

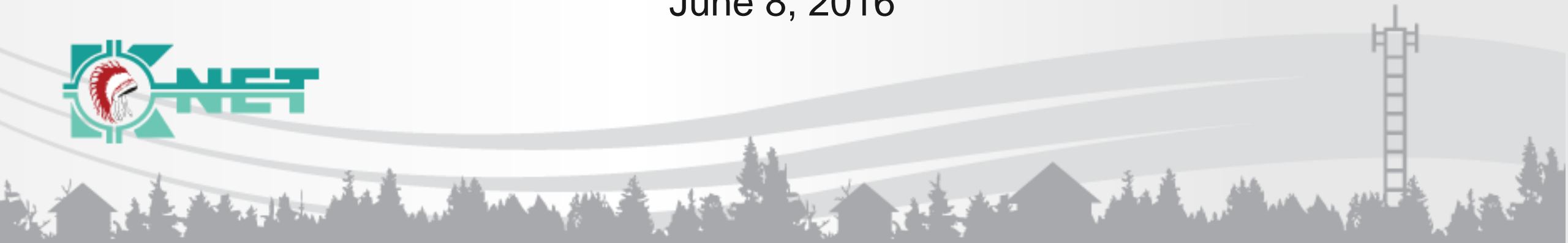


From Smart to Smarter – First Nation Health Centres Utilizing Broadband

eHealth Conference

Vancouver, BC

June 8, 2016



In the beginning.....

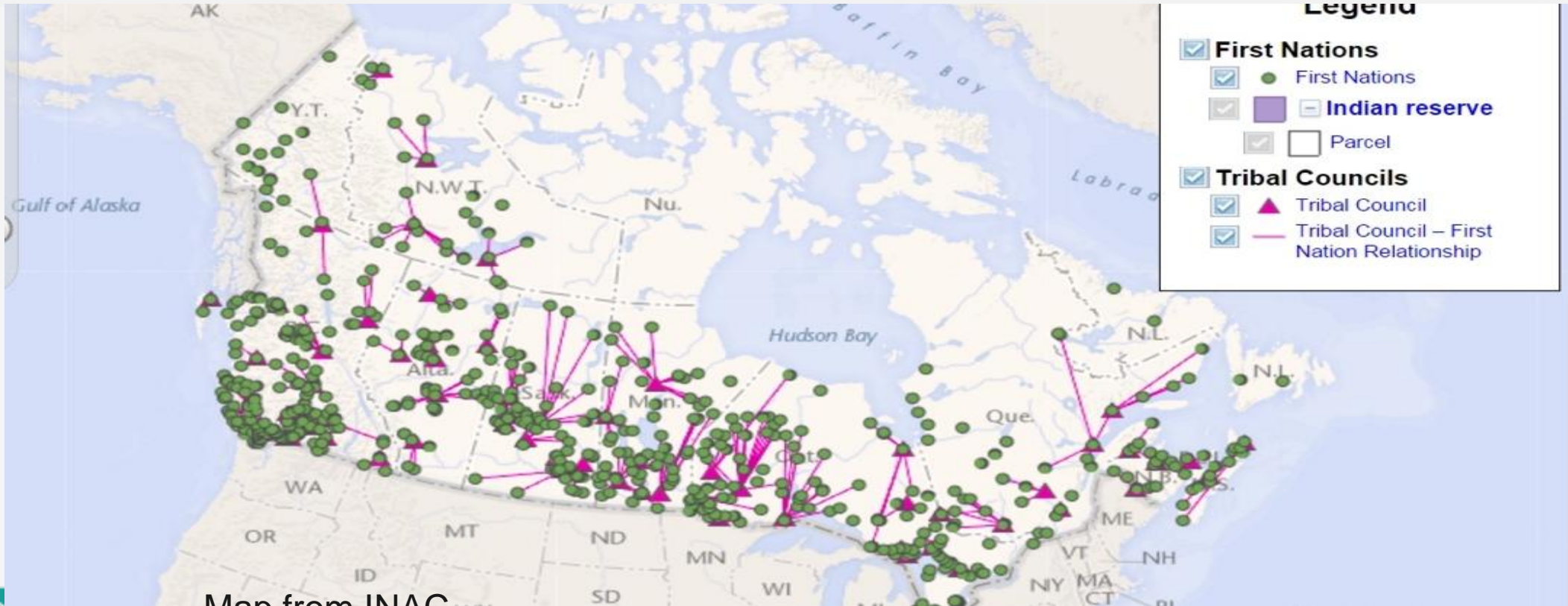
- In 1994, Keewaytinook Okimakanak (KO) started as a black and white electronic bulletin board to connect teachers.
- There was no broadband, teachers used dial up or was shipped a disk to open on their classroom computer
- In 2000, KO was part of Industry Canada's Smart Program to provide broadband and IT services to 5 First Nations



Today



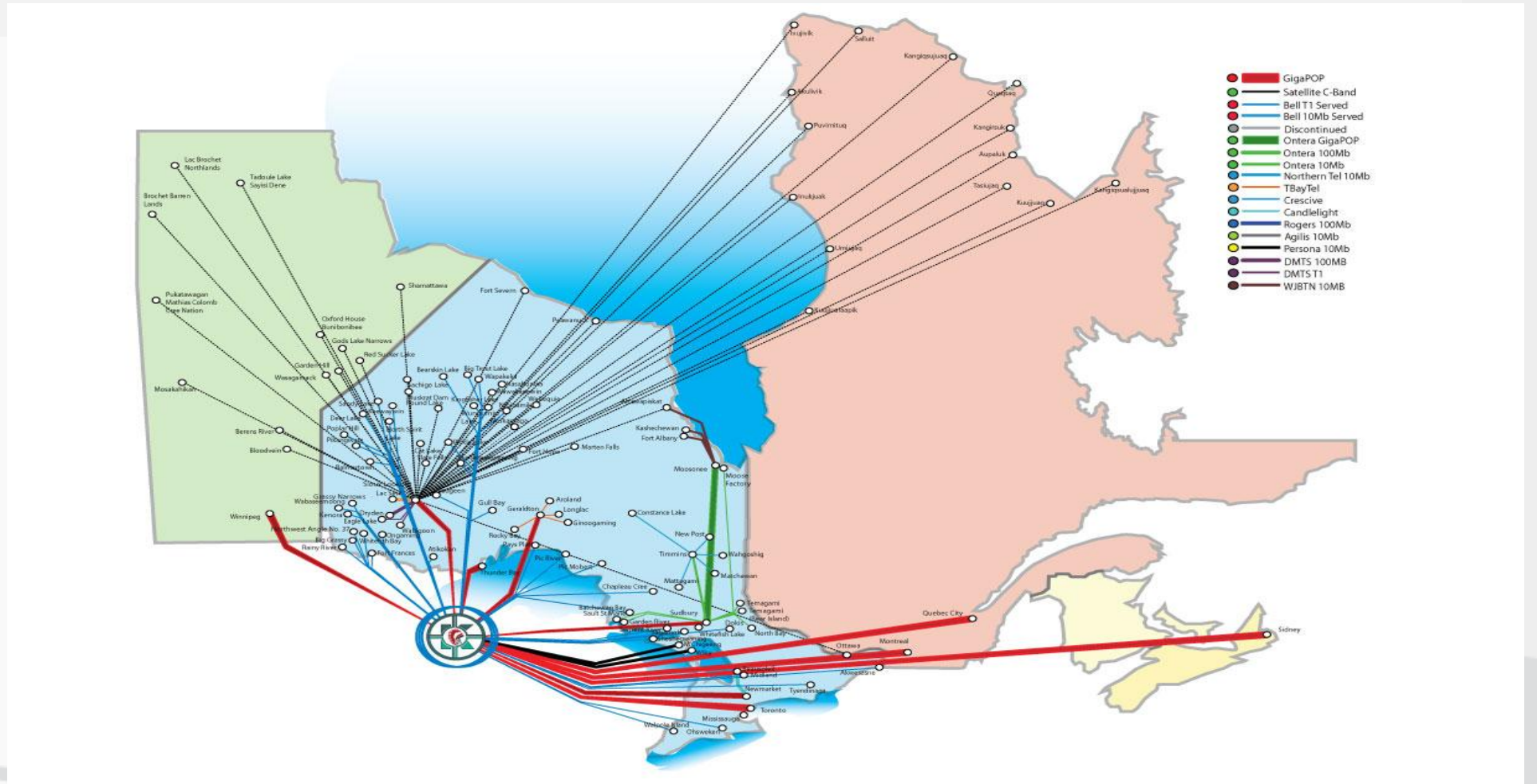
Connected remote and rural indigenous communities



Map from INAC



KNet Network



KNet covers Ontario's most geographically challenging landscapes and remoteness.



KNet Network

- KNet is the largest First Nation managed network connecting over 60 FN in Ontario, connecting FN organizations in Thunder Bay and Sioux Lookout
- KNet is an industry standard network
- Centralized service desk to troubleshoot and fix issues
- Incorporated network privacy and security policies and service desk management
- Supporting many community applications such as cellular, IP Telephones, community database development, KO Telemedicine, school databases, physician electronic medical records



Data Centre – KNet Cloud

- Industry Standard Data Centre respecting OCAP principles
- Incorporating privacy and security policies and procedures
- Supported by a 10 GiG circuit
- 24 hour backup

Services Offered:

- ❖ Virtual backup for First Nation databases
- ❖ Data hosting

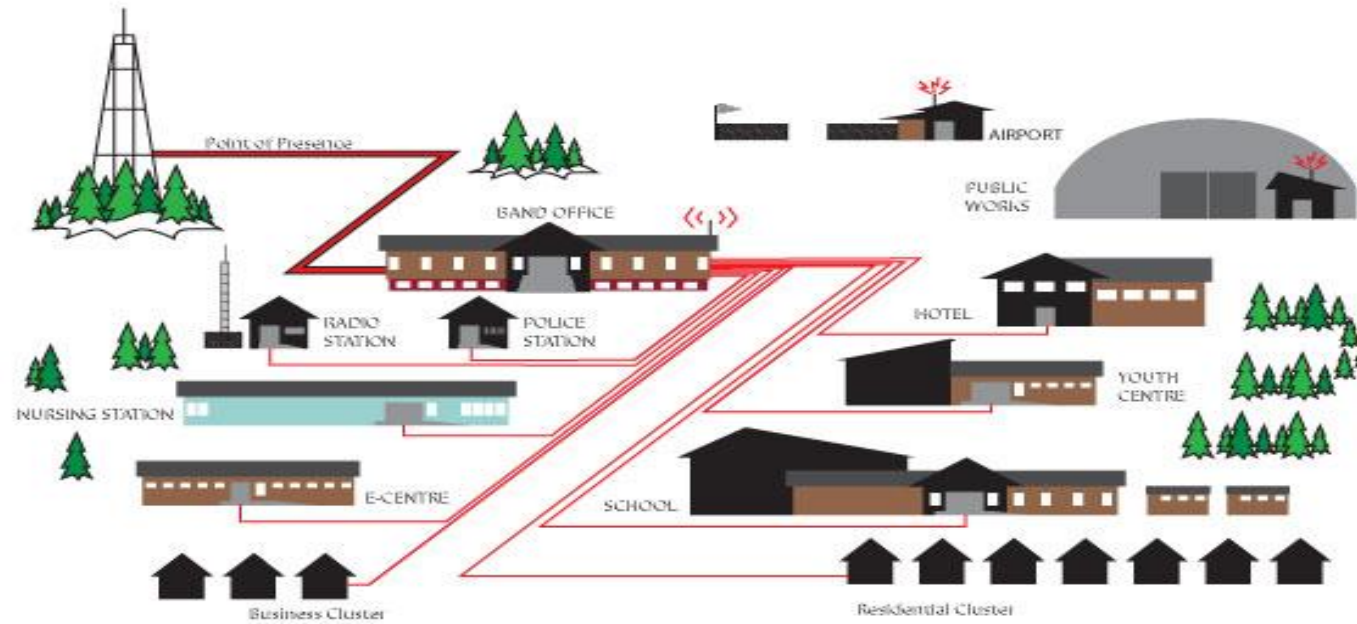


Knet Services

- IT Equipment purchases and installation
- Broadband deployment
- Service desk support
- Cable plant/wireless plant maintenance
- Fibre termination
- Cellular sales

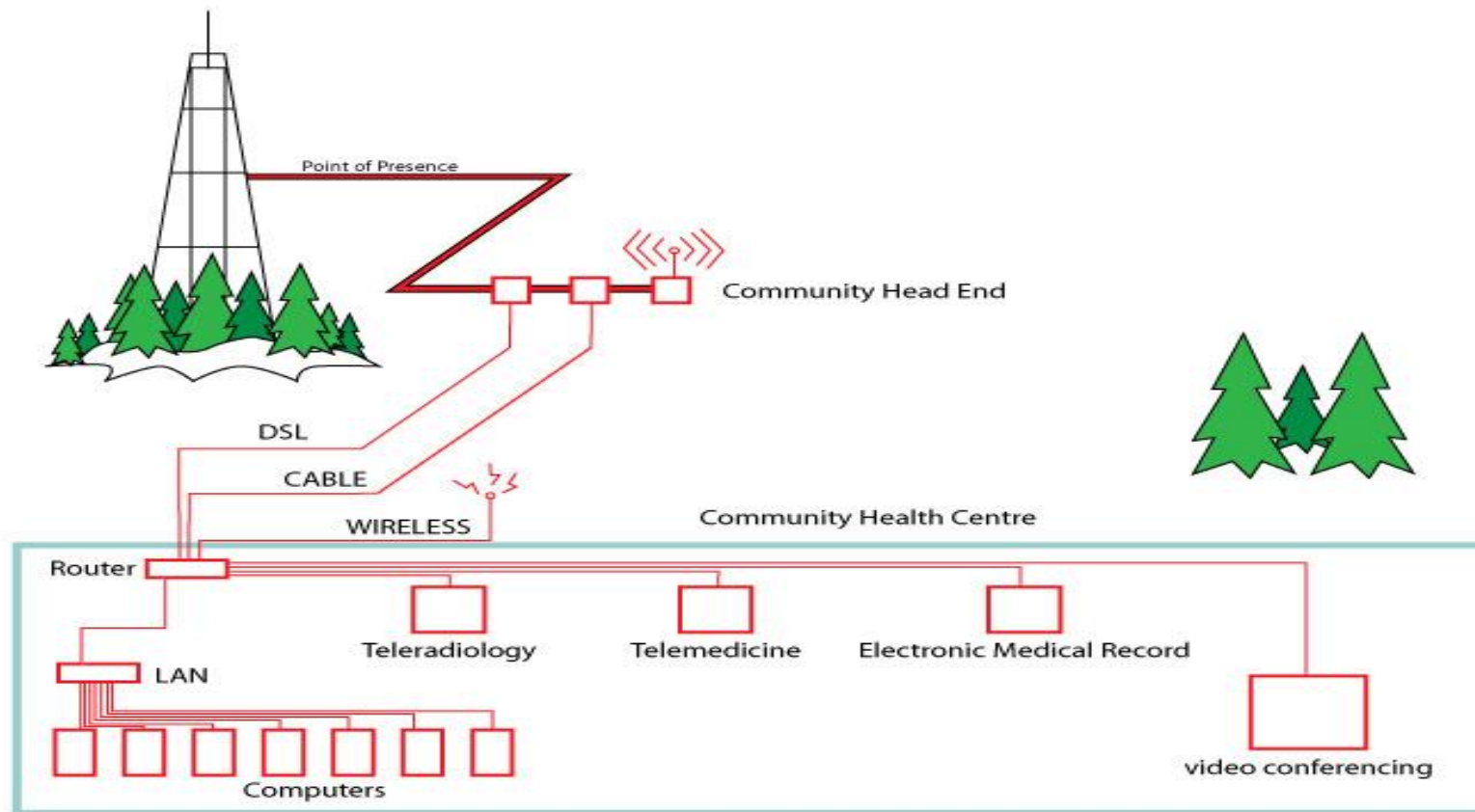


Community



E-Community Model





Building Local Capacity

- ❖ **Local infrastructure**
- ❖ **IT Technicians**
- ❖ **Community Telemedicine Coordinators**
- ❖ **Leadership**



Annabella Gliddy, CTC
Wunnumin Lake



Stephanie Kejick, CTC
Lac Seul

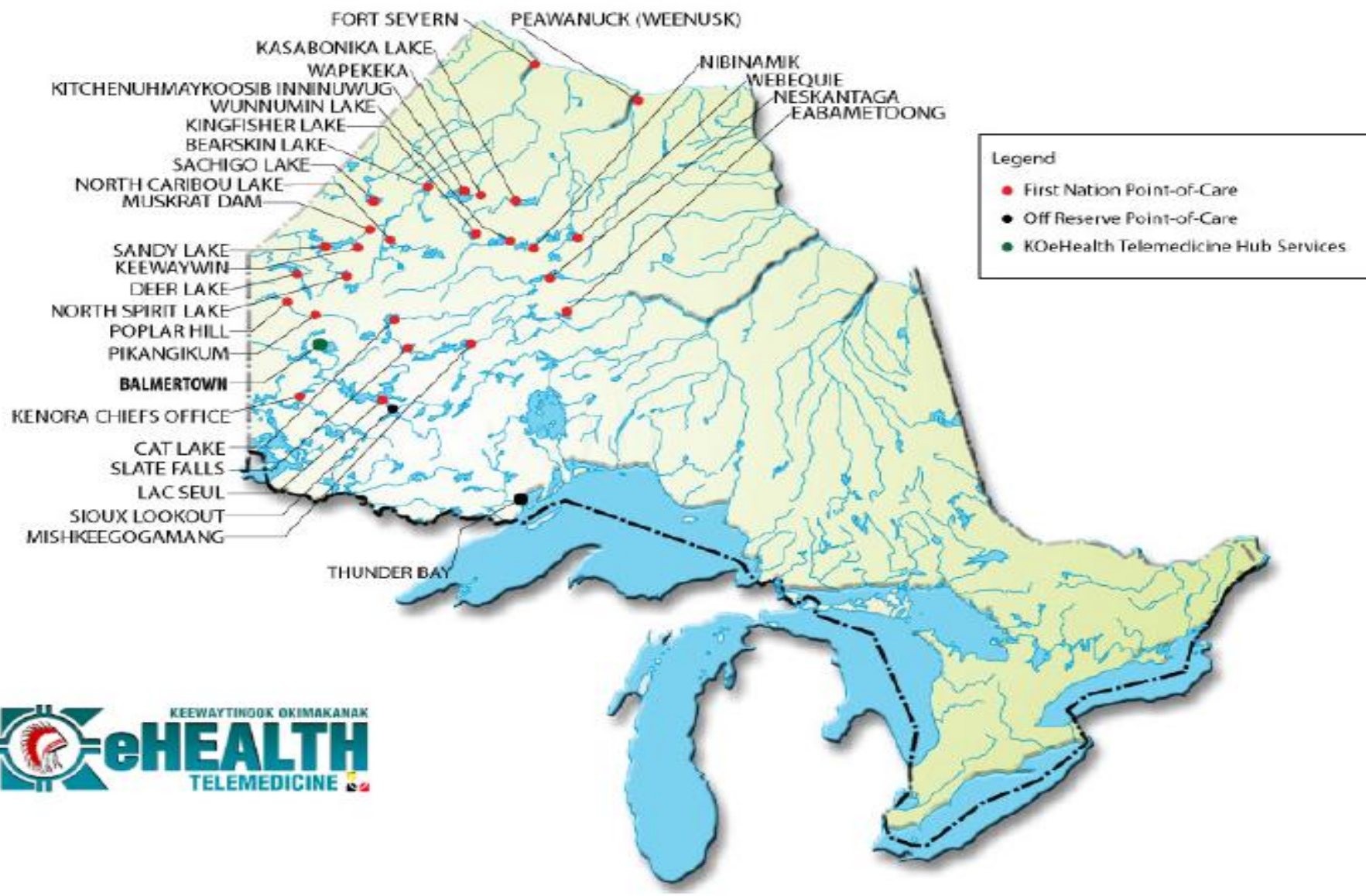


Ida Fiddler, CTC
Keewaywin



Peggy Sugarhead, CTC
Eabametoong

First Nations Telemedicine Sites



- KOeTS Advisory Council

- 26 northern & remote FNs points-of-care
- 10 northern provider sites
- 210,000 km² mostly fly-in First Nations



EMR

- Doctors' group serving the Sioux Lookout First Nations
- Federal and First Nation nurses do not have access
- In some communities, Knet manages the bandwidth at the health centre so the doctor has enough bandwidth to use the program



What we are currently working on....



Investments in community-based infrastructure

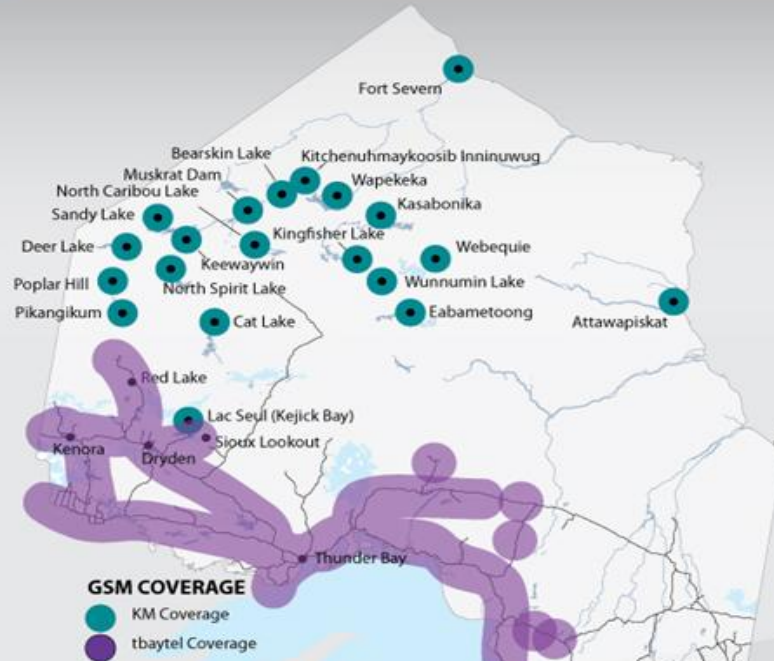
- Fibre to health centre
- Provides the health centre with optimal access to bandwidth
- This means the health centre management can incorporate virtual care tools such as telemedicine, emrs, community health databases, teleradiology into their health care delivery





Staying Positive

mobile.knet.ca



KEEWAYTINDOOK OKIMAKANAK
MOBILE
<http://mobile.knet.ca>

Staying Positive

mobile.knet.ca




3G Cellular

Welcome to DiabeTEXTs!



DiabeTEXTs is a new joint initiative by K-NET and KO Health to provide diabetes education and information to interested community members through SMS texting and other electronic mediums. If you have any questions, please contact the developer Michael Mak at makamizz@gmail.com

Admin

 [Enrol me in this Meeting Place](#)



Electronic Health Records

- Currently the physicians use OSCAR as their electronic medical record
- The Sioux Lookout area is in the Menoyawin Hospital catchment area. The hospital uses Meditec
- Federal Nurses do not use either system. Conceptual PIAs are under way to determine if the Federal nurses can use these systems.
- Community health workers do not use any centralized health record



Health office scheduling program

The screenshot shows a web browser window with the URL <https://breeze.knet.ca/appointment/day>. The browser's address bar and tabs are visible at the top. The application interface has a teal header with navigation tabs for "Day", "Week", "Month", and "Year". Below the header, there are three buttons: "Create Patient", "Create Appointment", and "Today".

The main content area is titled "Appointment Calendar" and displays a calendar for February 2016. The current date is Wednesday, February 17, 2016. The calendar grid shows the following dates:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

Below the calendar, the time slots for the selected date are listed on the left side of the main area:

- All day
- Before
- 12:30am
- 12:30am
- 1:00am
- 1:30am
- 2:00am
- 2:30am
- 3:00am
- 3:30am



<https://breeze.knet.ca/>

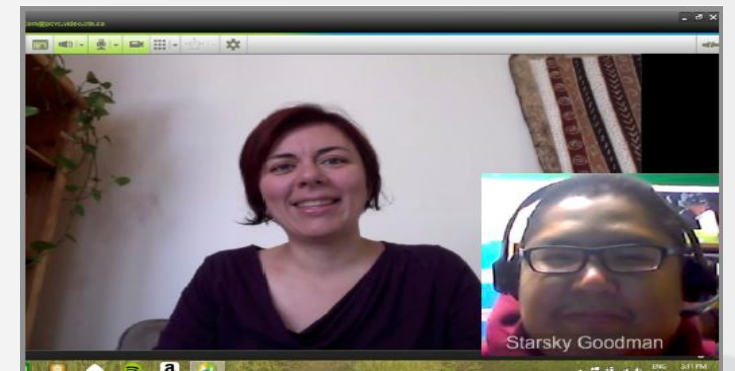
Emergency telemedicine

- Ad-Hoc group exploring emergency telemedicine
- There is a high cost of medivacs in the Sioux Lookout area
- Looking at improving process
- Part of the solution is to research options for telemedicine in the emergency room of the health centre.



Virtual Health Innovations

- *Virtual Maternal Addictions Aftercare Services* with Shibogama First Nations, Meno-Ya-Win & Nodin Child & Family Services (pending)
- *Alternative Points-of-Care Access Project* with the Sandy Lake First Nation and Dr. Lisa Letkemann



First mile website



CRTC – BSO Hearings – Apr 2016



E - Rant



Next Steps

- Harness new 3G & broadband capacities
- Move beyond telemedicine service desk and negotiate service desk support for other Health Canada funded services at the First Nation health centres
- Sioux Lookout area Virtual Care Planning Group
- Collaborate and share with all First Nation and Inuit in Canada



Questions?



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