TELEHOMECARE PROGRAM SUPPORTS CHRONIC DISEASE MANAGEMENT IN NORTHERN ONTARIO

June 24, 2016

Presented by:

Sandra Mierdel B.Sc. P.T., MA

OTN Clinical Lead, Telehomecare

Jason Carney MPH

North West LHIN Planning & Development Consultant

[redacted]

Presenters: Sandra Mierdel and Jason Carney

Presentation: Telehomecare Supports Chronic Disease Management in Northern Ontario

We have no financial or personal relationships to disclose

About OTN

The Ontario Telemedicine Network (OTN) is the global leader in telemedicine. We're a made-in-Ontario solution for healthcare transformation and sustainability.

1,748
OTN SITES

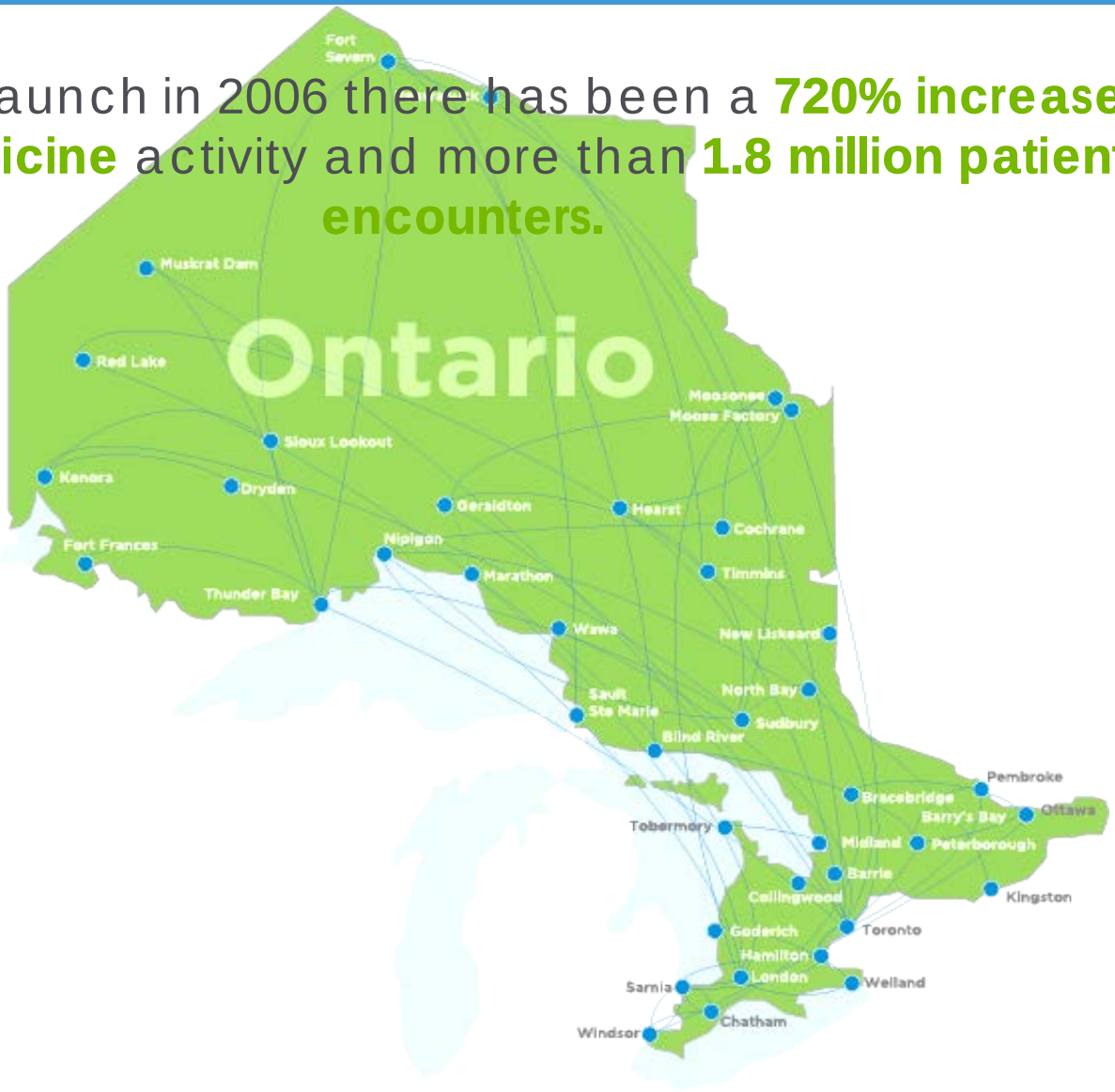
543,000+
PATIENTS SERVED

23,477
LEARNING EVENTS

otn
Care. Connected.

Growth of Telemedicine

Since our launch in 2006 there has been a **720% increase in telemedicine** activity and more than **1.8 million patient encounters.**



OTNHUB.CA

Care. Connected.

Telehomecare: A Patient Centred Model

Clinician Health Coaching:
Teaching the Patient how to self-manage & meet their goals

Efficient MRP Engagement:
Clinician provides regular updates, consults as required

Patient Empowerment:
At home; Sets Personal Goals; Submits vitals/ health responses

Remote Patient Monitoring:
Weekday feeds & Alerts

Simple Technology in Home:
Tablet, BP Cuff, Scale & Pulse oximeter

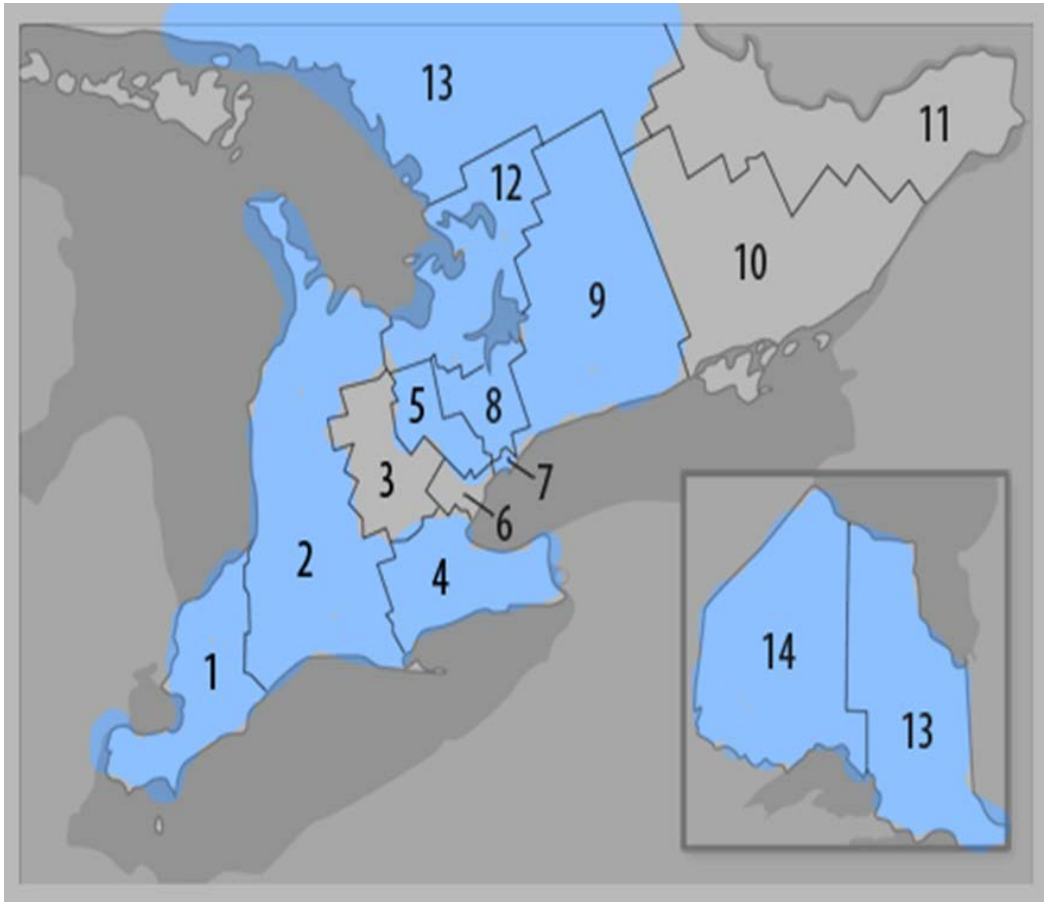
Care. Connected.

The telehomecare clinician provides teaching, care and support over the phone.

Care. Connected.

Current State

8900+ patients supported to date, 2000+ in Northern Ontario



13 Hosts are Currently Live:

1 Erie St. Clair (CCAC)
2 South West (CCAC)
4 HNHB (St. Joseph)
5 Central West (William Osler Health System)
7 Toronto Central (CCAC)
8 Central (HealthLinks via Southlake & CCAC)
9 Central East (CCAC)
11 Champlain (TOH)
12 North Simcoe Muskoka (CCAC)
13 North East (CCAC)
14 North West (CCAC & TBRHSC)

Care. Connected.

Provincial Service SPREAD→SCALE

CHF & COPD (RPM& Coaching)

- 8500 patients, 10 LHINs offering
- Self Management – 6 months for patients to "graduate"
- >50% reduction in IP and ED visits maintained 6 months after discharge

Integrated Care Model

- Incorporate remote patient monitoring into an established IFM program
- Program live with St. Joseph's Health System in HNHB LHIN with planning underway to spread to other IFM program

Congregate Living

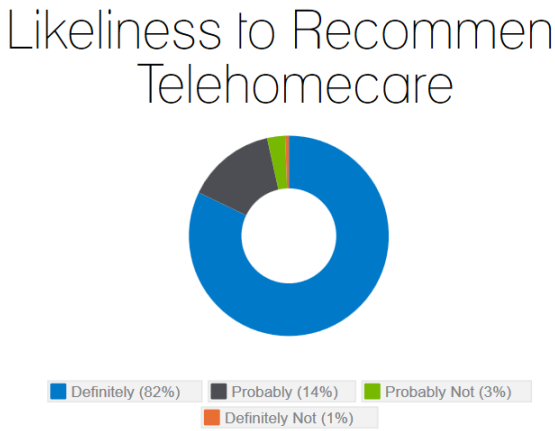
- Adapted existing care model for seniors living in assisted living, supportive housing and retirement home environments
- Sites live in Central LHIN, TC LHIN, CW LHIN, planning underway at sites in NSM
- Group teaching provided when possible via telemedicine

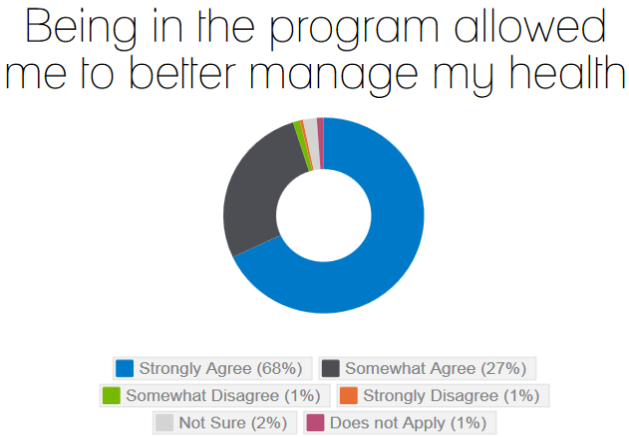
Post Acute

- Shared Care Model (test model is with HF) 8-12 week enrolment with focus on care transitions support
- 6 month pilot and 3 pilot sites
- Protocols developed to support monitoring and just-in-time teaching for patients with more acute care needs

Results: User Satisfaction*

- **Recommend Program**
  - ***96.8%*** of patients indicated they would likely recommend the program to others
- **Improved Self-Management**
  - ***94.5%*** responded positively that Telehomecare improved their ability to self-manage their condition
- **Progress towards Health Goals**
  - ***91.5%*** indicated satisfaction with progress towards their health goals
- **Improved Quality of Life (QOL)**
  - ***88.0%*** answered positively that QOL improved with program





Canada Health Infoway / Inforoute Santé du Canada

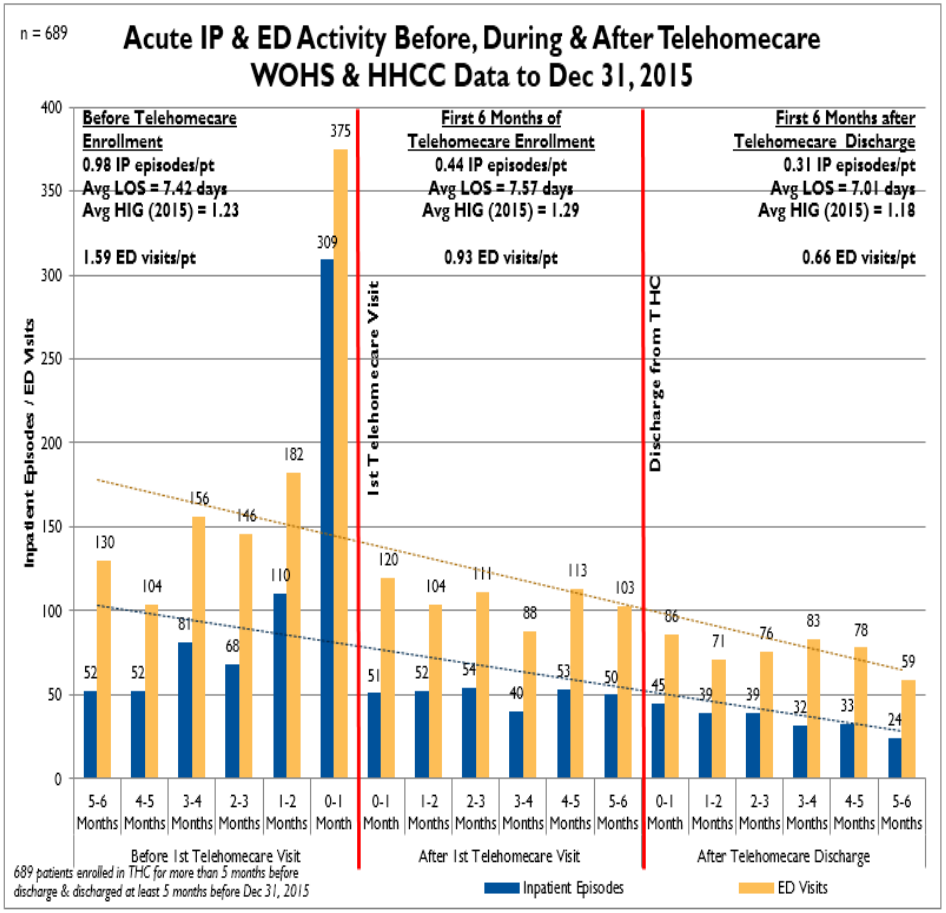
*** From System Use Survey by Infoway 2016, n = 183 patients from 8 LHINs**

otn Care. Connected.

Central West Health Region - Outcomes

Acute In-Patient and ER Activity Before, During, and After Telehomecare

58% decrease in ER visits and a **68% decrease in inpatient admissions.**



Care. Connected.

Quality Dashboard and Data Placemat

Ontario Telemedicine Network: Provincial Telehomecar

Reporting Period effective as of: April 2015 - Jan 2016

Indicator Type	#	Key Performance Indicator (KPI)	Jan-16 ESC	CW	TC	Central	SRHC	NSM	NE	NW	TBRHSC	SW	HHHS	YTD	Provincial Target	Data Source
OPERATIONS	1	# Patients Enrolled	12	40	55	45	18	41	46	14	7	33	5	2,656	Individual	PMMS: Program Activity Report
	1.1	▶ # patients with CHF diagnosis	10	11	33	37	11	18	28	7	2	17	_	1,361	n/a	PMMS: Program Activity Report
	1.2	▶ # patients with CHF - Diabetes diagnosis	_	7	_	_	_	2	4	_	_	2	_	79	n/a	PMMS: Program Activity Report
	1.3	▶ # patients with COPD diagnosis	2	20	21	8	6	21	13	7	5	13	5	1,175	n/a	PMMS: Program Activity Report
	1.4	▶ # patients with COPD - Diabetes diagnosis	_	2	1	_	1	_	1	_	_	1	_	34	n/a	PMMS: Program Activity Report
	2	# Patients Monitored	75	213	281	194	78	149	379	92	43	199	5	152	n/a	PMMS: Workload Distribution Report
	3	# of Total Discharges	22	79	110	98	14									PMMS: Program Activity Report
	3.1	▶ % planned Discharges	41%	38%	25%	16%	14%									
	3.2	▶ % non-Enrolments	9%	43%	44%	44%	64%									
	3.3	▶ % *un*planned Discharges	50%	19%	29%	36%	21%									
	3.4	▶ % unknown Discharges	0%	0%	3%	4%	0%									

Quality Pulse Check: Telehomecare Data Placemat for NE CCAC — **January 2016 Reporting Period**

Progressing Well

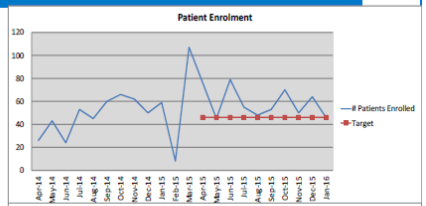
- This site has already EXCEEDED their FY1516 target continued enrolment! Please continue the excellent work and share your success with other sites. Congratulations!
- The average time from referral to consent decision decreased this reporting period from 14.9→10.2 and met the 14 day standard.
- Unplanned discharges decreased this reporting period (32%→24%) and was within the provincial benchmark.
- Non-enrolments declined (26% to 13%) to meet the provincial target of 15%.
- The average length of stay for planned discharges dropped to 6.3 months and met the recommended 5-6 months program duration aim.
- Failed installations trended downward in January (12%→7% and $1,989→$416). Great work!

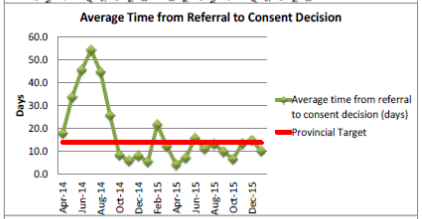
Monitor Closely

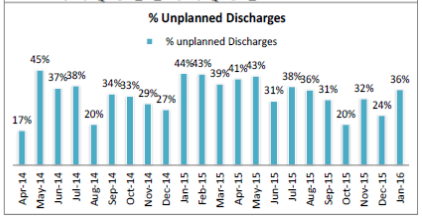
- The clinician: patient ratio was just shy of the 1:60 provincial objective currently sitting at 1:58 for January.
- The completion of patient discharge surveys was 66% and below the 75% provincial aim. It is important to have all planned discharged patients complete a patient survey at discharge to measure outcomes and patient experience.

Red Alert

- Assisted retrievals visits were significantly reduced from 100% to 27% and $903 to $794 this reporting period. if self-retrievals were promoted, the YTD total of $11,341 in potential savings was calculated.
- The cost of multiple visits continued to increase from $919→$1,380 and did not meet the expected 0% goal.
- The indicator for % unknown discharges jumped from 0% to 7% in January which indicated the discharge reasons are being completed properly.
- Planned discharges declined to 44%, down from 53%. This indicator was under the 60% benchmark.







Care. Connected.

MARTHA

DIDN'T HAVE TO GO TO
THE HOSPITAL TODAY.

North West LHIN Context

COPD

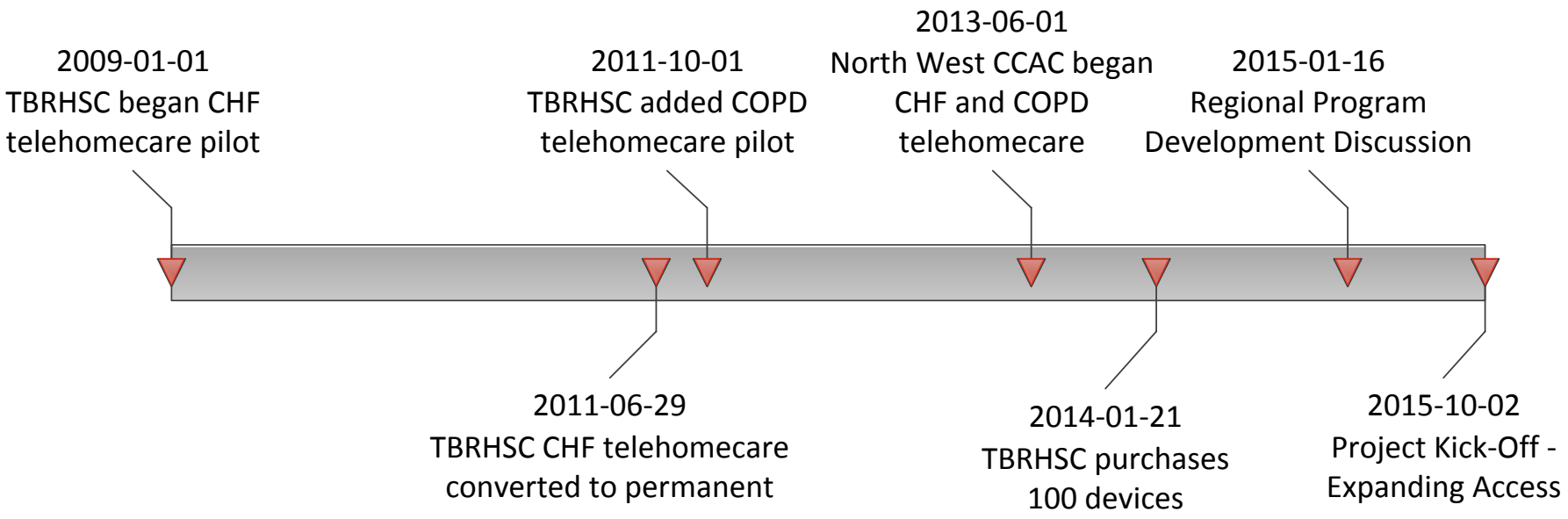
- 1875 ED visits = 6.1% of total
- 813 hospital discharges = 14.5%
- 5874 Acute LOS = 16.1%
- 1372 ALC LOS = 19.8%

CHF

- 903 ED visits = 3% of total
- 667 hospital discharges = 11.9%
- 5579 Acute LOS = 15.3%
- 1074 ALC LOS = 15.5%

Source: IntelliHealth Ontario, NACRS & DAD databases; 2014/15 FY

History



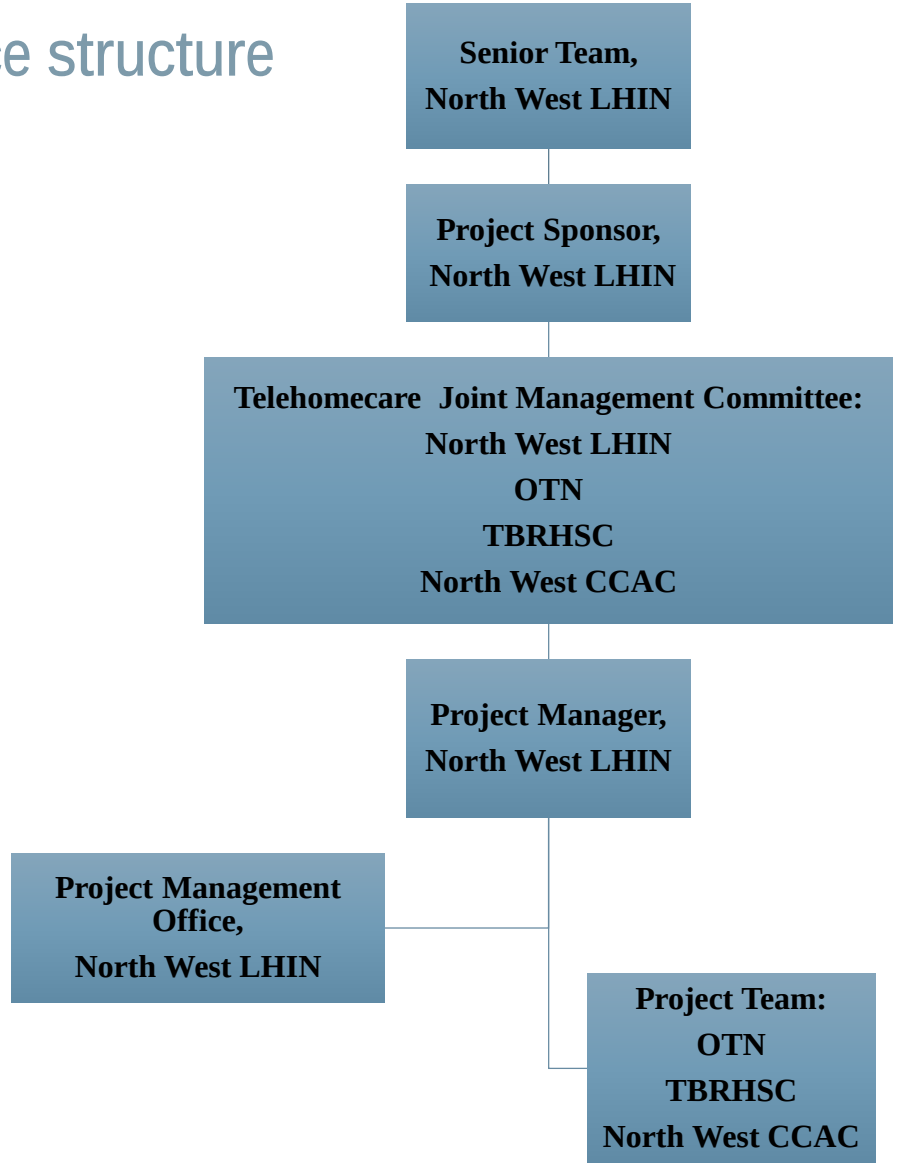
There are two telehomecare programs in the North West LHIN:

- Self-management model at North West CCAC
- Post-acute model at TBRHSC

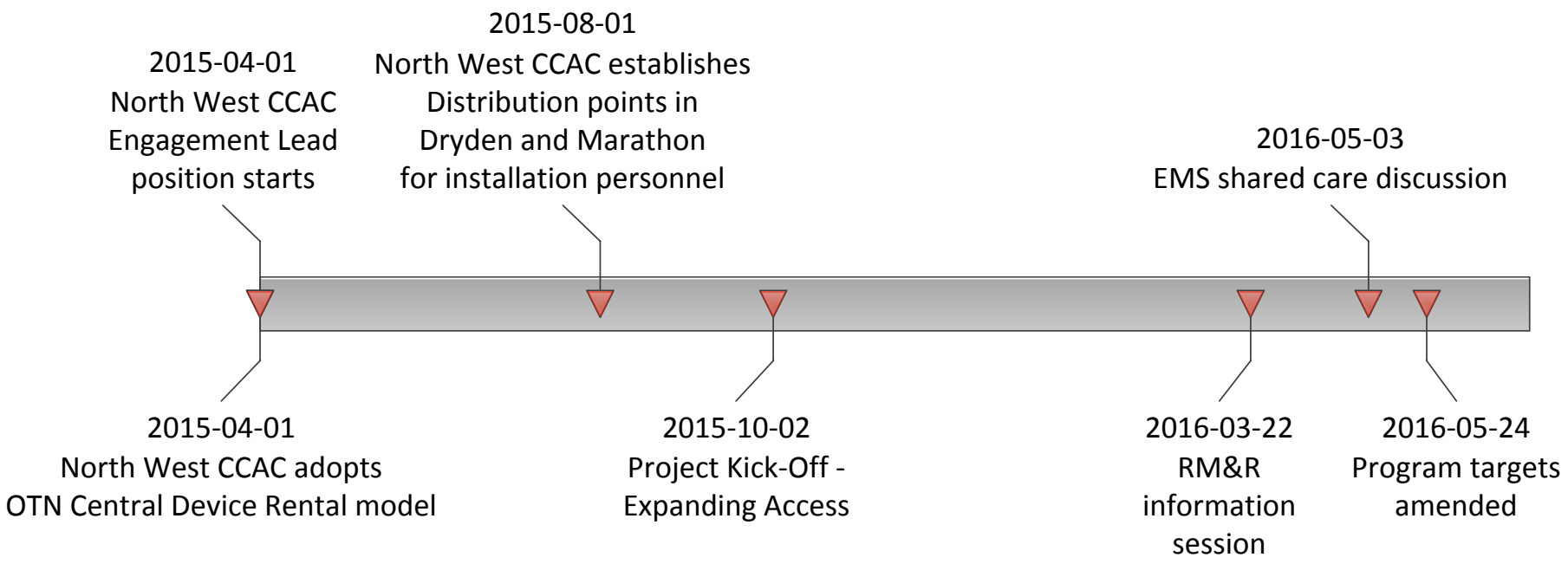
Project framework

Goal	Expand access to telehomecare services across the North West LHIN region by integrating and coordinating clinical and back-office processes of providers.						
Objectives	**Integrate and simplify the referral process**	**Integrate and coordinate asset management and equipment distribution**	**Integrate additional CCAC and TBRHSC roles and processes where appropriate**	**Measure and report the impact of telehomecare on avoidance of acute inpatient and ED visits**	**Advance education and awareness of telehomecare among primary care providers and hospital discharge planners**	**Revisit the existing telehomecare governance structure, and modify where appropriate**	**Revisit program targets, as outlined in Service Accountability Agreements, and revise where appropriate**
Activities	Explore and implement: • Common referral form • Central intake • RM&R Review and revise the eligibility criteria and enrollment process	Transition TBRHSC asset management to OTN's central device pool Continue to expand distribution of equipment with Hypertech service in Dryden and Marathon, including service for TBRHSC Explore options for self-install and community paramedicine install	Work with TBRHSC to better define the program, and establish a unique role amongst services for COPD and CHF Work with providers to identify synergies that will enhance access and reduce duplication	Work with decision support staff at CCAC and TBRHSC to develop workflows Explore the implementation of a post-discharge survey Explore the possibility to follow patients post-discharge for hospital and ED use, with their consent	Complete the CCAC Telehomecare Engagement Plan for 2015/16 Develop and implement the Telehomecare Engagement Plan for 2016/17	Work with the current steering committee to revisit governance structures Work with providers and the CDSM Steering Committee to modify governance for the telehomecare program Recruit stakeholders to inform project direction	Work with providers to revisit program targets Determine new targets and reporting requirements Revise Service Accountability Agreements to reflect new targets and reporting requirements
Indicator	The number of telehomecare enrollments across the region sustain targets of 20 per month for CCAC and 10 per month for TBRHSC						

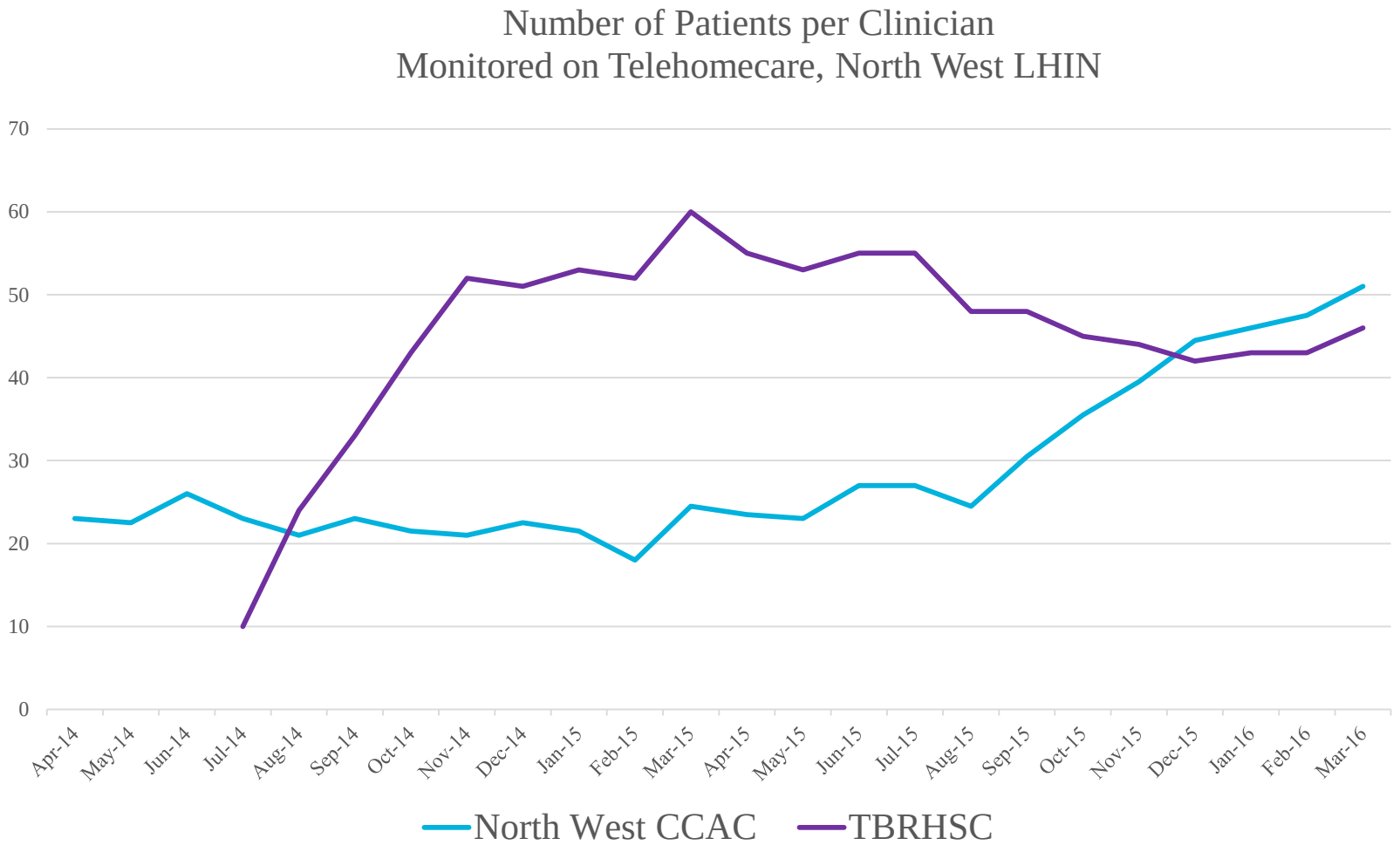
Governance structure



Quick wins


2015-04-01
North West CCAC Engagement Lead position starts
2015-08-01
North West CCAC establishes Distribution points in Dryden and Marathon for installation personnel
2016-05-03
EMS shared care discussion
2015-04-01
North West CCAC adopts OTN Central Device Rental model
2015-10-02
Project Kick-Off - Expanding Access
2016-03-22
RM&R information session
2016-05-24
Program targets amended

Results


Number of Patients per Clinician
Monitored on Telehomecare, North West LHIN
70
60
50
40
30
20
10
0
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
North West CCAC
TBRHSC

Priority work

Establishing a central intake, or Resource Matching and Referral systems

Creating a common referral form

Transitioning TBRHSC to OTN’s Central Device Rental model

Partnering with Community Paramedics in a shared care model

Coordinating installations by the North West CCAC IT department staff

Evaluation of impact on ED visits and hospital inpatient episodes

Future work

Post-discharge survey for evaluation of patient satisfaction and quality improvement

Continue to raise awareness among primary care practitioners, hospital discharge planners and system partners

Provide access in long-term care homes

Lessons learned

Partnership

Windows of opportunity

Flexibility

Questions?

Thank you.