

## Presentation to Health and Community Services Committee of the Queensland Parliament

May 9, 2014

Dr. Edward M. Brown, Chief Executive Officer, Ontario Telemedicine Network

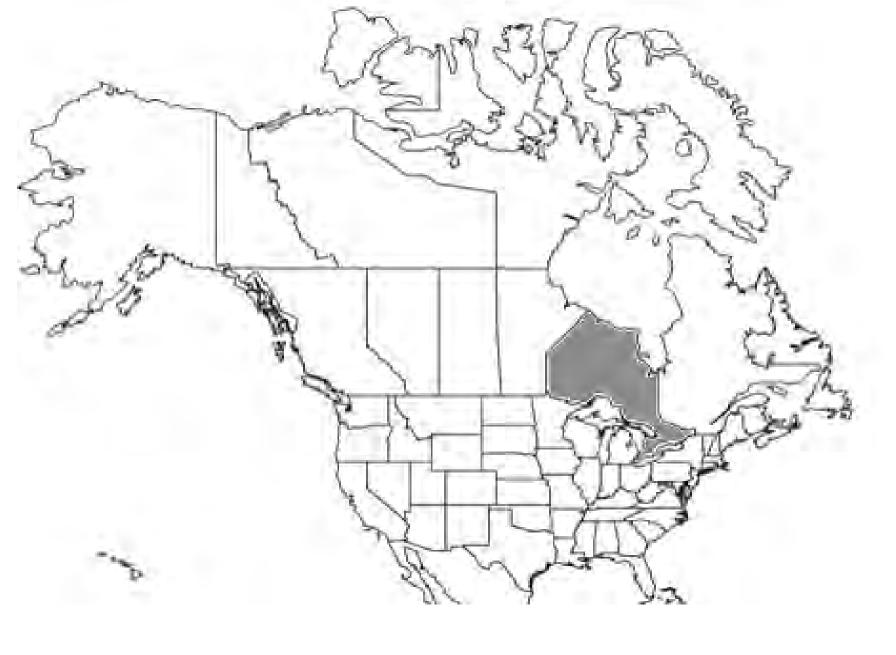
## The views expressed here do not necessarily reflect those of the Government of Ontario



#### Contents

- Comparing Australia to Canada
- Ontario's Health Care System
- OTN Overview
- OTN Service Offerings
- OTN's Role a "Telemedicine Service Provider"
- Delivery Partners
- OTN Proprietary Applications
- Telemedicine Roadmap 2014 2015











#### **Comparing Australia to Canada**



#### Australia/Canada Comparison\*

Item	Australia	Canada
Land Mass	2.9 million square miles	3.8 million square miles
Population	22.6 million	34.57 million
GDP	1.52 trillion	1.82 trillion
GDP/capita	\$67K	\$52K
Health Care Spend/capita	\$1,714*	\$1,939 (13% more than Au)

\* Source: March 28/14 – 'Nation Master' www.nationmaster.com



## **Queensland/Ontario Comparison\***

Item	Queensland	Ontario
Land Mass	1,730,648 km²	1,076,395 km²
Population	4,676,395 (est – Sept/13)	13,537,994 (July 1/13)
GDP	\$283.6 billion (2011-12)	\$674.5 billion (2012)
GDP/capita	\$60,645	\$49,823
Annual Health Expenditure (state)	\$12.326 billion operating plus 1.376 in health facility projects (budget 2013/14)	\$44.7 billion (2010/11)
Health Care Spend/capita	\$2,636 (operating only)	\$2,710
Investment in Telehealth	\$30.9 million over 4 years	\$22.5 million base funding (plus network and project costs)

\* Sources: Queensland – various; Ontario: government fact sheet



#### **Ontario's Health Care System**



## **Responsibility for Health Care Delivery**

- The Canada Health Act provides high level principles for health care delivery in Canada
- However, health care is a <u>Provincial</u> responsibility
- The Federal Government provides transfer payments to the provinces with minimal specific accountability
- The Federal Government is responsible for delivering health care on reserve for Aboriginal peoples
- Most provinces devolve some level of control to Regional Health Authorities, known as "Local Health Integration Networks" in Ontario.

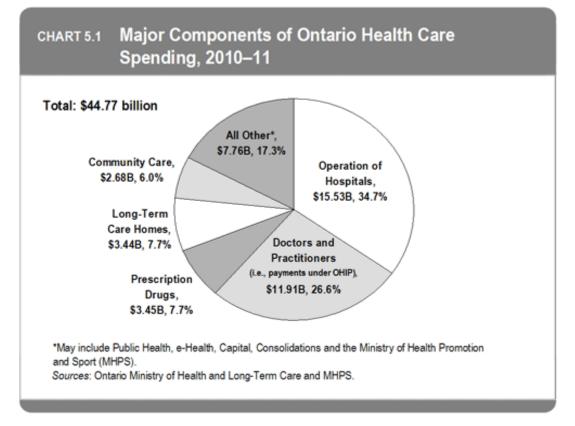


#### **Ontario Health Care System**

- Approximately 70% of all health care expenditures are publically funded by Ontario Government
  - Single payer, universal coverage for <u>100%</u> of all essential <u>physician</u> and <u>hospital</u> services (likely unique globally)
  - No dental coverage
  - Drug coverage for low income and seniors
  - Mixed coverage of allied health professional services
  - Mixed coverage of community/home services



## Ontario's Government Health Care Spend '10/11



Health Care Spend 40.3% of Ontario's total program spend (\$2,710/per capita)



# Independence of Physicians and Organizations

#### Organizations

- Although there is one payer, there are more than 8,000 independent hospitals and NGOs
- Each has their own governance and management

#### Physicians

- Physicians in the community are primarily fee-for-service and own their own practices
- An increasing number of primary care physicians and specialists are paid through alternate payment programs which usually combine a base salary with volume incentives



#### Physician Licensure in Ontario



- CPSO maintains jurisdiction over its members wherever they may practice and will investigate all complaints
- Same standards of care for in-person and TM
- In the process of revising its TM policy expect to see:
  - Patient should receive care using the most appropriate vehicle for providing care
  - Meets standards of care (same as for in person)
  - Must ensure that appropriate resources are available at the patient end
  - Meets privacy standards for PHI



## Hospital Credentialing in Ontario

- Public Hospitals Act outlines MD credentialing
- Labour intensive process for hospital and MDs
- The Act pre-dates virtual health care
  - The prevailing "custom" is to credential only at the hospital where the telemedicine consultant MD is located



# Physician Payment for Telemedicine in Canada

- Historically most MDs in bill fee-for-service
- There are 10 Provinces and Territories – all have their for-service plans



- 11 of 13 enable billing for Telemedicine
- 8 of 13 include specific Telemedicine premiums



#### **Ontario Telemedicine Network Overview**



## OTN

- An independent not-for-profit corporation funded by the Government of Ontario and established in 2006
- Delivery partners include:
  - eHealth Ontario
  - Keewaytinook Okimakanak e-Health
  - OntarioMD
  - Canada Health Infoway



- Members include 1,350 health care and education organizations
- 230 employees in 5 offices and 25 home offices



#### Governance

- Independent Board of Directors
- 13 sage individuals, including LHIN and hospital CEOs, health providers, educators, business leaders etc.
- A Transfer Payment Agent of the Ministry of Health and Long-term Care (MoHLTC) with base funding
- Deliverables determined annually through a standing Transfer Payment Agreement with an annually updated schedule of deliverables
- Additional revenue from non-MoHLTC ministries, Federal grants and sale of premium services.



Our vision: Telemedicine will be a mainstream channel for health care delivery and education.





#### **OTN Service Offerings**



#### **OTN Telemedicine Services**



#### 1. Clinical Videoconferencing



2. Provider eConsult



3. Acute Care



4. Learning



5. Telehomecare and Consum<sup>2</sup>

#### 1. Clinical Videoconferencing

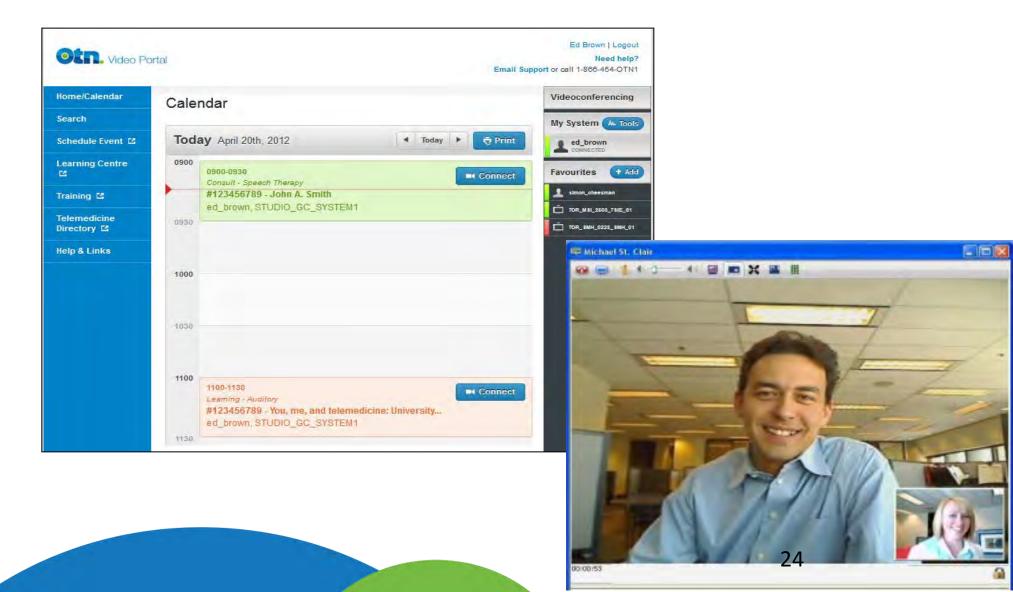








#### Personal Videoconferencing Portal

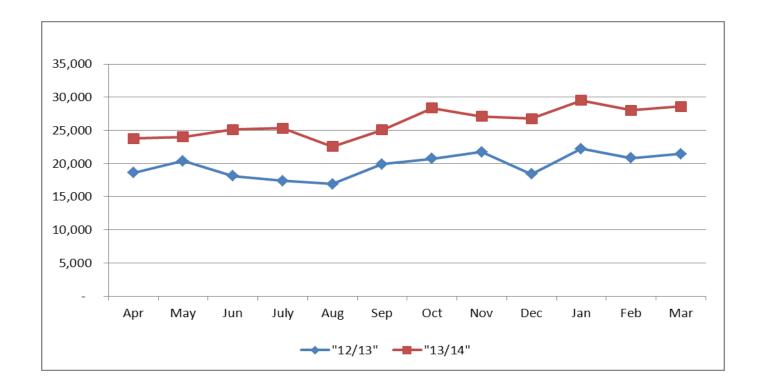


#### Metrics - 2013/14

Performance Measure	Year Ending 2013/14					
Patients Served	390,906					
Clinical Events	314,153					
Active Consultants <ul> <li>All</li> <li>Physician</li> </ul> <li>Active Sites</li>	2,745 1,852 1,748					
<ul><li>Videoconferencing Systems</li><li>Traditional Systems</li><li>Personal Videoconferencing</li></ul>	3,298 1,174					



#### Clinical Events 2013/14



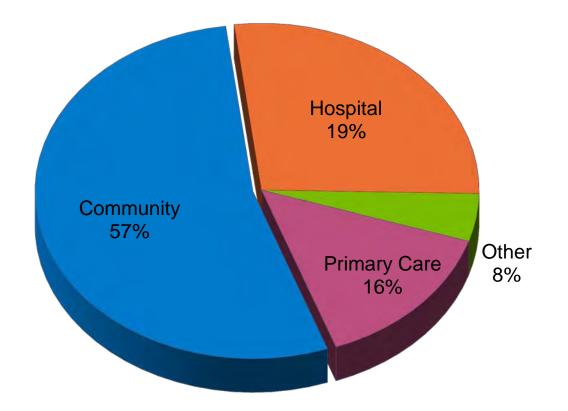
#### Year over Year growth of 33%



Site Type	# Active Sites	# Active Systems				
Community Care Access Centre	65	108				
Clinic	86	95				
Clinician Office	50	50				
Community Health Centre	127	179				
Community Support Services	179	220				
Educational Facility	23	70				
Family Health Team	133	149				
Government	18	24				
Hospital - Academic/Teaching	50	467				
Hospital - Community	117	530				
Hospital - Small	67	195				
Infection Control	14	19				
LHIN Office	17	60				
Long Term Care Facility	150	168				
Mental Health/Addictions	440	653				
Nursing Station	35	36				
OTHER Administration	16	16				
OTHER Community	1	1				
OTHER Education	3	3				
OTHER Healthcare	52	64				
OTN Office	18	62				
Professional Organization	17	22				
Public Health	53	72				
Rehab Facility	17	35				
Total	1,748	3,298				

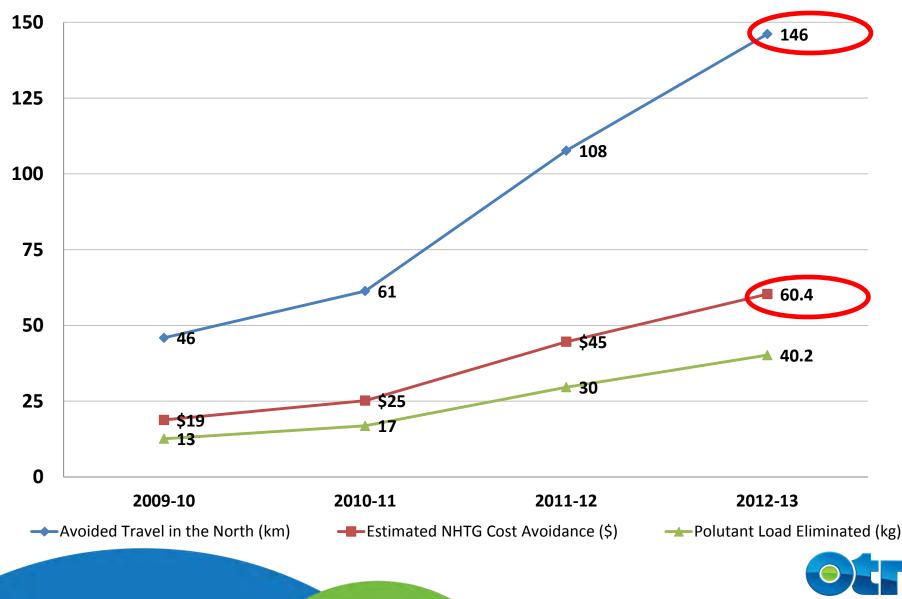


#### **Clinical Events by Patient Host Type**





#### Avoided Travel in Northern Ontario (in millions)



#### Avoided Travel 2013/14

- An estimated 259 million km of patient travel was avoided across all of Ontario.
- Estimated pollutant load eliminated = 61 million kg
- Estimated liters of fuel saved = 25 million L
- An estimated 145 million km of patient travel was avoided for patients from LHINs 13 and 14 alone.
- Estimated Northern Health Travel Grant cost avoidance of **\$61,800,539.**



#### Patient Survey Results

87%

74%

were satisfied with their telemedicine visit.

indicated they would use it again.

felt as comfortable receiving care through telemedicine as they would have in person.

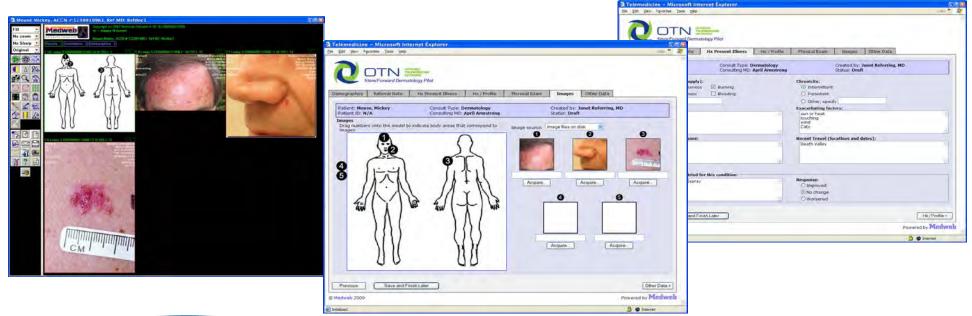
saved money using telemedicine, with average savings of \$C 242.

Patient survey results - videoconferencing 2012



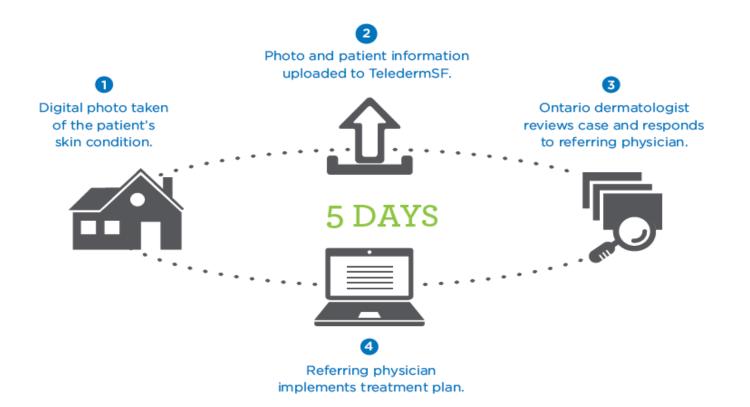
#### 2. Provider to Provider <u>eConsult</u> (AKA 'store-forward' telemedicine)

 Current uses: dermatology, ophthalmology & retinal screening, wound care, psychiatry





## Teledermatology (eConsult)



## As of March 31, 2014, 2,300 Family Physicians were using Teledermatology



## 3. Acute Care

- Provincial Programs (24/7 On-call)
- Telestroke
- Sign language service
- Teleburn

**Regional Programs:** 

- Crisis telepsychiatry
- Virtual critical care
- Teletrauma
- Vascular surgery emergencies



#### 4. Education and Meetings

#### Includes:

- Multi-point videoconferences
- Webcasts
- Webconferences

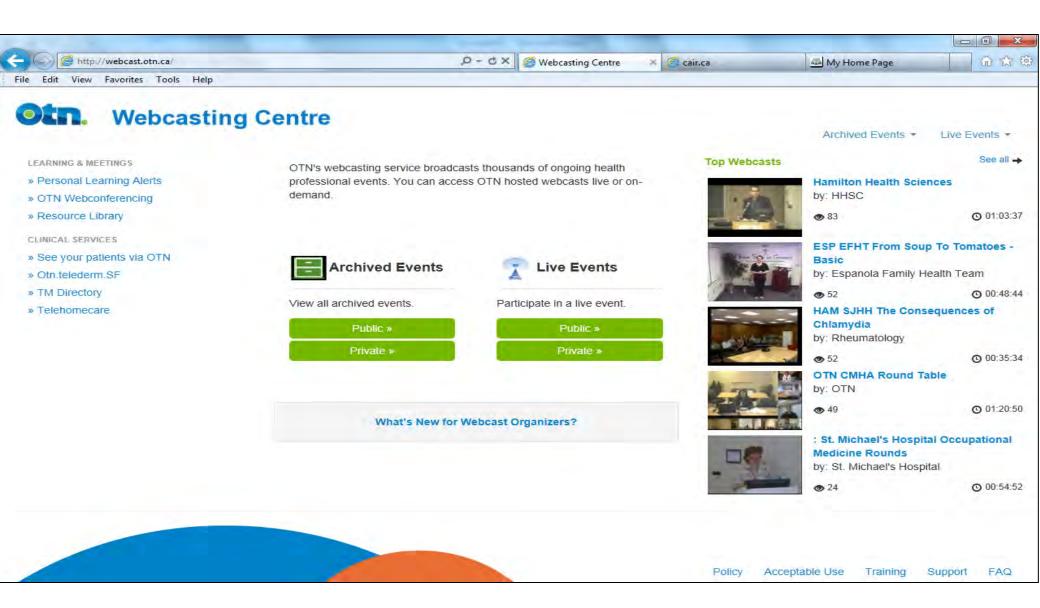


#### 21,477 Events in 2013/14



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http://learning.otn.ca/



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### **Ontario Geriatrics Learning Centre**

Français

Search

#### Home OTN.

### Sort by Date

#### Welcome!



The Ontario Geriatrics Learning Centre is an innovative space where health and social care professionals are able

to share their knowledge and expertise. The goal of this important resource is to help current and future providers from Ontario and beyond to gain the knowledge and skills they need to better care for our aging population."

- Dr. Samir K. Sinha, MD Provincial Lead, Ontario's Seniors Strategy

"This new online library represents an important step forward in ensuring that those with knowledge of how to



Aging Maintaining A Positive Attitude Presenter(s): David Conn Site: Baycrest Centre for Geriatric Care Event ID: 29682250 Views: 199 Date: 2014-01-15 Keywords: geriatrics Mood Depression

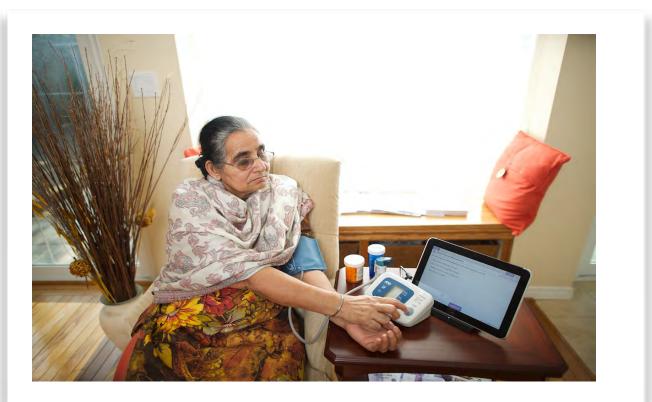


**Baycrest Geriatric Medicine Rounds** Presenter(s): Dr Camilla Wong Site: Baycrest Centre for Geriatric Care Event ID: 29144331 Views: 66 Date: 2013-12-19 Keywords: genatrics Functional Decline Activities of Daily Living Risk Assessment



Hearing And Aging: What Can We Do About It? Presenter(s): Marilyn Reed

### 5. Telehomecare

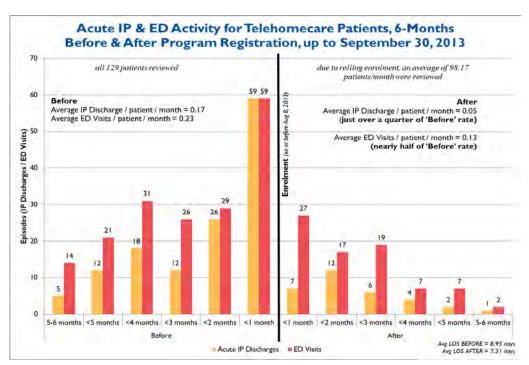


### Remote Monitoring and Coaching for People with Chronic Disease



## **Telehomecare Outcomes 2013**

 Results for the period April to September 30, 2013 indicate a reduction of 43% in ED visits and a reduction of 71% in hospital admissions (when compared with the pre-Telehomecare rate)\*



\*William Osler Health System utilization data review of first 130 patients in the Central West LHIN Telehomecare Program; September, 2013



## **Telehomecare Provincial Expansion**

- Heart failure and chronic lung patients
- Co-morbid diabetes
- No charge to eligible patients
- Currently available in 5 LHINS and 3 more by September 2014 (8 of 14)
- Home video pilots
- Additional chronic conditions





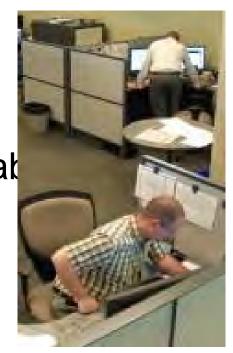
## **OTN's Role**



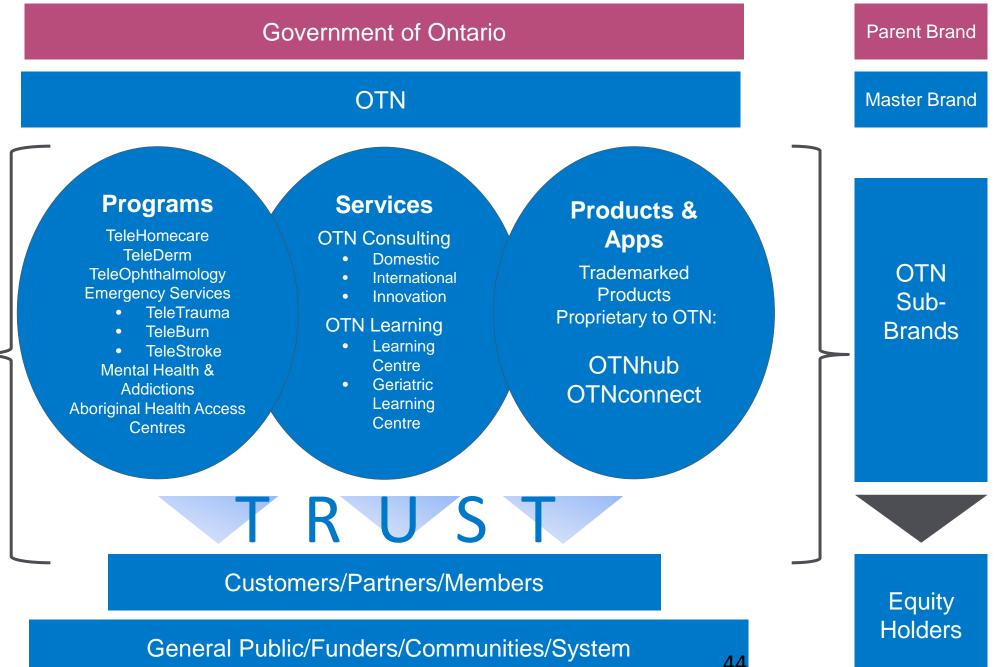
# What Does OTN Do?

- 1. Support a single, harmonized, model
  - Standards & processes
  - Inclusive <u>membership model</u>
- 2. Provide a set of centralized services
  - TM Applications Turnkey Technology Support Training – Privacy & Security – TM Directory – Scheduling – Reporting
- 3. Catalyze and drive adoption
  - Providers Organizations Programs Regions





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## **The Adoption Challenge**

- Adoption Process
  - Building Awareness
  - Identifying the ROI
  - Technology availability
  - Building a practice or program
  - Support the process of organizing care
- Strategic Business Planning support

## **Training for Telemedicine**

- Leverages two on-line approaches
  - Learning Content Management System (LCMS) for complex certificate training needs (Clinical Telemedicine Certificate)
  - On-line built-in training solution within the Telemedicine Center
- Develops e-learning training for our members
- Delivers training through hybrid solution (e-learning and live training)
- Trains nearly 5,000 learners annually

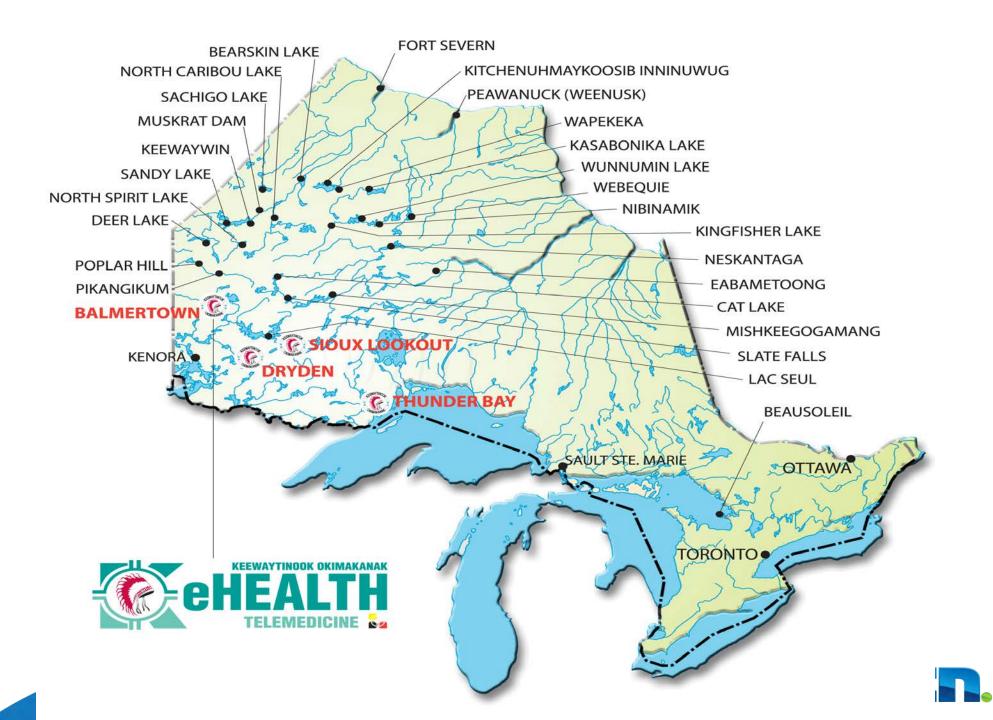


## **Customer Care Centre**



## **Delivery Partners**





## eHealth Delivery Partners

Keewatinook Okimakanak eHealth	<ul> <li>First Nations Telemedicine Provider</li> </ul>
eHealth Ontario	<ul><li>Data Centres</li><li>Network</li><li>Secure Authentication</li></ul>
OntarioMD	<ul> <li>Integration with physician EMRs</li> </ul>
Canada Health Infoway (a federal agency)	<ul> <li>Strategic Investor</li> </ul>



## **OTN's Proprietary Applications**



# **Scheduling Tool**

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# Scheduling a Clinical, Educational or Administrative Video Event

- 'Ncompass'
- OTN's on-line scheduling tool
- One page

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Ouick Search Enter Event ID	Create Clinic Event	New (Unsaved)
*	Participants Click here for help with this section	Event Tool Bar
Calendar		
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Non-Clinical Events	Age Group*:  Paediatric (0-17)  Adult (18-74)  Geriatric (75+) Unknown	Creation Date:
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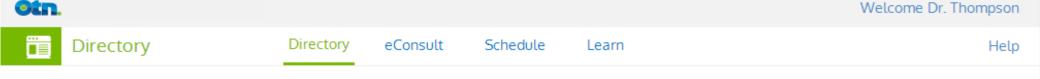


## **OTN Telemedicine Directory**

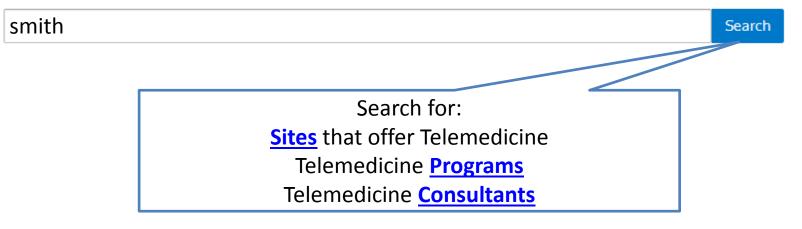
"Find the people and places that make Telemedicine work."

- Easy way to get access to specialists, programs and sites;
- A place to advertise, coordinate and manage services offered via Telemedicine; and
- A launching point for telemedicine interactions.





### Find the people and places that make telemedicine work!



	Directory Personal V	Adeoconferencing	eConsult S	cheduling	Learning Web	ocasting	
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Medical School:	Phone:	705-522-2682	E Fax:	705	-522-3293		10
Iniversity of Toronto	AlcPhone		Email		olmatthewman@ho	tmail.com	
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# **Otn.trainingcentre**

Resources

Personal Videoconferencing

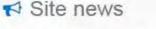
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### **Training Resource Library**

Forums

The Training Resource Library provides on-demand telemedicine training and resources that leverage: dynamic online content, informative videos and straightforward reference guides.

#### Read More



(No news has been posted yet)

Courses

### C Training Resource Library

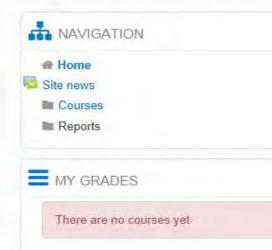


The training resource library has been designed to meet your learning needs. This library provides access to on-demand telemedicine training and resources that leverage: dynamic online content, informative videos and straightforward reference guides.

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Live Training



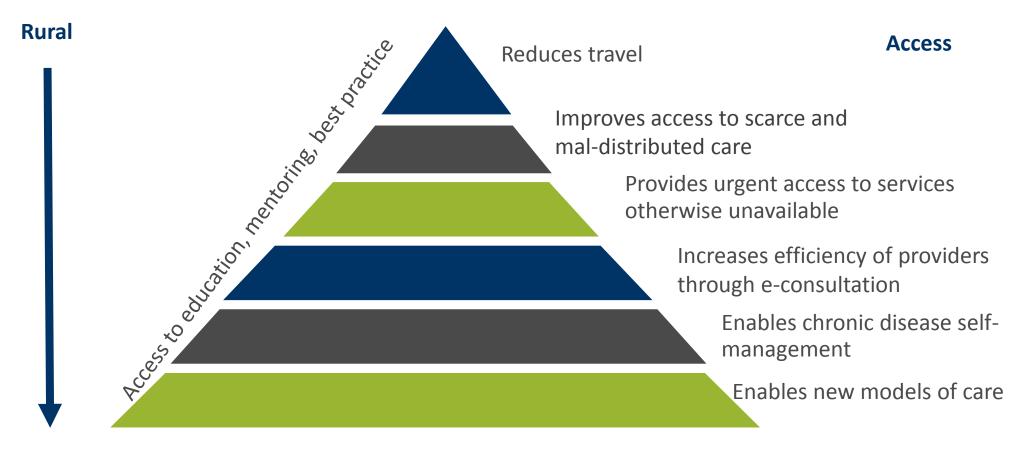




### Telemedicine Roadmap 2014/15



### Goal: Better Care for Patients Better Value for Money



### **Rural and Urban**

### **Access and Quality**

### **OTN Strategic Priorities 14/15**

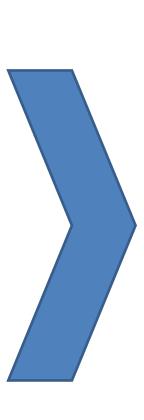
- 1. Improving access to care; reducing travel for rural and northern residents and; reducing wait times through continued expansion of clinical videoconferencing and provider eConsult
- 2. Expansion of the consumer/CDM telemedicine strategy, including:
  - i. System-wide expansion of telehomecare (i.e. geographic reach and disease areas) to improve quality for CDM patients and reduce hospital utilization
  - ii. Create partnerships and "bundles" of telemedicine services to align, standardize and scale support for major provincial CDM initiatives, such as Health Links and diabetes
- 3. Ramp up telemedicine consulting services to support key health system partner organizations and regional authorities
- 4. Develop a scalable consumer strategy to enhance consumer and CDM services and enable innovation



# Healthcare is Undergoing a Shift

### Moving from ...

- Highly fragmented
- Episodic care
- Data repositories
- Passive patients
- Focus on quantity of care
- Low incentive for innovation

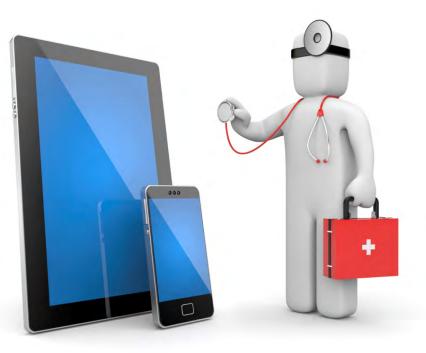


### ... towards

- Highly coordinated
- Patient-centered
- Information sharing and engagement
- Informed patients
- Focus on quality and improved outcomes
- Innovation to improve service, reduce costs



## **Healthcare Transformation**



- Chronic disease management is the challenge of our generation.
- It requires a shift towards a more responsive, patientcentered system.

### Telemedicine is the key enabler





### Care. Connected.