



INFECTIOUS DISEASES TELEMEDICINE SERVICES IN NORTHERN BRITISH COLUMBIA

AIM STATEMENT

To understand patient perceptions and uptake of the infectious diseases telemedicine service offered through the medical clinic of Dr. Abu Hamour in Prince George through the administration of a patient satisfaction survey and chart review.

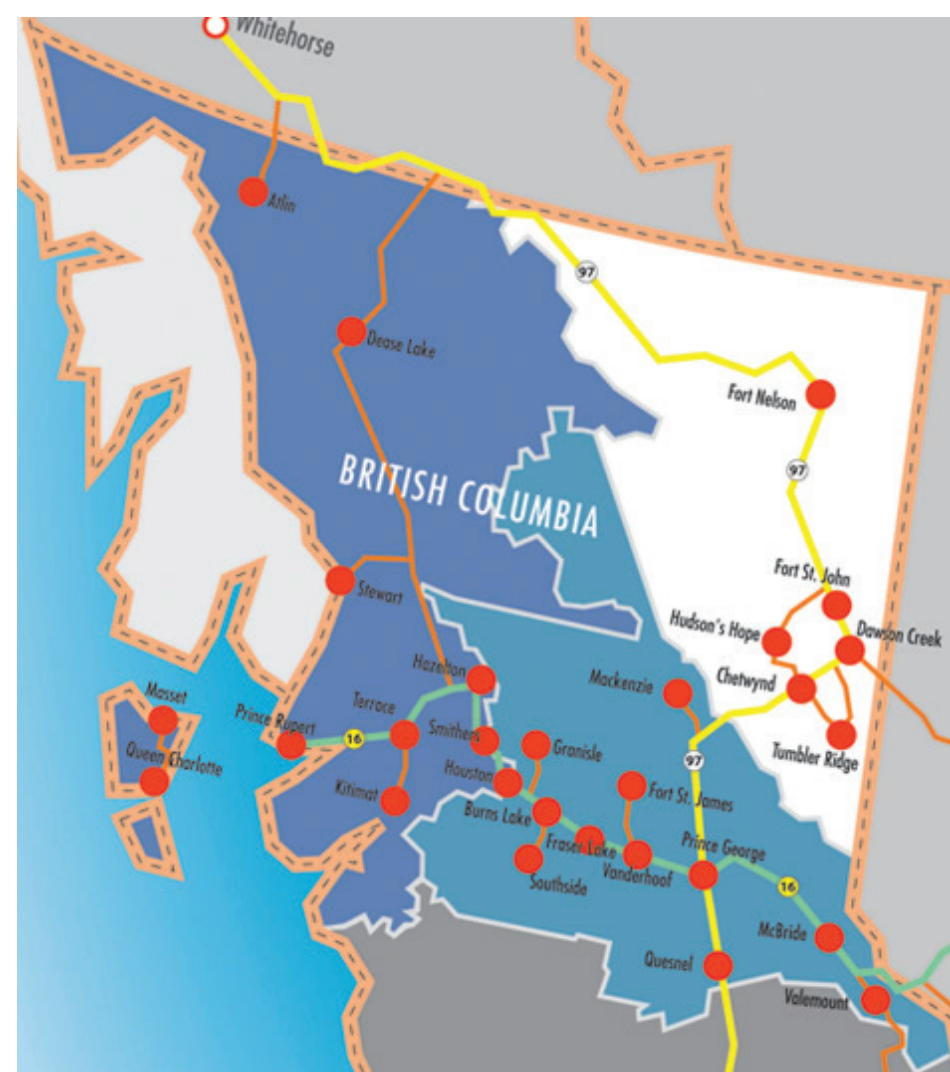
► BACKGROUND

Telehealth allows the provision of a variety of healthcare services and improves access to services for people living in rural and remote areas (1). It is becoming an increasingly popular care tool with the number of clinical sessions doubling in BC from 2012 to 2014 (2). The majority of telehealth services offered in BC are clinical sessions and the most common sessions in Canada deal with mental health, neurology, oncology, pediatrics, and rehabilitation (2).

In 2013, the BC Centre for Disease Control Annual Surveillance Report on HIV identified that the highest rates of new HIV diagnoses were in the Vancouver Coast and Northern Health Authorities.

Aboriginal peoples are disproportionately represented in BC's HIV epidemic (3). Additionally, telehomecare and chronic disease management have been identified as telehealth service areas deserving attention, especially in First Nations communities (4).

The use of telemedicine in the management of patients diagnosed with chronic infectious diseases in Northern British Columbia can address geographical and financial barriers to accessing specialist care.



► CURRENT STATE

Providing specialist follow up care for patients with HIV and Hepatitis C using telemedicine may help to improve continuity of care and patient outcomes. As such, the telemedicine initiative established at the clinic of Dr. Abu Hamour was initiated in January 2013 to enhance the follow up care provided to those patients in Northern British Columbia living with HIV and Hepatitis C, a portion of who identify as Aboriginal peoples.

The number of patients using the telemedicine service has increased annually. In total, 210 patients residing in Northern British Columbia have accessed the service and the telemedicine terminal has been used for 601 appointments. The majority (61%) of patients are aged 50-69 years old with a confirmed diagnosis of Hepatitis C (54%), HIV (11%), or a dual diagnosis (7%).

► SOLUTION

As the use and breadth of telemedicine grows, it is important to establish open communication with patients to continually evaluate its successes and shortcomings. This project aims to do this in order to inform future care delivered by our clinic.

Patient Satisfaction Survey

50 patient satisfaction surveys were administered by medical staff working at the office of Dr. Hamour using a provided script. The accessibility of the telemedicine service, the telemedicine technology and functionality of telemedicine as a care tool were assessed.

Chart Review

Information was gathered retrospectively from patients who used the telemedicine service from January 1st, 2013 to July 21st, 2017. Diagnosis, communities of residence along with the travel distance to the nearest Northern Health telemedicine terminal and to specialist care was recorded. In addition, the usage of the telemedicine terminal in the office of Dr. Abu Hamour was analyzed. Specifically, use of the terminal and the number of administrative scheduling hours were reviewed.



► RESULTS

Patient Satisfaction Survey

Overall feedback was positive with 98% of respondents stating they would use the telemedicine service again and would recommend this service to a friend.

- 80% of respondents felt comfortable using the telemedicine terminal
- 98% were satisfied or very satisfied with the quality of the visual image and audio sound
- 98% of respondents could understand the medical advice given

Chart Review

When looking at the distance patients must travel for medical appointments, 34% of patients live 100-299km from Prince George while a further 44% live 300-599km from Prince George. When using the telemedicine service, 88% of patients can attend their specialist appointment within their home community.

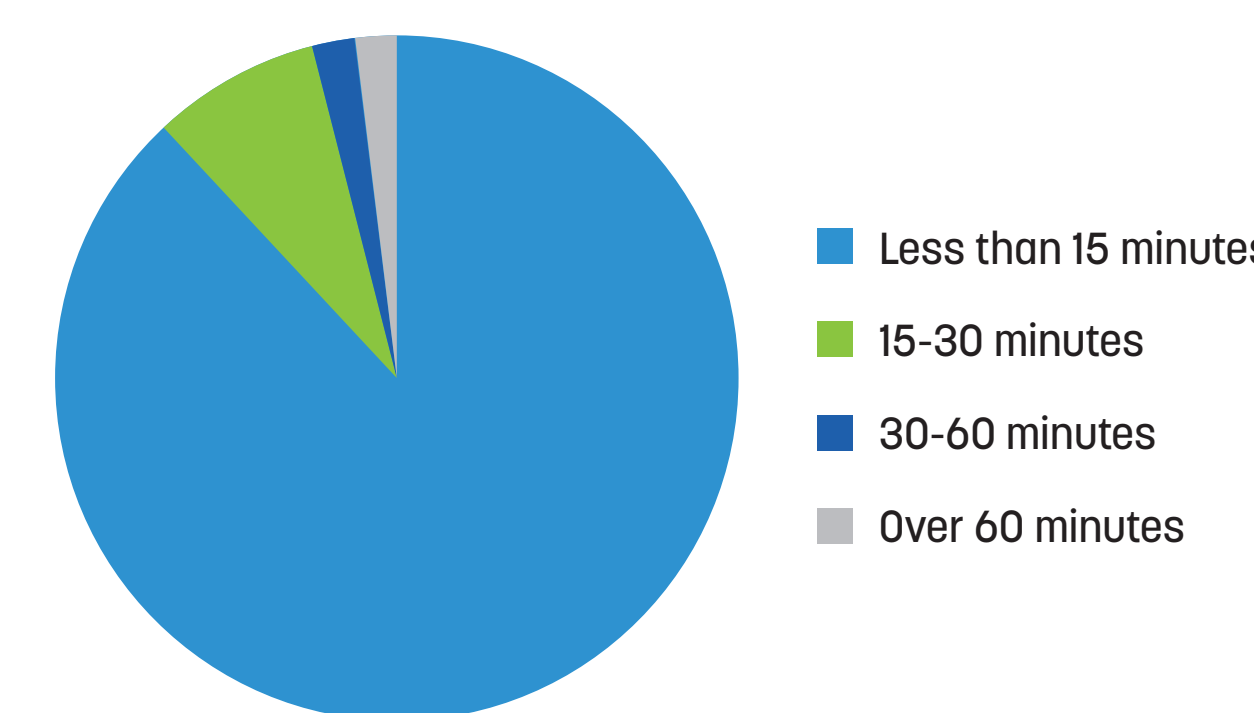


Figure 1: Time patients report spending commuting to nearest telemedicine terminal for medical appointment

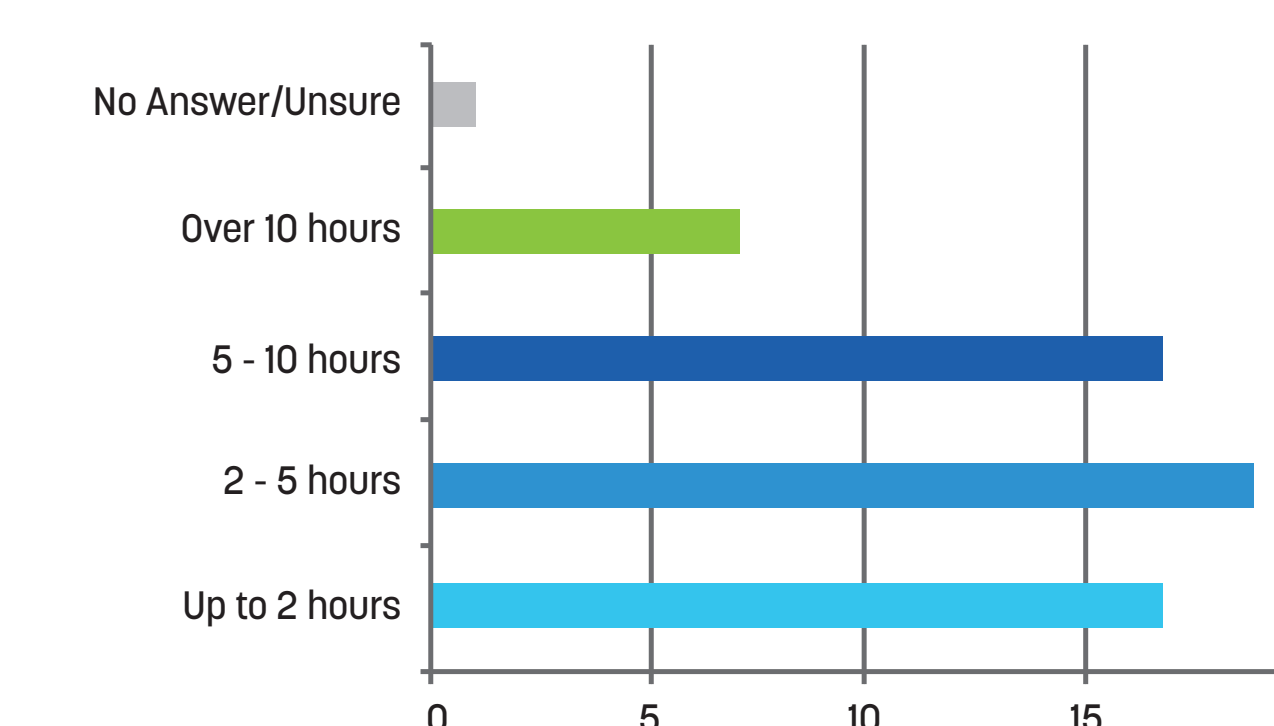


Figure 2: Time patients report spending commuting to Prince George for medical appointment

► NEXT STEPS / SUSTAINING THE GAINS

1) Continue to foster the current infectious diseases telemedicine service:

- Telehealth enhances care delivery to underserved populations and is also a cost effective means of delivering care (5).
- One third of respondents stated they preferred in person medical consultations to telemedicine appointments; however, 94% of respondents felt it was extremely important or important that a telemedicine consultation was an option for patients.

2) Develop solutions to address the greater administrative time needed to book a telemedicine versus an in person appointment.

3) Improve access to specialist healthcare in Northern BC through continued promotion and improvement of local telemedicine services by working with key stakeholders.

► PATIENT/CUSTOMER

Patient's of Dr. Hamour that are living in remote places in Northern British Columbia and those using telemedicine services that Dr. Hamour provides.

► REFERENCES

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