### **BRINGING RESPIRATORY** DIAGNOSTICS TO POINT OF **CARE IN REMOTE FIRST** NATIONS COMMUNITIES

#### **BC Rural Health Research Exchange**

November 29th, 2023 **Presenters:** Hannah Nelson and Maggie Woo Kinshella Principal Investigator: David Goldfarb

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First Nations Health Authority



# LAND ACKNOWLEDGMENT

The research team would like to acknowledge that this work takes place within the ancestral, traditional, and unceded territory of the Coast Salish Peoples, including the territories of the x<sup>w</sup>məθkwəýəm (Musqueam), Skwxwú7mesh (Squamish), Stó:lō and Səĺílwəta?/Selilwitulh (TsleilWaututh) Nations.

## HEALTHCARE IN REMOTE **SETTING**

The greying of resource communities in northern British Columbia: implications for health care delivery in alreadyunderserviced communities

Neil Hanlon, Greg Halseth

First published: 23 February 2005 | https://doi.org/10.1111/j.0008-3658.2005.00077.x | Citations: 93

### SOCIAL DETERMINANTS OF HEAL

ACCESS TO HEALTH SERVICES AS A SOCIAL DETERMINANT OF FIRST NATIONS, INUIT AND MÉTIS HEALTH

health services is, however, not

inancial or other barriers' ersal health care system is widely considered to (Government of Canada, 1985; amended 2017, p. 5). Having be among the best in the world and a source of pride and health reasonable and equitable access for many Canadians (Martin to universal health services et al., 2018). The primary facilitates earlier diagnosis, objective of this system is to lowers mortality and comorbidity protect, promote and restore rates, and leads to improved the physical and mental wellphysical mental emotional being of residents of Canada and social outcomes. Widely and to facilitate reasonable recognized as an important access to health services without determinant of health, access to

qually nor universally available to all Canadians (Greenwood, de Leeuw, & Lindsay, 2018; Iorrill, McMillan, Schultz, & hompson, 2018). Most notably. adigenous peoples1 continue to experience barriers to health care, resulting in significant and ongoing health disparities compared to other Canadians Browne, 2017: Cameron, del Pilar Carmargo Plazas, Santos Salas, Bourque Bearskin, & Hungler, 2014; Goodman et al., 2017; Greenwood, de Leeuw, Lindsay, & Reading, 2015; Office of the Auditor General, 2015).

This fact sheet will explore how accessibility, availability and acceptability of health services have indirect and direct impacts on Indigenous peoples' health and health outcomes. Within these three areas, complexities related to colonialism, geography, health systems, health human resources, jurisdictional issues,

<sup>1</sup> The terms 'Indigenous' and 'Indigenous peoples' are used here to refer to the First Nations, Inuit and Métis peoples of Canada, as defined in Section 35 of the Canadian Constitution of 1982. 'Aboriginal' and 'Aboriginal peoples' are used when reflected in the literature under discussion. Wherever possible, culturally specific names are used.



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as long confronted the geographic problems of ties and caregiver shortages. As a result, rural and ruggled with health care delivery. For rural and s, population ageing driven by industrial re from past experience. Drawing on examples per examines this context of ageing in rural and thting impending challenges for health care service provide a demographic overview of population cond part, we present data on the availability of niors who age-in-place. Population ageing, in efore, highlights not only important servicing ns about how to provide for needs that the policy juipped to meet.

Complexity of providing healthcare in resource-limited and rural settings • Severe healthcare worker shortages • Limited range of services Concerns about cultural safety

# **BACKGROUND**



- High burden of respiratory viruses among First Nations populations, particularly in northern and remote settings
- Canadian guidelines recommend that Indigenous Peoples should have access to influenza therapeutics, which requires effective and timely diagnostics
- The First Nations Health Authority (FNHA) implemented molecular diagnostic testing for COVID-19 in rural and remote First Nations communities
- Our project compiles lessons learned from implementing community-based COVID-19 testing to inform the expansion to RSV/Influenza testing in the community

# **OUR RESEARCH: THE REVIEW**

A Qualitative Systematic Review of the Barriers and Facilitators to Implementation of Community-Based Molecular Testing

> MEDLINE Ovid. EMBASE. Web of Science. WHO Database and Cumulative Index to Nursing and Allied Health (CINAHL)

#### **SEARCHES**

1. Implemented molecular testing systems at the community-level

2. Sufficient qualitative data



Ongoing thematic analysis of included articles by investigators that highlight barriers and facilitators to implementation

### ANALYSIS



CHECK OUT OUR PROTOCOL

## **REVIEW RESULTS**

4797 Studies Screened --> 6 Studies included Reports from South Africa, Zimbabwe, Papua New Guinea, Australia, Kenya, and one study examining lessons learned in 18 countries



Limited internet access, unstable electrical supply need to install AC and a generator, and insufficient space



Backlog of testing which left an impact on other services, and disruptions to workflow due to the lack of personnel to run the device

### WORKLOAD

### INFASTRUCTURE



Staff empowerment, increased awareness of illnesses, sufficient training, but also frustration due to inconclusive results

### **ATTITUDES**

## **OUR RESEARCH:** QUALITATIVE METHODS

8 in-depth semi-structured interviews with nurses (January 2023- June 2023)

> • All interviews were recorded, transcribed verbatim, and thematically analyzed



### QUALITATIVE RESULTS

Thematic areas	Illustrative quotes	Action points
Workload burden	"We're providing these testing apparatuses, but they don't have the money or personnel to man themit takes regular staff The other nurses trained on it is leaving today. So then I'll be the only one [When] you're just focused on the testing, [you] can't really run or do anything else other than that."	Development of micro- credentials to strengthen community capacity
Process paradigm shifts	"I think the reality of what the expectations were for tracking and for running the machine were not aligned with the reality of the day to day here"	Simplifying lab processes where possible
Community acceptance	"When people started finding out that, you know, we've got the machine and you can get your result within about an hour Everybody got like really excited, and it's just kind of made people not, I guess- not as anxious, you know"	Support for further scale up and expansion
Increasing options	"People just like, they would want to come in and get the saline gargle because they didn't want anything going up their nose"	Strengthening self- collected sample collection

# NEXT STEPS

"All around like good, like we've got nowhere to go but up with this [laughs]."

- Findings led to a successful co-application with FNHA for a BC Ministry of Health Innovation Grant to validate and implement non-invasive self-collected sample types for diagnostics in these communities
- Working with the FNHA community-based testing team in the development of infographics and educational materials
- Supporting potential expansion to other tests in community



# THANK YOU

Any questions?

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