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.
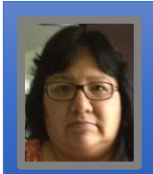

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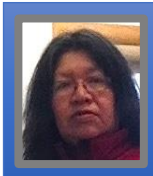# Barriers Patients & Providers Engage Every Day
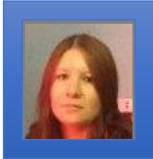
Annabella Gliddy, CTC Webequie
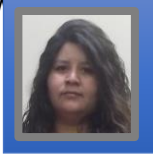
Stephanie Kejick, CTC Lac Seul

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.

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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.

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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
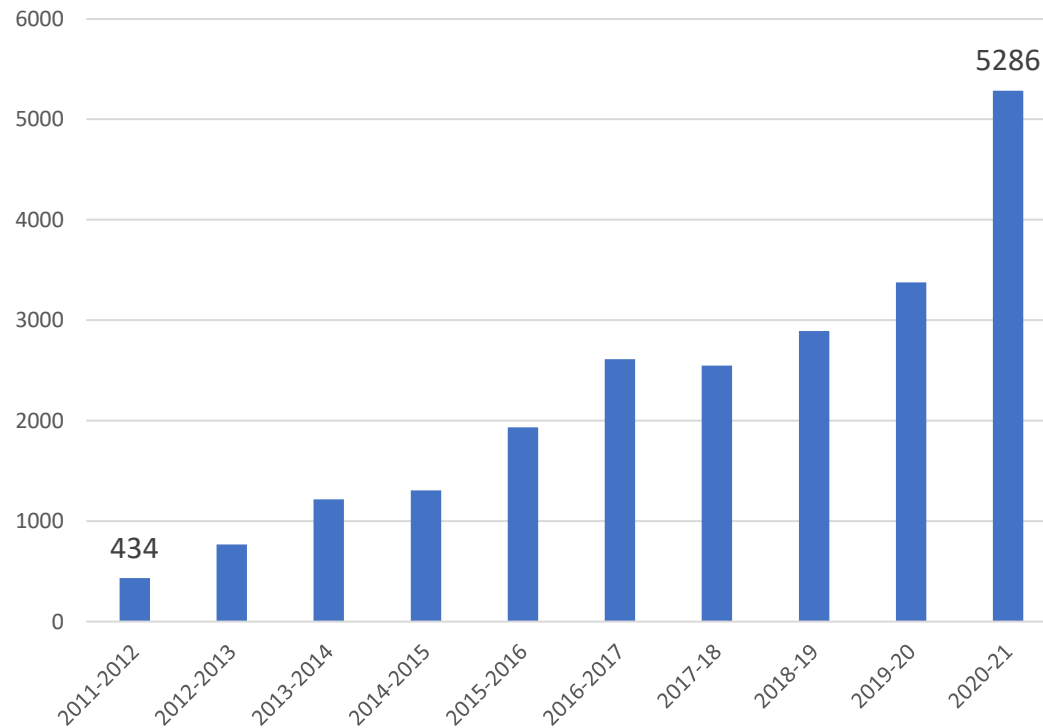
- More than 30,000 unique clinical appointments enabled for Indigenous clients living in remote fly-in First Nations during the last 10 years.

- 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	1st Reason	2nd Reason	3rd 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
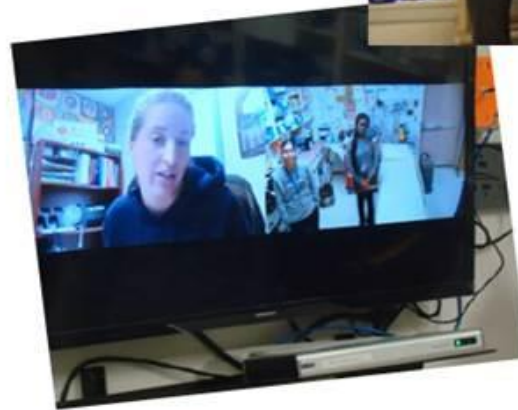
Telebabies

- 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.

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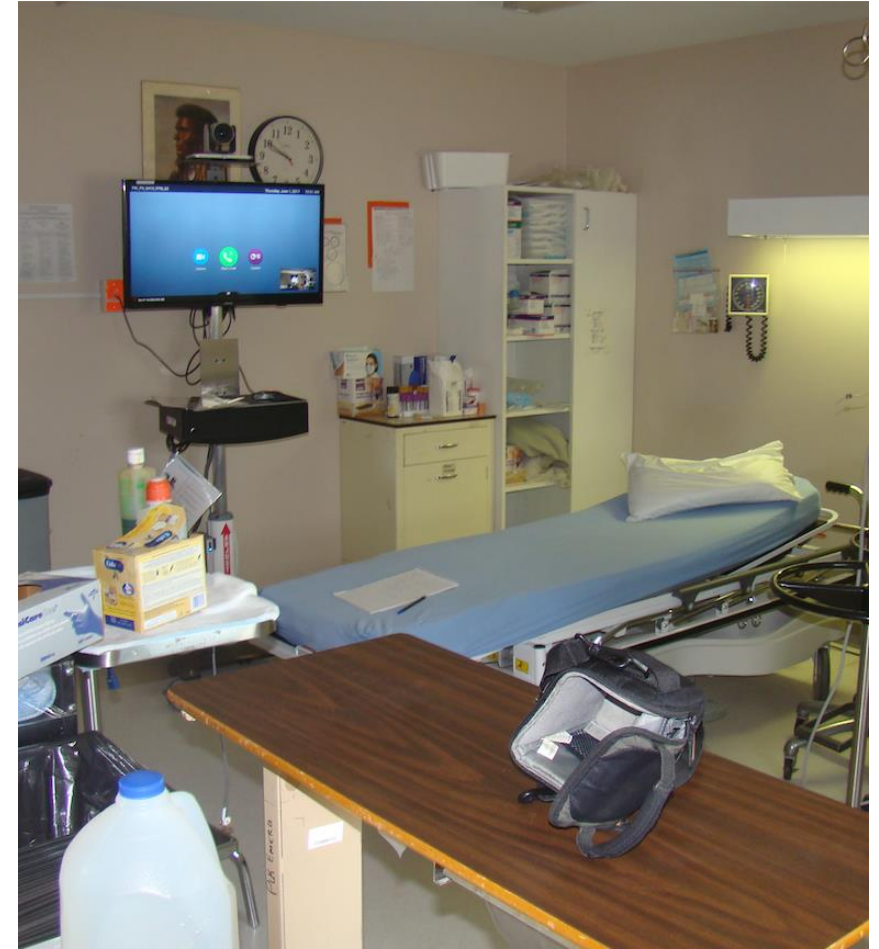TELEMEDICINE

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).

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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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