONSULTATIONS MADE REMOTELY

MILLIONS OF TAXPAYER DOLLARS **SAVED**

100% of hospital sites can share diagnostic images and reports digitally within their region.

ACCESS TO MEDICATION HISTORY

Helps prevent adverse drug reactions

Medication history of **all Ontario seniors** is accessible to health care providers in all hospitals and emergency rooms.

SECURE INFORMATION TECHNOLOGY

1.8 MILLION EMAILS EXCHANGED DAILY

Over 300,000 mailboxes are connected to our secure email service.

DATA CENTRE
State-of-the-art, fully monitored data infrastructure is designed specifically for health care requirements.

What Ontario Clinicians are saying

"When I log in…I get a one-stop shop of medical records, consultation notes, labs, pathology, radiology and diagnostic imaging"

Dr Rafi Setrak, Niagara Health System

"[the viewer] allows the clinician to focus on clinical decision-making. Pulling data from a number of sources is work that would've taken hours to do and condensing it into seconds"

Dr Naresh Mohan, Rouge Valley Health System

"… first, … it allows me to access information very quickly. Second, the patient has the comfort of knowing that I have the information right away"

Dr Upe Mehan, The Centre for Family Medicine

High performing health system attributes

ACCESSIBLE
People should be able to get timely and appropriate healthcare services to achieve the best possible health outcomes.

EFFECTIVE
People should receive the care that works and is based on the best available scientific information.

SAFE
People should not be harmed by an accident or mistakes when they receive care**.**

PATIENT-CENTRED
Healthcare providers should offer services in a way that is sensitive to a patient's needs and preferences.

EQUITABLE
People should get the same quality of care regardless of who they are or where they live.
sickness and improve the health of the people of Ontario.

Attributes (con't)

EFFICIENT
The health system should continually look for ways to reduce waste, including waste of supplies, equipment, time, ideas and information

APPROPRIATELY RESOURCED
The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs.

INTEGRATED
All parts of the health system should be organized, connected and work with one another to provide high quality care.

FOCUSED on POPULATION HEALTH
The health system should work to prevent sickness and improve the health of the people of Ontario

Value and Opportunities Created by Ontario's Digital Health Assets
Ed Clark report

Key points:

- Report confirms that the infrastructure built through eHealth Ontario and other health system partners provides significant and ongoing value to Ontarians and should continue to serve as a backbone for sharing patient health information.

- In an increasingly connected and mobile world, must accelerate the work done to make progress on digital health, but also make sure this is done in concert with a strategy that puts patients at the centre.

- The ongoing value well exceeds the costs of maintaining and growing Ontario's digital health assets. eHealth Ontario has built core infrastructure that is now creating real value for Ontarians.

    - In 2015-16 Ontario's digital health assets generated annual benefits of $900 million per year.

- In order for patients to realize all the benefits the digital health can bring, the government needs to move to a more directive approach.

- The Ministry should re-scope the mandate of eHealth Ontario to focus on technology service delivery and to ensure the agency is held to account for delivery against its mandate

- It should more clearly articulate a digital health strategy for the province that outlines the roles, responsibilities, achievements and objectives of each specific actor

- The digital health strategy must include a focus on minimum requirements for last mile connections and end users such as health care providers, practitioners, and patients.

- The implementation of the digital health strategy must include a strong focus and set of minimum requirements for the patient experience.

- The oversight of the digital health strategy should be assigned to a Digital Health Strategy Secretariat.

What lies ahead

- Completing remaining EHR component builds

- Increasing adoption and use: continuing to add more valuable data

- Focusing on constantly improving speed and reliability of system