Central East LHIN
RLISS du Centre-Est

Telemedicine in Central East LHIN
Opportunities to Strengthen the System

Central East LHIN Board

February 2015

Ontario
Local Health Integration Network
Réseau local d'intégration des services de santé

OTN and Telemedicine Enabled Organizations

BACKGROUND

What is OTN Telemedicine?

- OTN is one of the largest Telemedicine networks in world, helping to deliver clinica care and professional educatic among health care providers and patients.
- An independent, not-for-profit organization, OTN is funded by the Government of Ontario.
- Central East LHIN – 121 OTN Enabled Organizations

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OTN's Virtual Suite of Services

1. Clinical Videoconferencing

2. eConsult

3. Acute Care

4. Store Forward

5. Telehomecare

6. Education

OTN Services and Support Teams

Contact Centre/Scheduling	OTNhub
Personal Videoconferencing	OTNhub
Telemedicine Directory	OTNhub
Learning Centre	OTNhub
Webcasting	Included in the Learning Centre via OTNhub
Webconferencing	Included in the Learning Centre via OTNhub
Videoconferencing (program development)	OTN Adoption Team
Aboriginal Health Access Centres	Included in the Directory via OTNhub
eConsult	PILOT - OTN Adoption Team
Mental Health & Addictions	Therapeutic Area of Care - OTN Adoption
Teleburn	PILOT - OTN Innovation Team
Teledermatology	OTN Adoption Team
Telehomecare	OTN Telehomecare Team
Teleophthalmology	PILOT - OTN Innovation Team
Telestroke	OTN Adoption Team
Teletrauma	PILOT - OTN Innovation Team
TM LHIN Nurse Program	OTN Adoption Team

Central East LHIN Accountable OTN Organizations

- All Hospitals – multiple sites
- CMHA HKPR & Durham
- Hong Fook, Pinewood, FourCast
- CCAC – across 7 sites
- All 7 Community Health Centres
- Carefirst Services for Seniors (CSS)
- LTC Homes (9)
- Ontario Shores and various Community Clinics
- Diabetes Education Providers (e.g. Hospital, CHC, Charles H. Best)

****Equipment investments** since 2012-13 by Central East LHIN and MOHLTC = $700K

Additional Enabled Organizations in Central East LHIN

- CMHA Toronto Branch
- Bellwood Hospital
- Primary Care Sites: 5/9 FHTs (Kawartha North, HHFHT, SAFHT, EGTAFHT, Peterborough), Apsley Medical Centre
- First Nations (Curve Lake, Alderville, Mississaugas of Scugog)
- Various MCYS/MCSS Sites
- Warkworth Penitentiary & Central East Correctional Centre

Nursing Investment

ADVANCING CLINICAL TELEMEDICINE

Provincial Telemedicine Nursing Investment

- All 14 LHINs = 190 FTE
- Central East – third largest investment (20 FTE)
- 6.0 FTE vacancies province wide (Q3 2014-15)
- Currently 1.0 FTE vacancy in CE LHIN
- Vacancy at Brock CHC to be filled in early Spring to support Brock Geriatric clinic

LHIN	FTE Funded	# of FTE Hired
1 Erie St. Clair	15.0	14.0
2 South West	12.0	11.0
3 Waterloo Wellington	12.0	11.0
4 Hamilton Niagara Haldimand Brant	8.0	7.0
5 Central West	8	8
6 Mississauga Halton	3	3
7 Toronto Central	11	10
8 Central	5	5
9 Central East	20	19
10 South East	14	14
11 Champlain	15	15
12 North Simcoe Muskoka	10	10
13 North East	29.35	29.35
14 North West	28	28
TOTAL	190.35	184.35

Telemedicine Nursing Investment – Central East

Health Service Provider	FTE
Ross Memorial Hospital	1.00
Peterborough Regional Health Centre	1.00
Haliburton Highlands Health Services	0.75
Extendicare Haliburton	0.25
Lakeridge Health	1.00
Rouge Valley Health System	1.00
Campbellford Memorial Hospital	1.00
Northumberland Hills Hospital	0.75
Ontario Shores Centre for Mental Health Services	2.50
Port Hope CHC	2.00
City of Kawartha Lakes CHC	0.50
The Youth Centre	0.50
Oshawa CHC	0.50
Brock CHC	1.00
TAIBU Community Health Centre	0.50
CMHA Durham	1.00
CMHA Peterborough	1.00
Yee Hong Centre for Geriatric Care	0.50
Hong Fook	0.25
Scarborough Academic FHT	0.50
Haliburton Highland FHT	0.50
North Kawartha FHT	1.00
Charles H. Best Diabetes Centre	0.25
Carefirst Seniors and Community Services Association	0.75
TOTAL Central East LHIN	**20.00**

Central East LHIN Community of Practice – Telemedicine Nursing-Clinical Care

- Creation of a LHIN wide COP was a condition directed by Central East LHIN for Telemedicine Nurse funding (2012-13).
- Ontario Shores and Port Hope CHC have assumed leadership/co-chair responsibilities for the COP. Began meeting in May 2012.
- The COP meets 6 times per year and has held two face to face Strategic planning sessions in 2014 (June 2014 and October 2014). Next session planned for April 2015.
- Many areas for improved collaboration and to support improved performance were identified.

Provincial Summary

TM Nurse Recruitment and Utilization
(As of Q3 December 31, 2014)

Col	LHIN	FTE Funde	# of FTE	13/14YE Host	13/14YE Participant	2014/15 Q3 YTD Total	2014/15 Q3 YTD %-Change (from Q3)
1	Erie St. Clair	15.0	14.0	2,258	1,086	3068	48%
2	South West	12.0	11.0	109	149	765	410%
3	Waterloo Wellington	12.0	11.0	1,450	339	7369	441%
4	Hamilton Niagara Haldimand Brant	8.0	7.0	1,509	17	1022	-4%
5	Central West	8	8	1,482	267	1715	34%
6	Mississauga Halton	3	3	77	953	873	19%
7	Toronto Central	11	10	82	569	2304	413%
8	Central	5	5	1,610	1,630	2337	24%
9	Central East	20	19	5,967	1,768	16482	232%
10	South East	14	14	3,228	580	6392	164%
11	Champlain	15	15	9,280	11,047	18189	25%
12	North Simcoe Muskoka	10	10	6,514	755	7939	51%
13	North East	29.35	29.35	25,418	15,591	31647	4%
14	North West	28	28	13,224	10,962	17627	-4%
	TOTAL	190.35	184.35	72,208	45,713	117,729	39%

Source: MARS 11-Jan-2015

Clinical Events

- Central East LHIN Target of 10 056 events/year has been exceeded each year since implementation (2014-15 Q3 = 16, 482)
- Projected usage for 2014 is over 30,000 events. A 46% increase from the previous fiscal (Note: All sites not just telemedicine sites)
- 30% of sites are showing a decrease in usage.
- Mental Health Events account for over 60% of all OTN events.
- For the event type "Other", the most common usage is Administration. However, other popular usages included:
    - Diabetes clinic
    - Metabolic Clinic for Mental Health clients
    - Pharmacy
    - Surgery

Expanding Clinical Usage

Sector (Site Type)	Organization Name	Total 2013-14	Total Clinical Telemedicine Activity Year to date as of Q3 - FY 14/15
Hospital	Ross Memorial Hospital	946	**643**
	Peterborough Regional Health Centre	490	**614**
	Haliburton Highlands Health Services	483	**492**
	Lakeridge Health	913	**1,207**
	Rouge Valley Health System	659	**580**
	Campbellford Memorial Hospital	248	**167**
	Northumberland Hills Hospital	167	**8,510**
Specialty Psychiatric Hospitals	Ontario Shores Centre for Mental Health Sciences	527	**843**
Community Health Centres	Port Hope Community Health Centre	150	**221**
	Canadian Mental Health Association - Haliburton Kawartha Pine Ridge	1,893	**1,066**
	Canadian Mental Health Association-Durham	668	**476**
	Oshawa Community Health Centre	184	**235**
	TAIBU Community Health Centre	254	**255**
	Barbara Black Centre for Youth Resources	41	**39**
	Community Care City of Kawartha Lakes	99	**316**
	Scarborough Academic Family Health Team	0	**6**
Community Support Services	Carefirst Family Health Team	7	**71**
	Charles H. Best Diabetes Centre (The)	0	**60**
	Extendicare Haliburton	0	**5**
	Haliburton Highlands Family Health Team	0	**301**
	Hong Fook Mental Health Association	0	**3**
	Kawartha North Family Health Team	0	**60**
	Yee Hong Centre for Geriatric Care	0	**4**
	Brock Community Health Centre	6	**hiring pending**
TOTAL		**7,735**	**16,395**

Clinical Use

- Of the 43 sites, 7 sites accounted for over 80% of the OTN events. There sites are:
    - Northumberland Hills Hospital
    - Lakeridge Health
    - Canadian Mental Health Association - Haliburton Kawartha Pine Ridge
    - Peterborough Regional Health Centre
    - Ontario Shores Centre for Mental Health Sciences
    - Ross Memorial Hospital
    - Rouge Valley Health System
- Northumberland Hills Hospital accounted for approximately 50% of the events for the 7 high usage sites in current year. Northumberland Hills Hospital and Lakeshore Mental Health Services – growth has spiked due to substance abuse consults.
- While use is expanding – some sites experience high variability on an annual basis for various reasons (e.g. new/stopped clinician access or programs, no back up support to trained nurse)

Therapeutic Areas of Care

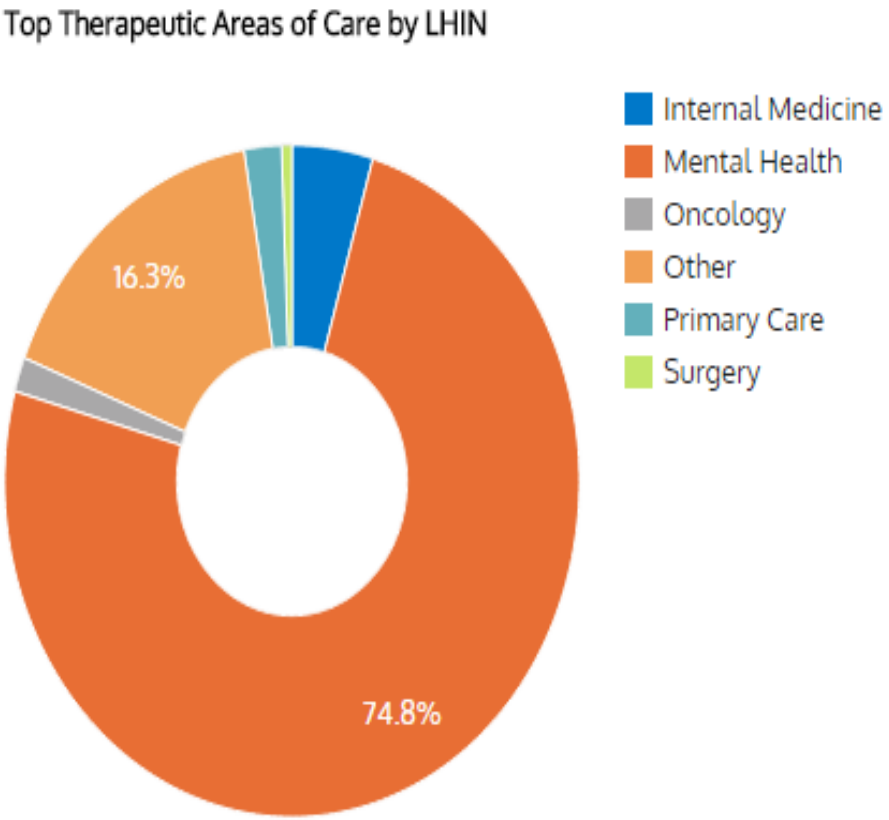
Telemedicine activity in

LHIN 9

during

2014/15 - Q2

Click on bars/slices in the charts to reveal detailed data.



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IHSP Strategic Aims & Priority Populations

Source: 2013 HSP Survey & COP Strategic Planning 2014

- **88%** of respondents (21/24) use OTN to support people with **Mental Health or Addictions** Needs Frequently or Almost Always
  - This includes hospital, primary care and mental health providers
- **46%** (11/24) use OTN to support **Seniors** Frequently or Almost Always
- **33%** (8/24) use OTN to support people with **Vascular or Diabetes** needs Frequently or Almost Always
- Lowest use of OTN is in supporting **Palliative Care** (13%)

Provincial and Central East LHIN

EMERGING OPPORTUNITIES

Common Challenges Across Central East LHIN Sites

- Human Resources
  - One staff, various role in telemedicine delivery
  - Back up coverage – cross training.
  - Community agencies may not have the back-up nursing/medical support in their own organization
  - Part-time positions are challenging for some HSPs
  - Administrative Support
- Various collaborative cross-agency strategies to be explored
- Program Design & Uptake:
  - Internal and external marketing
  - Physician Champion/Lead
  - Programming that wraps around the clinical nurses vs being seen as 'back up option' for face to face.
  - Start up support for physicians using OTN
  - Fulsome use of the OTN Hub and tools
  - Improve metrics for quality improvement and performance

Provincial Telemedicine Opportunities – *Findings*

- **Expand and Grow**
  - Expand within existing organizations by solidifying telemedicine as a strategic initiative and enabler - integrating Telemedicine into core program areas (not a stand alone program)
  - Recruit more specialists/allied health care professionals to Telemedicine
  - Grow other organizations and initiatives e.g. FHTs, Health Links, Telehomecare
- **Community Collaboration**
  - Foster relationships with other health and social service system partners
  - Improve cross-agency support for Telemedicine (e.g. staffing, marketing, clinician awareness/training)
- **Strengthen Governance Structures at LHIN level**
  - Lead and support LHIN level Telemedicine Steering Committees aligned with organizational (HSP) strategy and LHIN's IHSP priorities

Provincial Opportunities (continued)

Strengthen Performance Metrics & Reporting

- Evolve TM Nurse Reporting to ensure targets are informed, evidence- based and aligned with the goals, scope and deliverables of the provincial program, HSP and LHIN goals
- Identify data elements (metrics) beyond process indicators e.g. number of events or patients served such as system level measures e.g. (avoided ER visits and hospital admissions, time and travel distance saved)
- Share Promising Practice TM Nurse models, define the type of delivered service and a methodology to measure
- Support cross-LHIN collaboration

Provincial Opportunities (continued)

Strengthen Accountability

- Integrate telemedicine into new funding models e.g. QBPs and expand the definition of 'clinical telemedicine' as the concept of bundled care evolves
- Bringing the patient and patient experience to the forefront of telemedicine planning
- Breakdown silos between host organizations

Assess Administrative Support Needs

- Determine and allocate funding for administrative requirements e.g. scheduling resources and program development needs

Strategies for Improvement – Central East Community of Practice (CoP)

- **Health Human Resources:**
  - Explore cross-agency strategies - back-up/cross-training;
  - Full use of existing sites; staffing expansion were warranted.
- **Communication:**
  - Improve ability to collaborate/share with other Telemedicine nurses easily
  - Collective marketing across sites;
- **Engagement and Education:**
  - Clinician awareness – OTN Physician Champion/Lead
  - Training for consultants and other program staff
- **Access to Specialist Consultants:**
  - More robust directory and use of OTN hub to locate specialist out of area
  - Cross LHIN collaboration – explore opportunities

Opportunities to Support Central East Strategic Aims

- **Continued and expanded use toward Mental Health and Addictions Aim**
- **Vascular Health/Diabetes Aim**
  - OTN is being used by most organizations (63%) to support client/patient **self management** training
  - The majority of sites are seeing clients/patients who would be well-suited for **Telehome monitoring** if available
    - Explore use in conjunction with Chronic Disease Secondary Prevention Program
  - **Teleopthalmology** Pilot Initiative in Scarborough – Carefirst for Seniors Diabetes Education Program (DEP)
- **Seniors Care**
  - Explore GAIN Team use
  - Explore Telehomecare opportunity for complex clients

Opportunities to Support Strategic Aims – cont'd

- **Palliative Care**
  - Family Consultation; Bed-side support using PCVC
- **Vision Care Strategy**
  - **Teleopthalmology** would be complementary to hospital sites performing cataract surgery, supporting Diabetes care (Retinal Screening) and other vision care procedures
- **Aboriginal Services**
  - Opportunity to explore partnerships between OTN enabled Central East LHIN First Nations and OTN enabled Aboriginal Health Access Centres across the province

Support Quality Based Procedure Implementation:

- **Quality Based Procedures:**
  - Agencies see opportunities to expand the use of OTN to support the care of patients/clients related to various QBP clinical areas or procedures.
  - Areas of particular opportunity include Orthopedic procedures, Stroke, COPD and CHF
  - Other Areas:
    - Wound care
    - Oncology
    - Family Conferencing

Expand Access to Specialist Consultants

- OTN HUB Service Directory is the central tool used by all OTN sites to identify Specialist Consultants – Keep up to date and used by all sites
- Supply does not meet demand from Central East clients/providers. Expand access to specialists to support:
  - Orthopedics Pre and Post Operations
  - Rheumatology
  - Neurology
  - Psychiatry
  - Psychotherapy (youth, follow-up for all ages)
  - Cardiology

Moving Forward

KEY OPPORTUNITIES FOR ACTION IN 2015-16

Key Opportunities for Action within Central East LHIN

Objective	Focus	Responsibility	Timeframe

Explore new opportunities for OTN Clinical Care	• Alignment with each of the LHIN Strategic Aims (Seniors, Vascular, MHA, Palliative)
	• New Opportunities for Clinical Care
	  • Teleopthalmology
	  • Telehomecare
	  • QBP (Stroke, CHF, COPD, others)
		LHIN
		OTN organization
		HSP Sites
			On-going:
			April 2015 – March 2016

Improve Cross Agency Collaboration	• Continue and grow support for Community of Practice (CoP) • Identify Best and Promising Practices • Cross Agency strategies to address challenges (e.g. HHR, Education, Training, Specialist access) • Common Patient/Client Supports (e.g. Self Management Training and Skill-building)	CE Community of Practice HSP Sites OTN organization	Provincial Education Event (March 2015) Next Central East LHIN CoP April 2015

Key Opportunities for Action within Central East LHIN - continued

Objective	Focus	Responsibility	Timeframe
Develop and Implement a Joint Communication - Marketing Strategy	• Work with Communication Leads to develop a Communication and Marketing strategy	OTN Organization CE LHIN HSP OTN Sites	April – June (develop) Q2-Q4 (implement)
Strengthen GP and Specialist Physician Consultant Engagement and Support	• Identify OTN Physician Champion(s) and/or LHIN wide Lead • Promote use through existing physician networks, Leads, Health Links, other • Identify new Specialist Consultants (varied disciplines)	CE LHIN OTN Organization HSP OTN Sites CE Community of Practice	On-going: April 2015 – March 2016

Generate Information to Guide Quality Improvements & Decision-making	• Identification of key metrics beyond clinical event counts (e.g. Patient Experience, Time Saved, Travel Saved)
	• Standard and regular reporting process – template questions
	• Quarterly performance meetings between HSP sites and LHIN, OTN
	  • Ensure all FTEs deployed & working to full scope
	  • Align nursing capacity to expansion opportunities
		CE LHIN
		HSP OTN Sites
		OTN Organization
			April – Sept 2015 (design & test)
			
			Q3 and Q4 (compile & evaluate)

THANK YOU

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