Research and Knowledge Translation Newsletter

northern health
the northern way of caring

ORAL HEALTH = OVERALL HEALTH

New initiative aims to prolong and improve Long Term Care residents' lives by improving oral care practice

Sasha Wade, MSc. RSLP C

Most residents in long-term care require assistance with oral care but don't receive it (Yoon & Steele, 2012; Willumsen et al., 2012; Bellander et al., 2021). Staff lack time and confidence in performing oral care and they are concerned about safety issues such as biting when working with residents who have dementia (Forsell et al., 2010; Lindqvist, 2013). Frequently, basic oral care supplies are also unavailable. Poor oral care can have dire consequences to overall health; heart disease, stroke, diabetes, aspiration pneumonia (Atherton Pickett, 2012; Gomes-Filho et al., 2019; Nazir, 2017; Sjogren et al., 2008; Stanko & Holla, 2014), oral pain and depression due to social isolation (Nitschke & Müller, 2004; World Health Organization, 2006; Yoon & Steele, 2012) and difficulty speaking and eating are also common effects of poor oral health.

Recognizing the urgent need for change in oral care practice, Northern Health created an Oral Care Clinical Practice Standard (CPS) in Long Term Care. The standard requires that all residents receive regular oral health assessment, formalized oral care planning, and clinical oral care support twice daily.

A complementary 90-minute virtual course on Learning Hub introduces interdisciplinary staff to the practice standard content and provides an overview of Oral Health Assessment, Oral Care Techniques and Planning Tools, and Oral Care Skills for Dementia and Palliative Care. The course

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content is adapted from the evidence-based Brushing Up on Mouth Care series.

To support oral care best practice implementation, Northern Health upgraded the number of oral care products available to order on the e-Rex ordering system to over double the previous number of products available. The new products are recommended by dental health care professionals. These basic supplies allow staff and residents to conduct person-centered oral care. Some of the new products help with mouth access as well as safety and resident comfort during oral care like mouth props, while other products like floss handles and interdental brushes (an alternative to finger flossing) aim to maximize oral care independence. Some oral care products are upgrades intended to improve effectiveness of oral care; for example, mouth rinses now come with added fluoride and toothbrushes feature soft bristles.

PILOT PROJECT

Rainbow Lodge, an 18-bed long term care site in Prince George, BC, participated in a pilot project to implement the new Oral Care CPS. The pilot project aimed to identify observable oral care practices a LTC site could expect in the first 2-3 months of implementation and to determine initial barriers and enablers to be sustained. While oral health assessment of

residents (n=17) was conducted in September 2021, short term change to oral health was not expected within this time frame. Notably, 19% of Rainbow Lodge residents received a score of 'Healthy' on a measure of oral cleanliness on the standardized Oral Health Assessment Tool. The remainder of residents scored 'Changes' or 'Unhealthy' (both designations require intervention by dental health care professional).

In December 2021, once 90% of clinical staff completed oral care e-learning, two residents were adopted into the oral care program every week until all residents received an oral health assessment, oral care plan, and corresponding required oral care products.

A resident bathroom physical audit at the end of March 2022, revealed 93% of bathrooms contained care plans and 67% of residents could access the appropriate corresponding oral care products.

At the same time, care aides and nurses participated in on-site interviews to share their perspective on facilitators and barriers to practice standard implementation, satisfaction with oral care products, and current oral care practices. Interviewed staff agreed better oral care services for residents were needed. Access to a range of free high quality oral care products and oral care e-learning content reportedly enhanced staff engagement and oral care skill level.

While oral care products were available and oral care plans were complete for most residents, interviewees universally cited a lack of time to spend on oral care as a significant barrier to providing oral care to residents twice daily. Staff agreed most residents were not receiving the support they required to achieve adequate daily oral care.

Sample of Reported **Barriers** to Oral Care

- "Oral care is a good idea but when you're stressed and short-staffed, you do hands, pits, peri, face and move on. There's no time for anything else."

- "It's tough to change a resident's routine if they have dementia. Oral care isn't reality unless you're dealing with a compliant resident."

- "I'm totally on board with oral care, but how many more things can you ask us to do without providing more help?"

- "The most independent residents suffer the most. Even if they need help my time goes to those who need it more."

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Sample of Reported **Facilitators/Enablers** to Oral Care

- "There are certain residents I enjoy doing oral care with. You're looking at them face-to-face. It's a positive interaction."

- "I find the best time for oral care is when they're sitting on the toilet."

- "The oral care plan cards are helpful for new staff. But we usually tell each other verbally what residents need and how to do it."

- "When there are good quality products available in resident rooms, they are more likely to get oral care."

Oral care **service delivery** is improving with

- Mandatory education for all staff (current and new hires);

- Sustained access to quality oral care products; and

- Person-centered oral care service planning and programming.

While these changes are pre-requisites for clinical practice change and staff are vocalizing interest in improving oral care, a shortfall in oral care support to residents persisted in early stages of implementation; staff largely attribute this shortfall to care time limitations. Ongoing organizational and leadership supports to sustain oral care practice and to address staff resource issues are expected to impact oral health and quality of life of residents over time.

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FIVE DAYS IN MAY 2022
PROVINCIAL RESEARCH SHOWCASE

Synthesis of a report written by: Jaashing He, Research Education Coordinator Vancouver Coastal Health Research Institute

Five Days in May 2022 constituted the first provincial research showcase hosted across five regional health authorities and the First Nations Health Authority. This new event brought together health researchers, students, patients, healthcare providers, decision-makers and the public to learn, share ideas, and spark innovation.

There was an overall positive response to participate with 875 individual registrations and 105 presenters and moderators. As planned by the event organization, many participants joined live sessions from outside of their health authority region to increase their knowledge, hear high-quality speakers, and learn about research from other regions. Interestingly, and based on attendance, the top popular themes were senior's health, Indigenous health, mental health and substance use and Covid-19. An end of the event feedback survey indicated that most of the respondents were satisfied with the online platform (i.e Zoom), presentations and overall event delivery.

Statistics at Glance

875 registrants in total	**77** average attendees per session	**9** average sessions registered per person
33 sessions hosted across the 5 days	**105** speakers and moderators participating	**89%** satisfied with the overall event

HIGHLIGHTS

Presentations with the highest registrations:

1. Indigenous Cultural Safety, Cultural Humility and Anti-Racism: A Journey to a Shared Practice Standard
2. Building Research Relationships with Indigenous Communities: An Introduction
3. Mental health and substance use research at Fraser Health
4. Strategies to enhance quality of life amongst seniors
5. Research and innovations during a drug poisoning emergency: where are we now?

Top primary reasons for attending *

1. To increase knowledge
2. To hear quality speakers
3. To learn about research from other regions
4. To acquire new skills
5. To share information with others

Themes participants would like to be included in future events*

- Aging/Senior Care
- Indigenous Health
- Application of Research: KT & policy changes
- Implementation and Evaluation
- EDI in Research
- Brain Health

Link to watch Northern Health Presentations: Knowledge translation | Northern Health

Link to watch Presentations from all HA's: Five Days in May - Fraser Health Authority

* Based on feedback collected online to registered participants.

BROADENING THE CIRCLE: BC SUPPORT UNIT PROVINCIAL TEAM BUILD A SHARED VISION

Article prepared by: Jennifer Parisi, Manager, Marketing and Communications
BC SUPPORT Unit

BC SUPPORT Unit team members gathered in Vancouver on June 28 and 29 from all parts of the province. For some, it was the first time meeting in person, and for others it was a reunion with cherished colleagues.

The goal of the meeting was to develop a collective vision for patient-oriented research in BC. Building on the success of the first five years, The BC SUPPORT Unit recently received an additional five years of funding from the Canadian Institutes for Health Research. This is in addition to funding support from the Ministry of Health. Team members contributed their ideas for collaborative work that engages patients and improves health care.

Harley Eagle, Indigenous cultural safety facilitator, opened the meeting by exploring shared values. Harley offered a safe space for generative discussions among the group.

Teams from the Island, Interior, North, Fraser and Vancouver presented their workplans. Leads from the BC Ministry of Health provided insight into the mandate letter for health authorities. Patient partners also conveyed their vision for inclusive health research. The BC Network Environment for Indigenous Health Research offered new perspectives on data ownership, control, access and possession, and Indigenous ways of knowing. All of the reflections and conversations were captured in graphic recordings.

Together, participants reflected on past lessons and began to generate a shared provincial model based in transparency, trust, generosity and sustainability.

In the coming weeks, the provincial team will continue to refine this vision to improve health systems for all people in BC.

For more information about the BC SUPPORT Unit and the Northern Centre, visit: https://www.bcahsn.ca/our-units/bc-support-unit

Examples of graphic recordings by Visual Facilitator Avril Orloff
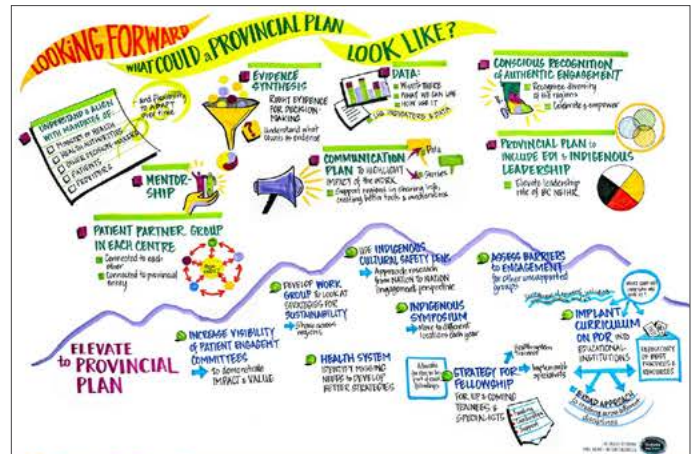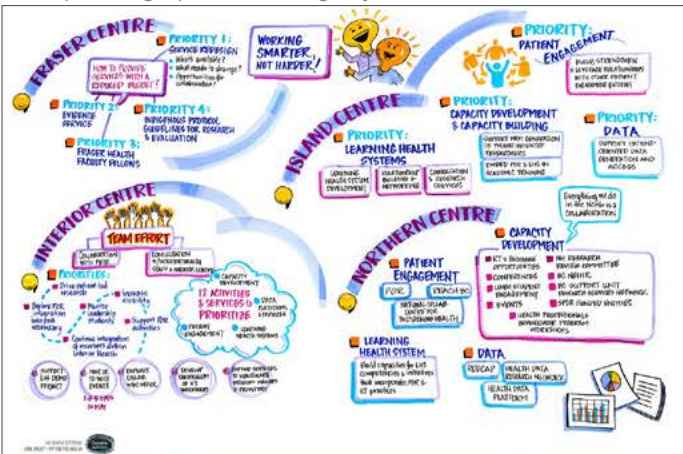
VIRTUAL CARE

Christine Vandenberghe
Primary Healthcare Evaluation Specialist

Imagine it, it's a winter evening and your child is spiking a fever, your only healthcare access is a nursing station but the nurse is away, and the next available provider is a two hour drive away. That was the situation my parents faced with me as an infant in the Yukon village where I grew up. In the end they put me in a cool bath and hoped for the best, and it all worked out in the end. It was experiences like these growing up in the North that came to mind, and how virtual care could have assisted, when I saw Northern Health's Evaluation Specialist posting for Primary and Community Care with a focus on virtual care, that motivated me to apply for the position.

VIRTUAL CARE

Virtual care has been suggested as a means to enhance health care access for those living in rural and remote areas, while decreasing barriers such as the need for travel, costs related to travel and care coverage, and time away from other commitments. So what do we mean by the term "virtual care", does it mean the same thing for everyone? In response to the popularity of the term the Royal College of Physicians and Surgeons recommend a pan-Canadian lexicon be developed for virtual care. Digital Health Canada produced the Virtual Care in Canada: Lexicon in 2020, and define virtual care as:

Virtual care includes a number of concepts/domains (e.g. telehealth, telemedicine, telemonitoring), capabilities (e.g. phone, video visit, remote monitoring), and executions (synchronic, asynchronous).

As technology has advanced to make virtual care a possibility, we have seen the rise in these offerings and use. Its adoption was further accelerated with the pandemic, where efforts were made to limit the spread of COVID-19 by reducing in person encounters. The system rapidly responded, with Doctors of BC developing a virtual care policy statement and the telehealth physician billing codes being enacted to facilitate health care visits by phone or video. A number of rapid reviews of literature on the topic were also released (Alberta Health Services, 2020; Canada Health Infoway, 2021; Li et al., 2020; Mold et al., 2019) to help inform the emerging mode of care. The Canadian Institute for Health Information found in its examination of pandemic virtual care trends across five provinces, including British Columbia, that while only 2 to 11% of visits were virtual in 2019 it grew to be the mode for 24 to 42% of visits in 2020 (CIHI, 2022).

> " Virtual care has been suggested as a means to enhance health care access for those living in rural and remote areas, while decreasing barriers such as the need for travel, costs related to travel and care coverage, and time away from other commitments. "

NORTHERN HEALTH AND VIRTUAL CARE

Northern Health (NH) has a virtual strategy through the [Enhanced Access to Primary and Special Care Strategy](#). The aim of the strategy is to improve equity, access, and care experience of people in rural, remote, and First Nations communities and to support provider's experience of caring for people. The strategy defines how the use of virtual technology will enable the delivery of equitable, accessible, team-based primary and community care services linked with specialists and specialized services. It has four interconnected areas of focus including:

1. Supporting providers to use virtual technology to extend the provision and access to service locally.

2. Integrating with existing local, regional, and provincial virtual and in-person primary care services, specialists and specialized service offerings (NH's specialist services, [8-1-1](#), [Real-Time Virtual Support](#)).

3. Working in collaboration with existing community-based primary care services, developing a virtually enabled regional primary and community care service, and fulfilling the functions of an urgent and primary care centre, including connecting people to specialized services/care.

4. Engaging with communities and partners to iteratively improve access and the care experience of people whose health and well-being is supported virtually.

The strategy includes the work of the [Northern Health Virtual Primary and Community Care Clinic (VPCCC)](#). The clinic began early in 2020 providing COVID-19 assessments, testing and follow ups. In the fall of 2020 it expanded to a primary care service operating seven days a week, including holidays, from 10:00 am to 10:00 pm.

VIRTUAL CARE EVALUATION

Similar to the recent proliferation of literature on virtual care, there is a growing evidence base on how this form of care should best be evaluated ([Heart & Stroke Foundation](#), 2020; [Hui, Dolcine, & Loshak](#), 2022; [Li, Rising & Goldberg](#), 2022). Networks such as the [Canadian Network for Digital Health Evaluation](#) have also been established.

The evaluation plan for the Enhanced Access to Primary and Special Care Strategy is under development, but foundational work for the plan has been completed. There are four guiding principles for the evaluation:

- The focus of the evaluation is on timely, relevant and useful information, in order to achieve identified outcomes, and continuous reflection that will support the strategy's implementation.

- A culturally safe approach informed by NH's Indigenous Health department, the First Nations Health Authority, and the Métis Nation British Columbia.

- A focus on building capacity to identify, collect, and act on evaluation findings to support ongoing improvement.

- Efforts to identify research opportunities to support larger and longer-term questions.

In line with the above principles, a developmental evaluation approach is being used. Developmental evaluation (Patton, 2011) is a fluid and responsive practice designed to support emergent needs and ongoing learning. The evaluation is framed around the Quintuple Aim ([Nundy, Cooper & Mate, 2022](#)), with key questions focused on improved provider experience, improved outcomes, improved patient experience and increased value. Each of these involve the fifth aim of equity. This is an important aspect as virtual care has the potential to exacerbate inequities due to differences in access to infrastructure, technology, and digital literacy. There is a growing body of literature about equity in virtual care, including mitigations ([Audy et al.](#), 2022; [Fujioka et al.](#), 2020; [Health Canada](#), 2021).

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The evaluation is working towards three objectives:

- to determine the extent to which the five aims have been met;
- to inform the ongoing work of the strategy in implementing improvement activities;
- and to establish a measurement system for the strategy.

A key piece of the measurement system has already been built by Strategic Analytics, an internal VPCCC Tableau dashboard. The dashboard provides real time utilization information for leadership and staff to understand how the clinic is being used. Data has also been summarized for partners to support conversations about how our services can enhance each other's offerings. Finally, an internal Evaluation Report outlining the first year of the VPCCC has recently been completed. Evaluation findings such as these will regularly be shared back with clinic leadership and staff to understand whether clinic outcomes are being met and to inform continuous improvement efforts.

If you have a similar interest in virtual care, it would be great to connect Christine.Vandenberghe@ northernhealth.ca

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NEW RESEARCH CENTRE FOR NORTHERN BC

By: Cheryl Jahn featured in CKPGToday.ca

Building on existing infrastructure and partnerships, the new Northern Centre for Clinical Research-NCCR is a collaboration between the University of Northern British Columbia, the University of British Columbia Faculty of Medicine, and Northern Health.

The centre will be housed at the University Hospital of Northern British Columbia in Prince George with potential future satellite centres across northern B.C. The NCCR will be focused on enabling clinical trials and research as well as biomedical science that is relevant to northern, remote and Indigenous populations.

"This new centre will help foster collaborative clinical and medical life sciences research across the north," says Fraser Bell, Vice President, Planning and Quality, Northern Health. "Which we hope will lead to innovations in technologies, processes and practices that reflect rural and Indigenous geographical, social and cultural contexts. The NCCR will also provide more opportunities for northerners to participate in critical health studies such as clinical trials, enhancing health equity for those in the north and firmly embedding research in northern healthcare delivery."

Clinical research, which includes both clinical trials and observational studies, helps find new and better ways to prevent, detect, diagnose and treat disease by involving volunteer participants in health research. Clinical trials help find the best options for patient care by studying the safety and effectiveness of new medical interventions, like a drug or medical device. In observational studies, researchers study participants receiving routine medical care to deepen understanding of health and disease and identify opportunities to improve health delivery.

The NCCR will provide regional clinicians, academic faculty and other rural health stakeholders, from the north as well as other parts of B.C., with a variety of supports, including assistance with research design, regulatory approvals, and project administration. The centre will also host a Rural Coordination Centre of BC research associate focused on research and evaluation of real time virtual support for clinicians working in rural communities.

The new centre will also offer research training opportunities and mentoring for students, healthcare workers, and up-and-coming health investigators.

"The Northern Centre for Clinical Research will enable us to answer clinical research questions from a northern, rural and Indigenous context," says Dr. Paul Winwood, Associate VP, Division of Medical Sciences, UNBC and Regional Associate Dean, Northern BC, UBC Faculty of Medicine. "There has been very little clinical research done from this point of view. Through this initiative, the people of northern B.C. will have access to state-of-the-art research in terms of new therapies, investigations, and approaches to health care, including enhanced virtual care."

Online article and video of interviews are available at: New research centre for Northern BC | CKPGToday.ca