

KOeHealth's First 20 Years Indigenizing Virtual Care

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Northern Policy eHealth Webinar:
Exploring the opportunities and risks related to remote delivery of healthcare

Webinar Objective

- To discuss the best (relevant) practices in telehealth/virtual care in a broader conversation about e-health delivery experiences

Learning Objectives

- Participants will...
 - know how KOeHealth figures in Ontario's system of virtual care;
 - understand the limitations of a transportation-based medical model for delivering care in remote northern First Nations;
 - are aware of the risks and opportunities of using virtual tools and platforms to deliver care with Indigenous communities.

The First KOeTS Event

- March 8, 2002: a family visit supported by Rita Wassaykeesic, Poplar Hill's Community Telemedicine Coordinator
- 10-year old recovering from open heart surgery at Sick Kid's in Toronto
- In 2002 there was no telemedicine in Pikangikum. The child's Aunties drove to Poplar Hill along a melting winter road
- Family members spent an hour with the child and his parents and were happy to see that the boy was well after surgery.

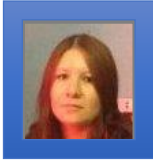


Community Origins

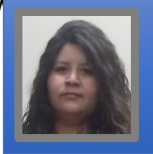
- Keewaytinook Okimakanak Chiefs began experimenting with the use of secure clinical videoconferencing in 1998.
- In the year 2000 KOeHealth partnered with the legacy North Network, known today as Ontario Health Digital Services, aka OTN.
- In 2004 a regional meeting of Indigenous health leaders created the foundation for a regional delivery model.



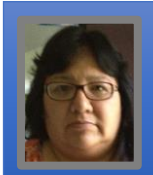
Barriers Patients & Providers Engage Every Day



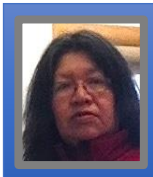
Annabella
Gliddy, CTC



Stephanie Kejick,
CTC Lac Seul



Ida Fiddler,
CTC

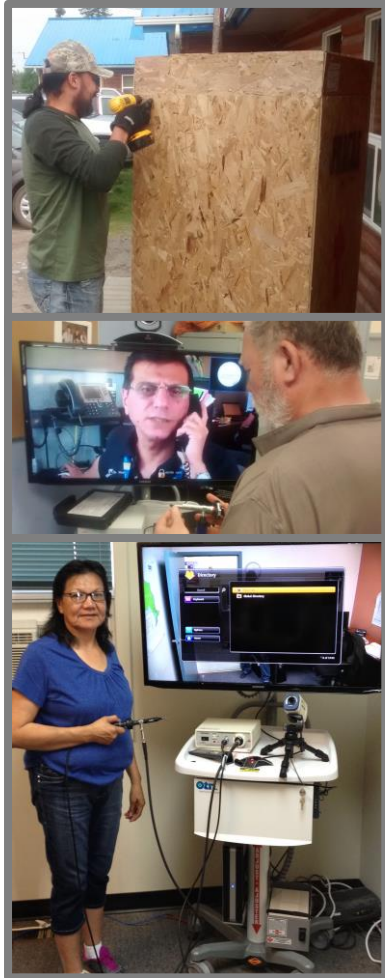


Peggy
Sugarhead, CTC
Eabametoong

Demographics and Logistics

- **Burden of Illness:** People living in northern communities are vulnerable. More likely to suffer from chronic diseases earlier in life, more experience malnutrition, attempt suicide, live significantly shorter lives.
- **Access:** First Nations who live on northern reserves have little to no F2F access to clinical specialists.
- **Travel:** Patients must fly out to points-of-care 100s and 1000s of kilometers from their community.
- **Continuity of Care:** Communication between community providers and specialists is uneven: limited capacity to follow-up and provide local support for patients once they're back home in their community.

Barriers Patients & Providers Engage Every Day

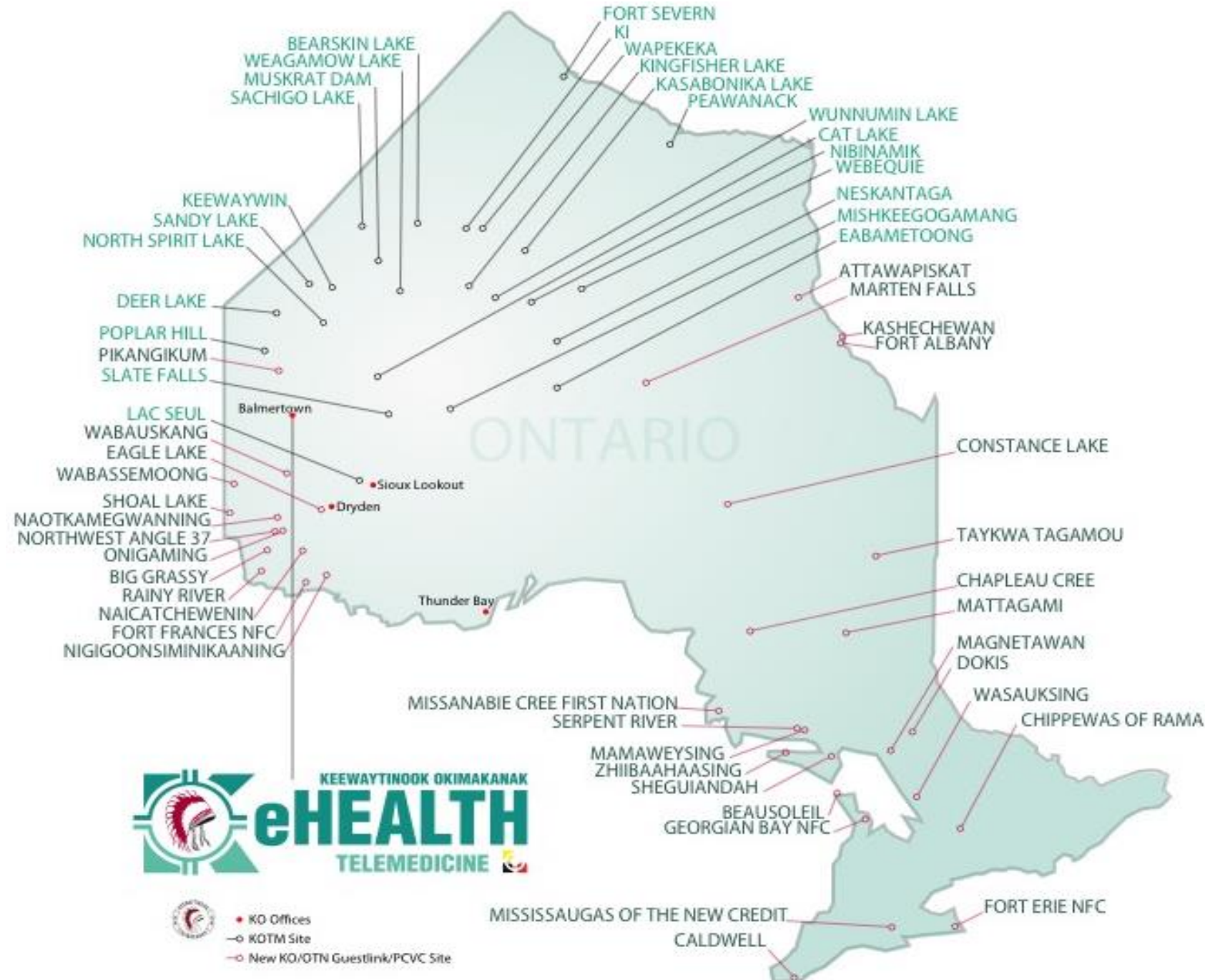


Infrastructure

- Electrical infrastructure in most communities is still unreliable and prone to frequent outages
- The regional telecommunications infrastructure owned by Bell Canada is end-of-life and community-based internet service providers have no way to purchase additional bandwidth.
- Much of the regional fiber optic cable is laying on the ground which makes it vulnerable to breaks and subject to repair delays.
- Overcrowding in most homes makes it impossible to have a private virtual care visit. Sessions must occur at the Nursing Station.

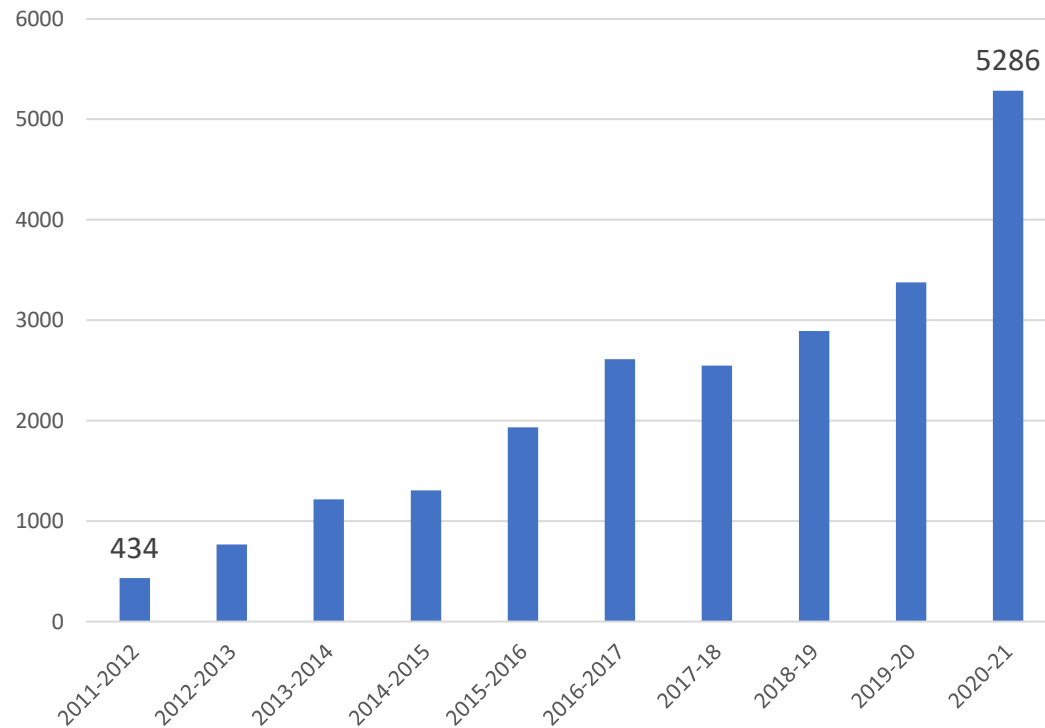
KOeTS Today

- Is a community-based, First Nations owned & operated network;
- Fully interoperable with the provincial virtual care delivery model.
- Manages full-time staff at 26 remote points-of-care delivering comprehensive services
- Supports & coordinates service delivery in 39 additional First Nations
- Enables development of First Nation focused service models.



Service Volumes

Completed Virtual Care Appointments:
FY 2011-2012 to 2020-2021



- More than 30,000 unique clinical appointments enabled for Indigenous clients living in remote fly-in First Nations during the last 10 years.
- 2020-2021 clinical volumes grew by nearly 60% (56.4%) over 2019-2020 volumes.
- Most patients say they like virtual care and would use it again.

Northern Service Modelling

- Success requires a longstanding commitment to community engagement
- Listening to community members and providers creates a foundation for growing new health resources.
- Hub staff provide training, manage new service development and support technology
- Community staff manage patient and administrative workflow.



Service Model Key Capacities

- Enables service development to align with community health priorities:
 - Support delivery of health and wellness services as close-to-home as possible
 - Increase the available pool of clinicians who practice virtual care
- Respects longstanding historical referral relationships

Top Reason for Virtual Care Referrals by ON and MB Providers			
Location of Provider	1 st Reason	2 nd Reason	3 rd Reason
Ontario	MH/Addictions	Diabetes	Speech-language
Manitoba	Genetics	Gastroenterology	Nephrology

- 92.5% of all services delivered by KOeTS last year were delivered by an Ontario provider

Northern Service Models



Telebabies

- Pre-natal confinement is a standard procedure in northern First Nations.
- Some mothers don't want to leave their community to have their baby
- Often there are no clinical staff with OB experience.
- Telebabies is an urgent service that links nursing stations with the Meno-ya-win OB team.



Elder's Gatherings

- National award winning application that regularly brings together Elders living in Northern First Nations.
- Clinical Purpose: provides an informal setting for providing positive nutrition messaging.
- Social-Cultural Purpose: a chance for Elders to visit with friends from other First Nations, share a meal and speak their own language.



Teleophthalmology



Old technology



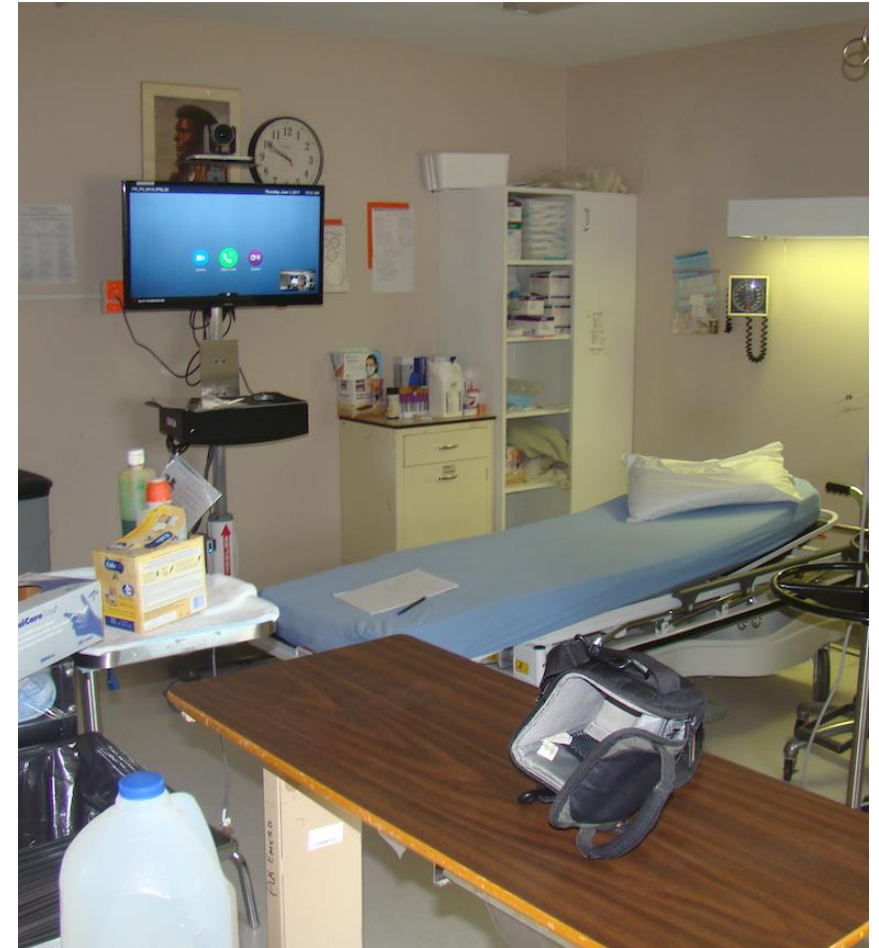
New technology



- Service began as a 2002 pilot project among UWO, the Sandy Lake First Nation & KOeTS
- Clinical rationale: prevalence of T1 & T2 diabetes increases the risk of retinopathy among northern First Nations.
- Method: KOeTS travels to northern First Nations, screens people living with diabetes for retinal eye disease and uses a store-forward connection to securely send images to the provider.
- Collaboration with regional Ophthalmologist
- Screening visits are staggered through the northern communities to enable standard of care (1 exam every two years).

Virtual Emergency Services

- During the first telehealth community engagement sessions in 2001, First Nation communities expressed the need for emergency telemedicine services in their communities.
 - *KOeTS said:* “Let’s get the elective services piece figured out first.”
- In 2016, KOeTS initiated a partnership with OTN, ORNGE, Indigenous Services Canada’s Nursing Service, and four First Nations to develop a northern service model.
- The first phase of the pilot was launched in March 2017.
- Today, 19 remote First Nations have on-demand access to ORNGE Transport Medicine Specialists and the TBRHSC Intensivist Team.
- In 2020-21, ORNGE & RCCR teams attended 196 urgent/emergent video-enabled events for 125 community members.



Questions/Comments

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