RESEARCH DAYS 2016

Making Research Matter: Celebrating Evidence Implementation in Northern BC

CONFERENCE PROGRAM

November 7-9, 2016

Civic Centre,

Prince George, BC

northern health
the northern way of caring

idc
innovation and development commons

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

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IDC Research Days Conference would not have been possible without the support and contribution of a number of organizations, universities, individuals and community members. We extend a warm thank you to all for their many hours dedicated to planning this successful event.

Rachael Wells, Manager, Health Research Institute UNBC

Tammy Hoefer, Regional Manager, Innovation and Development Commons

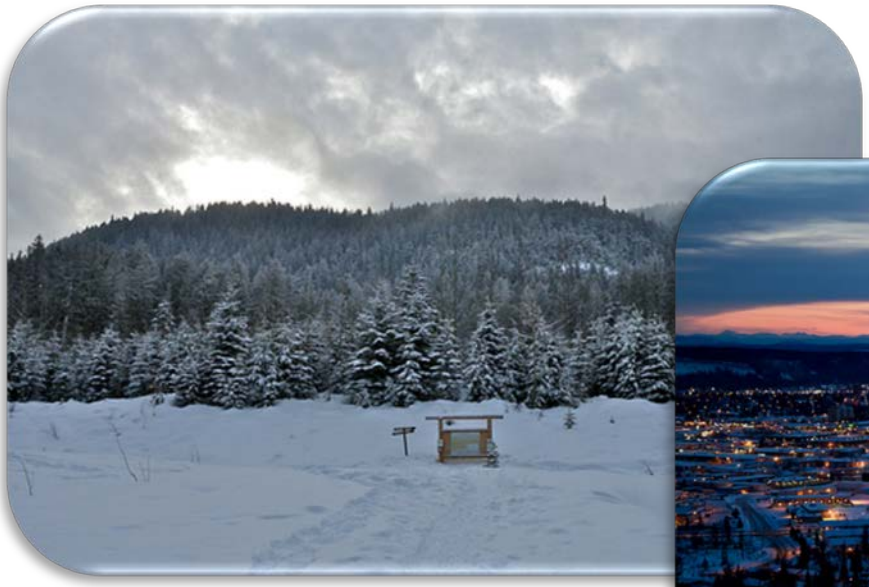
PRINCE GEORGE

We are pleased to welcome you to the beautiful and dynamic city of Prince George, British Columbia for the 2016 IDC Research Days Conference "Making Research Matter: Celebrating Evidence Implementation in Northern BC. ”

Known as BC's northern capital, Prince George is a bustling city located on the traditional territory of the Lheidli T'enneh. With a population of approximately 90,000, Prince George is situated at the crossroads of Highway 97 (north-south) and Highway 16 (east-west), and at the confluence of the Fraser and Nechako Rivers. Lheidli T'enneh traditional territory stretches over 4.3 million hectares, from the Rocky Mountains to the interior plateau. The Fort George Indian Band Reserve was first established in 1892 where the Fraser and Nechako rivers meet. Downtown Prince George, neighborhoods, and parks are now on this site.

The geographies, cultures, socio-economics, and political histories of this region overlap to shape the realities of the individuals living in and around Prince George today. As a major city of the Pacific Rim, Prince George is firmly tied to the global market. The City of Prince George is a vibrant, active and diverse community that provides a strong focal point and identity to the north, with a thriving economy that offers full opportunities for housing, employment, education, recreation and the cultural life of residents. The University of Northern British Columbia provides outstanding undergraduate and graduate learning opportunities that explore cultures, health, economies, and the environment. As one of BC’s research-intensive universities, they bring the excitement of new knowledge to all of our students, and the outcomes of our teaching and research to the world.

The urban city of Prince George is a regional centre for shopping, the arts and sports. Visitors will find a variety of great restaurants from fast food to fine dining, and overnight guests can choose from charming B&Bs to elegant hotels. Shoppers can delight in the city's big box stores, shopping malls and unique downtown boutiques while culture buffs will take pleasure in the art galleries and museums. Outdoor enthusiasts will find everything they desire in the northern wilderness, including world class fresh water fishing and hunting. Forests and waterfalls line the highways, greenery-rich parks can be found within city limits, and countless lakes and rivers exist within a short drive. In the winter season, the selection is just as diverse: world class Nordic, downhill and heli skiing, snowshoeing, ice fishing, and snowmobiling are a few of the many pastimes visitors and locals are able to enjoy.



PARTNERS

Northern Health

Northern Health is responsible for the delivery of health care across Northern British Columbia, including acute care, mental health, public health, addictions, and home and community care. The Authority covers almost two-thirds of B.C.'s landscape, which is home to over 300,000 people. www.northernhealth.ca

Innovation and Development Commons

The Innovation and Development Commons (IDC) is a partnership between Northern Health and the University of Northern British Columbia (UNBC). It aims to facilitate education, research and innovation in the North, ultimately improving the quality of life and health outcomes for Northerners.

Health Research Institute

The mission of the Health Research Institute (HRI) is to facilitate the creation and translation of knowledge that will enhance the health and well-being of individuals, families and communities. The HRI supports UNBC's health researchers to find ways of enhancing the creation of knowledge, the development of research capacity and the exchange of knowledge with research partners: communities, community organizations, practitioners, and most notably, Northern Health.

SPONSORS

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Rural Health Services Research Network of BC

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BC Cancer Agency
CARE + RESEARCH
An agency of the Provincial Health Services Authority

WOMEN'S HEALTH RESEARCH INSTITUTE AT BC WOMEN'S

Poster presentations Conference 2014

PROGRAM AT A GLANCE

Monday, November 7, 2016		
7:45am – 8:45am 7:45am – 4:30pm	Continental Breakfast Conference Registration	*Upstairs, foyer* *Front Foyer*
8:50am – 10:30am	**WORKSHOPS** A) **Donna Ciliska & Susan Snelling, National Collaborating Centre for Methods and Tools** – Organizational Change B) **Rob Olson, BC Cancer Agency Center for the North** – Preparing for an Academic Career	*Room 201-203* *Room 204-206*
10:00am – 11:00am	**Refreshments available (facilitator has control over break time)**	*Upstairs, foyer*
10:30am – 12:00pm	**WORKSHOPS cont'd** A) **Donna Ciliska & Susan Snelling, National Collaborating Centre for Methods and Tools** – Organizational Change B) **Rob Olson, BC Cancer Agency Center for the North** – Preparing for an Academic Career	*Room 201-203* *Room 204-206*
12:00pm – 1:00pm	**Lunch**	*Upstairs, foyer*
1:00pm – 2:30pm	**WORKSHOPS** C) **Jude Kornelsen, Centre for Rural Health Research** – Where the Wild Things are: Unlocking the door between Patient-Oriented Research and Health Planning **D) Martha MacLeod, University of Northern BC & Dawn McArthur, BC Children's Hospital Research Institute** - Developing Well-Funded Sustained Research Partnerships	*Room 201-203* *Room 204-206*
2:30pm – 3:30pm	**Refreshments available (facilitator has control over break time)**	*Upstairs, foyer*
2:30pm – 4:30pm	**WORKSHOPS cont'd:** A) **Jude Kornelsen, Centre for Rural Health Research** – Where the Wild Things are: Unlocking the door between Patient-Oriented Research and Health Planning B) **Martha MacLeod, University of Northern BC & Dawn McArthur, BC Children's Hospital Research Institute** - Developing Well-Funded Sustained Research Partnerships	*Room 201-203* *Room 204-206*

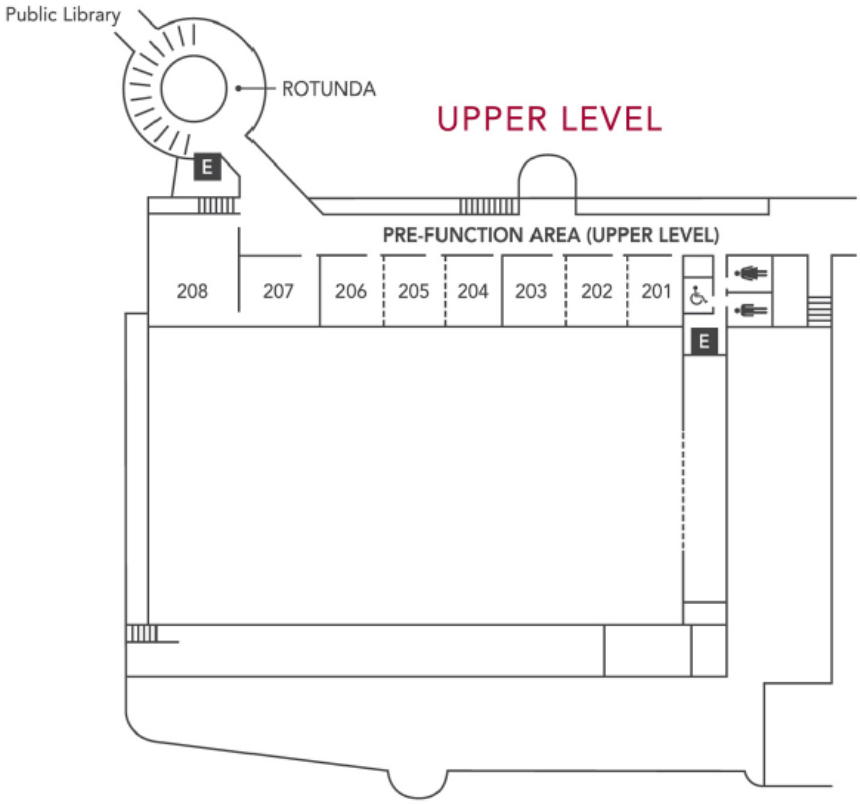
PROGRAM AT A GLANCE

Tuesday, November 8, 2016		
7:45am – 10:00am 7:45am – 8:30am	Conference Registration Continental Breakfast	*Civic Center, Foyer* *Civic Center, Room 101*
8:30am – 8:45am	TRADITIONAL WELCOME Elder Kenora Stewart, Lheidli T'enneh First Nation	*Room 101-102*
8:45am – 9:00am	OPENINGS AND GREETINGS Cathy Ulrich, CEO Northern Health Geoff Payne, Vice Preseident of Research and Graduate Programs, UNBC	*Room 101- 102*
9:00am – 10:00am	**WELCOME & KEYNOTE SPEAKER** **Dr. Janet Smylie –** We are all Doing Implementation Research (and we didn't even know)	*Room 101- 102*
10:00am – 10:15am	**Refreshment Break & Transition Time**	*Civic Center, Foyer*
10:15am – 11:55am	**CONCURRENT SESSIONS** Session A: Women's Health Session B: Northern Cancer Care Strategies and Prevention Session C: Rural Professionals: Recruitment and Education	*Room 101* *Room 204-206* *Room 208*
12:00pm – 12:45pm	**Lunch – Transition to Concurrent Sessions**	*Civic Center, Foyer/Room 101*
12:45pm – 2:00pm	**CONCURRENT SESSIONS** Session A: Women's & Men's Health Session B: Chronic Disease Management Strategies Session C: Health Equity - I	*Room 101* *Room 204-206* *Room 208*
2:00pm – 2:15pm	**Refreshment Break & Transition Time**	*Civic Center, Foyer*
2:15pm – 3:30pm	**CONCURRENT SESSIONS** Session A: Resources for Research Session B: Innovative and Creative Approaches to Research Session C: Health Equity -II	*Room 101* *Room 204-206* *Room 208*
3:30pm – 3:40pm	**Transition to Rapid Fire**	n/a
3:40pm – 4:30pm	**RAPID FIRE POSTER PRESENTATIONS**	*Room 101- 102*
4:30pm – 6:30pm	**Reception & Poster Viewing**	*Room 101- 102*

PROGRAM AT A GLANCE

Wednesday, November 9, 2016		
7:30am – 10:00am 7:30am – 8:30am	Conference Registration Breakfast Buffet/Breakfast Tables	*Civic Center, Foyer* *Civic Center, Room 101*
8:30am – 8:50am	**Welcome and Poster Award Presentations**	*Room 101- 102*
8:50am – 9:50am	**PLENARY SESSION** **Dr. Janis Shandro -** Health Impact Assessment of the Mount Polley Mine Tailings Dam Breach: Screening and Scoping Phase Findings	*Room 101- 102*
9:50am – 10:05am	**Transition Time – refreshments/snacks available**	*Civic Center, Foyer*
10:05am –11:45am	**CONCURRENT SESSIONS** Session A: Quality of Care Session B: Primary Care Transitions Session C: Team Based Care	*Room 101* *Room 204-206* *Room 208*
11:45am – 11:55am	**Transition time**	*n/a*
11:55am – 12:10pm	**CLOSING REMARKS** **Fraser Bell, Vice President PQIM,** Northern Health **Martha MacLeod Co-Chair**, UNBC Health Research Institute	*Room 101- 102*

Prince George Civic Centre



WORKSHOPS – Morning - November 7th

Facilitator: Robert Olson, MD FRCPC MSc, Radiation Oncologist, Research Lead, BC Cancer Agency Center for the North, UBC Northern Medical Program

Workshop Title: **Preparing for an Academic Career**

Description:

1. Preparing and maintaining your CV
2. The difference between academic vs. clinical research
3. Tips for writing a clinical manuscript

Facilitators:
Donna Ciliska, Professor Emeritus in the School of Nursing at McMaster University, Senior Knowledge Translation Advisor, National Collaborating Center for Methods and Tools, Inaugural Scientific Director of the NCCMT

Susan Snelling, PhD, Senior Knowledge Translation Specialist, National Collaborating Centre for Methods and Tools.

Workshop Title: Organizational Change

Description: In keeping with NCCMT's priority of evidence-informed decision making (EIDM), the workshop will focus on organizational change concepts as they relate to an organization that has made a commitment to performance improvement through EIDM.

Objectives:

1. To become familiar with one model of organizational change.
2. To know what tools can be used for organizational assessment.
3. To develop knowledge and skills in planning organizational change.
4. To learn about strategies that can be implemented for organizational change.
5. To become familiar with process, structure and outcome indicators and their measurement that could be used for evaluation of organizational change.

WORKSHOPS – Afternoon - November 7th

Facilitator: Jude Kornelsen, Assistant Professor, Co-Director, Center for Rural Health Research.

Workshop Title: Where the Wild Things are: Unlocking the Door Between Patient-Oriented Research and Health Planning

Description: This workshop will consider the role of patient-oriented research in health planning with a particular focus on qualitative research, starting with a review of the importance of such research. The role of qualitative research as both a *hypothesis-generating* and *explanatory* part of data on a complex problem will be covered, as will mechanisms for moving such research into health planning. This workshop will rely on real-world examples and be structured in a Socratic (dialogue-based) approach.

Facilitators:
Martha MacLeod, Professor, School of Nursing, UNBC

Dawn McArthur, Director, Research & Technology Development, BC Children's Hospital Research Institute

Workshop Title: Developing Well-Funded Sustained Research Partnerships

Description: In this interactive workshop, participants will examine what it takes to develop a research partnership that can be sustained over time. Key to sustained research partnerships is creating innovative yet feasible integrated knowledge translation projects that build on one another, while developing a well-functioning research and knowledge user team. The workshop will help participants build a project plan and explore important considerations when developing a proposal for funding. This workshop will benefit about-to-form teams, newly-formed teams and experienced teams alike.

KEYNOTE SPEAKER – November 8th

Dr. Janet Smylie is a family physician and public health researcher. She currently works as a research scientist in Indigenous health at St. Michael's hospital, Centre for Urban Health Solutions (CUHS), where she directs the Well Living House Applied Research Centre for Indigenous Infant, Child and Family Health. Her primary academic appointment is as an Associate Professor in the Dalla Lana School of Public Health, University of Toronto. She maintains a part-time clinical practice with Inner City Health Associates at Seventh Generation Midwives Toronto. Dr. Smylie has practiced and taught family medicine in a variety of Aboriginal communities both urban and rural. She is a member of the Métis Nation of Ontario, with Métis roots in Saskatchewan. Her research interests are focused in the area of addressing the health inequities that challenge Indigenous infants, children and their families through applied health services research. Dr. Smylie currently leads multiple research projects in partnership with First Nations, Inuit, and Métis communities/organizations. Dr Smylie holds a CIHR Applied Public Health Research Chair in Indigenous Health Knowledge and Information and was honoured with a National Aboriginal Achievement (Inspire) Award in Health in 2012.

We Are All Doing Implementation Research (and we didn't even know)

In this interactive and practical presentation Dr. Smylie will demystify implementation research and implementation science, drawing on her 25 years of experience working in partnership with First Nations, Inuit and Métis people and communities as a family doctor and applied public health researcher. She will provide working definitions of implementation research, implementation science, and population health intervention research and support audience members in identifying how they are already engaged in systemic and strategic actions to enhance health and wellbeing at home and at work. Too often research becomes disconnected from what is locally relevant and useful. In this talk Dr. Smylie will provide concrete strategies on how to build action research that foundationally incorporates local ways of knowing and doing with respect to health and explain why this approach results in more effective services and programs. She will draw on examples from her own Indigenous health research program.

PLENARY SESSION – November 9th

Dr. Janis Shandro, Senior Community Health and Safety Specialist, Monkey Forest Consulting Ltd. Adjunct Professor Geography Department, University of Victoria.

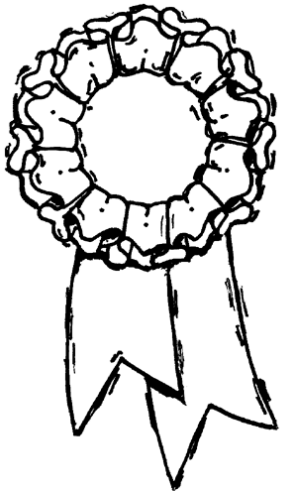
Janis Shandro holds a PhD in mining engineering and is a trained health scientist. For the last 8 years, she has led a research program in partnership with First Nation communities on the intersection of extractive industry development and community health issues in British Columbia, Canada. Professionally, with Monkey Forest Consulting Ltd., she leads culturally appropriate community health impact assessments, develops and implements community health and safety management plans, and delivers executive training sessions on community health and safety in relation to the extractive sector for communities in British Columbia, Canada and clients around the globe.

As engineers, we have a professional responsibility to ensure that our work brings positive benefits to the societies we serve. As community health researchers we strive to ensure our work brings real tangible health benefits to those under study. In my practice, engagement and partnership with communities and industry, especially around large-scale development projects, is essential. In the context of such projects, it has been my experience that community health receives inadequate attention, yet internationally the topic is recognized as an important issue that can hold risk for both projects and communities. Since 2006, I have been working to bolster the importance of community health and safety in relation to industrial development with a deep focus on British Columbia, Canada.

Health Impact Assessment of the Mount Polley Mine Tailings Dam Breach: Screening and Scoping Phase Findings

This presentation will describe initial stages of a health impact assessment (HIA) that has been conducted on behalf of First Nations Health Authority to address community health concerns around the Mount Polley tailings dam failure. As part of this presentation, the lead investigator will elaborate on the HIA methodology adopted, as it has roots in almost a decade of community-based participatory health and extractive sector research. Key project findings and recommended strategies to bring research evidence into action will also be discussed.

POSTER COMPETITION



The IDC Research Days is featuring a Poster Competition. Students that have designated their poster for consideration in the competition will be judged by voting by your peers as well as a judging panel for Quality, Evidence, Illustrations, and Overall appearance. There will be one award of $150 as contributed by the UNBC Health Research Institute that will be given to the best student poster, as well as one award of $100 as contributed by the UNBC Health Research Institute that will be given to the best overall poster. The winners will be announced Wednesday, November 9th in the morning.

Student Poster
Awarded
2014 Research Days

CONCURRENT SESSIONS

Morning - Tuesday, November 8, 2016			
Time	**Room 101 – Session A** **Chair: Sim Milligan** Theme: **Women's Health**	**Room 204-206 – Session B** **Chair: Tanis Hampe** Theme: **Northern Cancer Care Strategies and Prevention**	**Room 208 – Session C** **Chair: Rachael Wells** Theme: **Rural Professionals: Recruitment and Education**
10:15 – 10:40	**148 – Heather Pedersen & Sheona Mitchell-Foster** Retrospective chart review exploring substance use, antenatal and perinatal outcomes associated with rural residence in Northern British Columbia	**133 – Jessica Place** Renewed Northern Cancer Strategy – A five-year roadmap to improve the response to Cancer in Northern BC	**153 – Sarah Hanson** It's Complicated: Staff Nurse Perceptions of Their Influence on Nursing Student's Learning
10:40 – 11:05	**108 – Sheona Mitchell-Foster** Identifying Barriers to Treatment for Women with Cervical Dysplasia in Rural and Remote Geographies	**161 – Simran Lehal** Exploring Cancer Care in Haida Gwaii: A Perspective from a Model Island Community in British Columbia	**136 – Helen Bourque** Recruitment of Nurse Practitioners
11:05 – 11:30	**135 – Trina Fyfe** Prevention of RhD alloimmunization in Northern British Columbia	**120 – Sumreen Javed** Northern British Columbian Mushrooms- Potential Source of Novel Immunomodulatory Compounds	**122 – Jessica Inskip** Interprofessional education of rehabilitation professionals in a rural primary health care setting: Using evidence to improve patient care and student training in Prince Rupert
11:30 – 11:55	**151 – Helen Bourque** The use of Vaginal Pessaries in a Primary Care Setting	**103 – Drona Rasali** Estimated Direct Health Care Costs of Tobacco Smoking, Excess Weight and Physical Inactivity among Northern BC Residents in 2013.	**117 – Leana Garraway & Janna Olynick** Rural and Remote Nursing in British Columbia: Results from a National Survey

CONCURRENT SESSIONS

Afternoon – Tuesday, November 8, 2016			
Time	**Room 101-Session A** **Chair: Tamara Checkley** Theme: **Women's & Men's Health**	**Room 204-206-Session B** **Chair: Julie Creaser** Theme: **Chronic Disease Management Strategies**	**Room 208 – Session C** **Chair: Kerensa Medhurst** Theme: **Health Equity - I**
12:45 – 1:10	**112 – Clarie Johnson** Voices in thread: Women's Childhood Experiences of a Primary Caregiver that Remained in a Relationship with an Alleged or Known Sex Offender, an Arts-Based Inquiry.	**132 – Jennifer Hawkes** Creation of the Regional HIV/HCV Specialized Support Team	**126 – Katriona Auerbach** Exploring well-being through an Indigenous lens: How hunting practices and land-relationships contribute to health.
1:10 – 1:35	**162 – Davina Banner-Lukaris** Optimizing the implementation and uptake of stroke prevention guidelines in northern British Columbia	**134 – Jessica Place** Regional Chronic Diseases: A Program Supporting Integrated Health Services and Interventions for Chronic Diseases in Northern BC	**110 – Murry Krause** Engaging in Research to Advance Health Equity: The EQUIP Study at CINHS
1:35 – 2:00	**118 – Cherisse Seaton** Considerations in developing a workplace mental wellness program for men in the north	**125 – Daemon Cline** Hormonal control of energy metabolism in brown adipose tissue, a potential therapeutic target in obesity	**143 – Kate Hewitt** Exploring Indigenous-led collaborative planning in a watershed context: Perspectives from the Nechako headwaters
2:00 – 2:15	**Refreshment Break & Transition Time**		
Time	**Room 101-Session A** **Chair: Tamara Checkley** Theme: **Resources for Research**	**Room 204-206-Session B** **Chair: Julie Creaser** Theme: **Innovative and Createive Approaches to Research**	**Room 208 – Session C** **Chair: Kerensa Medhurst** Theme: **Health Equity - II**
2:15 – 2:40	**163 - Cindy Hardy** Introducing RDC@UNBC	**150 – Theresa Healy** Collaborating as Learning: An Introduction to the Harmonization Manual	**115 – Charis Alderfer-Mumma** Creative and Collaborative Research Practices to Enhance Northern Health: Stories from the Health Arts Research Centre (HARC)
2:40 – 3:05	**106 – Lori Brotto** Introduction to Women's Health Research Institute	**164 – Janna Olynick** Intergenerational Influences on the Understanding and Use of Technology in Later Life	**102 – Chris Buse** Advances in cumulative impact assessment for resource development operations in Northern BC: Towards holistic and integrated evaluation of environment, community and health data
3:05 – 3:30	**106 – Lori Brotto** Introduction to Women's Health Research Institute	**128 – Shanthini Rajendran** Data Visualization Software for NIRS devices	**111 – Katie Cornish** Towards more robust indicators for monitoring the socioeconomic determinants of health as it relates to resource development in Northern BC

CONCURRENT SESSIONS

Wednesday, November 9, 2016			
Time	**Room 101-Session A** **Chair: Mark Barnes** Theme: **Quality of Care**	**Room 204-206-Session B** **Chair: Linda Axen** Theme: **Primary Care Transitions**	**Room 208 – Session C** **Chair: Sam Milligan** Theme: **Team Based Care**
10:05 – 10:30	**104 – Henry Harder, Sandra Allison, Drona Rasali** State of Healthy Public Policy in Northern BC: Making the Healthy Choice the Easy Choice	**146 – Dr. Gary Knoll** A Culture of Quality Improvement: The Prince George Coaching Strategy	**107 – Vanessa Evens** Change Analysis: Beyond Plans of Care
10:30 – 10:55	**105 – Gregory Marr** Implementation of a Community Based Convalescent Care Program (Gateway to Home) - 1 Year Quantitative and Qualitative Operational Evaluation	**144 – Karen Gill** Prince George Coaching Team – A look at the work on the ground	**116 – Erin Wilson** Who Needs Team-Based Care: Patient Perspectives
10:55 – 11:20	**114 – Anne Pousette** A best practice model to maximize the health impacts of mass gatherings: Northern Health and the 2015 Canada Winter Games	**123 – Neil Hanlon** Partnering for primary health care reform: Rhetoric's of intimacy and relations of scale	**156 – Helen Bourque** Organization Behavior and Design: A change in structure
11:20 – 11:45	**157 – Indrani Margolin** Arts-based research methods and mentorship between older and younger northern women in the context of recovery from mental illness	**154 – Sujata Connors** Community Nursing – Increasing Access & Quality	**100 – Erin Branco** Nutrition Care Process Terminology in Northern Health: Dietitian use, knowledge, attitudes, and learning needs

RAPID FIRE POSTER PRESENATIONS

Tuesday, Novmeber 8, 2016	
Time	**Room 101 – 3:40pm – 4:20pm**
3:40 – 3:45	113 – Crystal Li - Measuring Food Insecurity in Northern BC
3:45 – 3:50	119 – Jessica Inskip - Development of a database for rehabilitation services at Prince Rupert Regional Hospital: Using data to enhance care and meet community needs
3:50 – 3:55	121 – Manish Sadarangani - Determining burden of Haemophilus influenza type a (Hia) disease and assessing attitudes and perceptions about Hia in Indigenous communities.
3:55 – 4:00	130 – Yaser Ahmed - Development of a survey instrument to measure ethnic food habits and dietary patterns in ethnic (non-aboriginal) populations in northern British Columbia
4:00 – 4:05	137 – Jonathan Simkin - Cancer Mortality in Yukon 1999 - 2013: Elevated Mortality Rates and a Unique Cancer Profile.
4:05 – 4:10	152 – Komal Sandhu - Metabolic and hemodynamic adaptations in respiratory muscles after 4 months of training in varsity soccer players
4:10 – 4:15	158 – Mike Eadie - A cross-season investigation of the impacts of wildfire smoke on respiratory health of wildfire fighters in northern BC
4:15 – 4:20	154 – Sujata Connors – Community Nursing -Increasing Access & Quality

BREAKFAST TABLES

Wednesday, November 9, 2016
7:30am – 8:30am
Prince George Civic Centre, Room 101

Purpose of Breakfast Table:

- Allow for informal conversation regarding your topic in relation to knowledge, research, and collaborative action
- Provide an opportunity for focused networking between topic leads and participants with similar interests and ideas

Breakfast Table Hosts & Titles:

- **Donna Ciliska and Susan Snelling, NCCMT –** What's the difference? Understanding Knowledge Translation and Implementation Science
- **Linda Axen, NH Policies -** Where Evidence Informs Our Practical Solutions
- **Naseam Ahmadi, First Nation Health Authority -** First Nations Perspective on Holistic Measures of Wellness – the FNHA Experience
- **Judith Kulig, University of Lethbridge –** There's Been a Wildfire in my Neighborhood: Dealing with the Aftermath
- **Chris Buse, UNBC –** The Health Impacts of Resource Development
- **Holly Christian, NH –** Population Health in Research – Knowledge Translation to Action
- **Lori Brotto, WHRI –** Transforming Women's Health Through Research: A Provincial Research Strategy
- **Martha MacLeod, UNBC –** NH-UNBC Knowledge Mobilization Chair: What Does this Mean for You?
- **Jude Kornelsen, RHSRNbc –** Rural Primary Care or Comprehensive Generalist Care? Thinking through the 'primary care home' in a Rural Setting.

Please sign up for a Breakfast Table at the Registration Desk

ABSTRACTS – POSTER PRESENTATIONS

Prince George Civic Centre Room 102

109 - Title: Assessment of Service Delivery and Utility of Childhood Preventive Care Services – Vision & Dental – in Northern British Columbia

Presenter: Dorri Mahdaviani

A comprehensive assessment of vision and dental preventive care services for children aged 0 – 6 was conducted to obtain knowledge on the current state of services available to residents of the northern health region. This investigation was instigated as a result of recent recommendations to alter the dissemination of preventive care services, as some appear to be cost-ineffective. As early childhood is a sensitive and critical period for the proper development of visual and dental health, it would be ill-informed to discontinue or alter service distribution without thoroughly identifying gaps and barriers in service delivery and utility. Hence, a timely, accurate, and transparent investigation was administered to enable evidence-informed decision making by Northern Health Authority (NH) for the purposes of future planning and resource allocation.

Mixed methods (key stakeholder interviews and surveys) were implemented to engage and collaborate with internal and external Northern Health health professionals, with the goal of gaining an understanding of the available preventive services. Data collected by NH vision and dental Public Health staff was also analyzed to pinpoint the geographical location of preventive service administration, and the frequency of service delivery and utility.

This presentation reviews the primary findings from the service delivery and utility assessment, and explores the challenges faced by NH Public Health staff in administrating services to rural and remote sites. Additionally, opportunities for community collaboration with allied health professionals are identified in order to improve future planning and delivery of public health programming for this age group. Most importantly, this investigation inadvertently identified inconsistencies in NH data integrity and quality, which infer the need for a validated systematic data collection and extraction methodology. Findings from this exploratory assessment have profound implications on future planning and execution of not only NH Public Health programs, but all programs administered by this regional health authority as the overarching obstacles are common amongst all sectors.

113 - Title: Measuring Food Insecurity in Northern British Columbia

Melanie Kurrein (BCCDC), Crystal Li (BCCDC)*, Marianne Bloudoff (Northern Health Authority)*, Rita Zhang and Drona Rasali (BCCDC)

* Presenters

Abstract:

Food insecurity, a public health concern in British Columbia (BC), affects a household's ability to afford nutritious food and influences both physical and mental health of the affected individuals. Household food insecurity is when a household worries about or lacks the financial means to buy healthy, safe, personally acceptable food. We carried out two separate statistical analyses of food security measurement for Northern BC as parts of provincial surveillance studies.

Results from the analysis of Canadian Community Health Surveys (CCHS) for 2011-12 showed that over one in ten BC households were food insecure. Northern BC had the highest overall rate of food insecurity (16.4%) in the province. Food insecurity in households with children was especially high in Northern Health (24.8%) compared to the provincial average of 15.1%. Another way of understanding household food insecurity in BC is by measuring the average monthly cost of a nutritionally adequate, balanced diet through the bi-annual Food Costing. Across BC, the cost of an adequately nutritious diet has steadily increased over time; in Northern Health the cost increased from $841 in 2011 to $1,032 in 2015 for a reference family of four. In 2015, the monthly average of food costs were the highest in northwest ($1,121) and northeast ($1,022) compared with other health regions in BC for a reference family of four. The root cause of household food insecurity is not food costs but the lack of sufficient income to purchase healthy, safe, personally acceptable food. Northern and remote communities face additional challenges in accessing healthy food such as transportation and access to grocery stores. It will take policy interventions at the local, provincial or federal level to address household food insecurity in Northern Health.

119 - Development of a database for rehabilitation services at Prince Rupert Regional Hospital: Using data to enhance care and meet community needs

Jessica Inskip 1*, Caitlin DuBiel 1,2, Angenita Gerbracht 2,3, Robin Roots 1
1. Department of Physical Therapy, University of British Columbia (UBC), Vancouver, Canada
2. Prince Rupert Regional Hospital, Northern Health, Prince Rupert, Canada
3. Department of Occupational Therapy, UBC, Vancouver, Canada
*. Presenting author

A quality improvement culture requires information systems to record and manage data. This information helps identify areas for improvements, tailor modifications, and evaluate outcomes. Here we present our experience developing and transitioning to a robust database to document client referrals, care, and outcomes. The ability to record and retrieve this information helps us respond to community needs and improve patient care.

The Prince Rupert Regional Hospital Rehabilitation Department serves the city of Prince Rupert and coastal communities. There is a significant need for rehabilitation services in this area and the waitlist, especially for chronic disease management, was becoming challenging to manage. We identified a need for a more reliable way to manage patient referrals, wait times, and progression. We worked with members of the NH Custom Application Development Team, IT Corporate Reporting, to develop a database to meet our specific departmental requirements.
We began using the database in stages; first to come on board was the Prince Rupert Interprofessional Student-Led Model (PRISM) clinic this spring, followed the rest of the rehabilitation staff in September this year. The database ensures patient data is secure while allowing multiple clinicians and students to input client information simultaneously. The database supports a culture of quality improvement. It helps us identify more clearly our client characteristics and needs, including: where client referrals are coming from; the average number of appointments a client has before discharge; the length of time clients are on the waitlist; the outcome measures being used; whether clients achieve their goals by discharge; who is involved in the interprofessional team; and how to modify services to meet clients' needs. Looking forward, the database may also facilitate patient discharge summaries to share with other members of the care team. We are continuing to explore the full potential of our database to improve care.

121 - Determining burden of Haemophilus influenza type a (Hia) disease and assessing attitudes and perceptions about Hia in Indigenous communities

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Over the last decade, the incidence of invasive Haemophilus influenza type a (Hia) disease has increased in some regions of Canada, with a predominance of disease in Indigenous communities. Hia causes meningitis, septicemia, pneumonia and septic arthritis and has a case-fatality rate of up to 10%. More data are needed to assess the current burden of disease and investigate issues surrounding Hia disease in Indigenous communities.

The overall aims of this study are (i) to investigate the immunoepidemiology of Hia infection and (ii) to assess the knowledge, attitudes, beliefs and values of Indigenous communities in relation to Hia disease.

The immunoepidemiology of Hia infection will include:

- Identifying incidence rates and risk factors for Hia infection by review of hospitalized cases in Northern Ontario since 2006 plus cases recorded by the Canadian Immunization Monitoring Program, ACTive (IMPACT) network;
- Establishing the prevalence of Hia carriage by identification and molecular characterization of Hia from nasopharyngeal swabs of healthy 3-5 year old First Nations children undergoing routine dental procedures in Northern Ontario;
- Determining the age-related development of immunity to Hia by assessing antibody responses in serum and saliva from individuals of Indigenous and non-Indigenous communities in Northern Ontario.

Attitudes and perceptions of Hia in Indigenous communities will be explored by community-based participatory research. The first stage will involve interviews with several Indigenous organizations and stakeholders, Indigenous health care providers and First Nations health authorities/directors to identify research questions. In the second

stage there will be talking circles (focus groups) held for health service providers and community members in each community, directed by information from the first stage.

This project builds on existing collaborations between the Northern Ontario School of Medicine and Indigenous communities in Northern Ontario. Information from additional Indigenous communities across Canada will establish if these data are representative of the national situation.

129 - Pituitary Adenylate Cyclase-Activating Polypeptide and its Association with the Melanocortin System in Regulating Thermogenesis

Author: Thecla Rae McMillan, University of Northern British Columbia

Accumulation of excess white adipose tissue (WAT) has detrimental consequences for metabolic health that range from decreased overall quality of life to premature death. In addition to positive lifestyle modifications, understanding the pathophysiological mechanisms of obesity-induced metabolic impairments may be beneficial in controlling and preventing obesity. Activation of thermogenic adipocytes in brown adipose tissue (BAT) confers beneficial effects on adiposity and is considered a new potential therapeutic target for human obesity. Many hormones modulate the thermogenic capacity of BAT such as norepinephrine, melanocortins, and pituitary adenylate cyclase-activating polypeptide (PACAP). In mice lacking PACAP (PACAP -/- mice), metabolism and thermogenic capacity in response to cold is impaired. This study examined the connection between PACAP and the melanocortin system in activating BAT to upregulate adaptive thermogenesis. PACAP is expressed in the hypothalamus and it is hypothesized that PACAP acts upstream of the melanocortin system to regulate sympathetic nerve activity (SNA) to stimulate thermogenesis. To assess this, PACAP -/- mice and PACAP +/+ mice were kept at 4°C and given daily injections of a melanocortin receptor agonist, Melanotan II (MTII), for 24 days. The effect of MTII on thermogenesis was examined by measuring body weight and composition, and metabolic rate through oxygen consumption. Additionally, tissues were collected to analyze molecular markers of thermogenesis. Results show MTII partially restored maximal metabolic rate in PACAP -/- MTII injected mice as compared to controls. These results provide evidence to suggest that PACAP acts upstream of melanocortin receptors to upregulate thermogenesis in response to cold exposure. Follow-up molecular and histological examination of the dissected tissues will determine expression levels of thermogenic genes such as uncoupling protein 1 (UCP1) and will provide further molecular evidence to refute or support the physiological results described above.

130 - Development of a survey instrument to measure ethnic food habits and dietary patterns in ethnic (Non-aboriginal) populations in northern British Columbia

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Author: Yaser Ahmed

Abstract: Context: Ethnic populations comprise a sizeable segment of the Canadian Population. There is great emphasis in nutritional epidemiology on studying dietary patterns related to risk of chronic disease such as type 2 diabetes (T2D) and cardiovascular disease (CVD). The Mediterranean diet pattern (MDP) has cardio protective diabetes-lowering effects in randomized clinical trials (RCT). The evidence of the MDP has not been investigated in northern populations, particularly rural ethnic Canadian populations. Aims: Using a feasibility study, we examined food consumption patterns amongst a convenience snowball sample of various ethnic populations in Prince George, BC. Specifically; 1) to develop a valid and reliable survey instrument to collect baseline data on food patterns and other lifestyle risk factors for T2D among adult men and women of different ethnicities (South Asian, Chinese, East European, Middle Eastern, and African); and 2) to determine if gender-based differences exist in food patterns. Methods and Results: 200 surveys were distributed to individuals, and 164 surveys were returned. Data collection extended from October 2013 to June 2014. Participants had reasonably healthy food habits for some dietary items such as fruits and vegetables (F&V) and low-fat dairy products. Such consumption patterns, however, did not achieve Canada's Food Guide to Healthy Eating. Consumption of fatty foods (french fries; red meats; pizza; refined sugar products) was considerably high particularly among younger adults (18-29 years of age). High-fat and sugary products contributed to significant increase in mean body mass index (BMI); which was 32.6 kg/m2. Significant gender differences in food consumption patterns emerged. Males had unhealthier Western-type diet patterns compared to females. Conclusion: This is the first investigation in northern BC to examine ethnic food patterns. Our results

indicate that obesity and T2D are health concerns particularly among men. Health promotion programs that focus on adult Men are warranted given their CVD risk profile.

131 - The Understanding and Management of Stroke Risk in Patients with Atrial Fibrillation in Rural

Northern British Columbia Research Conference Abstract
University of Northern British Columbia
Alexandra Marleau- Presenting Author

Atrial fibrillation (AF) is one of the most common sustained cardiac arrhythmias in the world, affecting approximately 1% of global population (Assiri, Al-Majzoub, Kanaan, Donovan, & Silva, 2013). In the Canadian population, AF affects 8% of people 65 and older, presenting a unique issue to people living in rural and remote communities in northern British Columbia (Assiri et al., 2013). AF is major cause of further health concerns, the most serious being that of ischemic stroke (Fuchs et al., 2012). Risk for stroke increases by 500% with a diagnosis of AF, making this condition once thought of as benign actually a public health epidemic (Atrial Fibrillation Association and Anticoagulation Europe (UK), 2011; Björk, Palaszewski, Friberg, & Bergfeldt, 2013). During the literature review of this project, few studies were found that focused on the patient experience of living with AF, and in the context of living rurally.

Using a qualitative descriptive design, this study aims to explore a person's understanding and management of their own journey with AF through a series of eleven questions asked over the phone. The participants of this study are residents of northern British Columbia who are living with AF. At this point in data collection, the seven participants who have been interviewed represent varying ages and gender. Further recruitment is planned to obtain a further 5-8 participants to reach data saturation. The data will be analyzed from the transcripts of the interviews, using the software NVivo 10 QRS international (QRS International, n.d.) to help with the coding and sorting of data. Thank you for taking the time to read my application. I look forward to attending this conference, and hope that I am considered as a candidate to present my research.

137 - Cancer Mortality in Yukon 1999 - 2013: Elevated Mortality Rates and a Unique Cancer Profile

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OBJECTIVES: Although cancer is the leading cause of death in Canada, cancer in the North has been incompletely described. Our objective was to determine Yukon's cancer mortality rates, compare them to Canadian rates, and identify major causes of cancer mortality.

METHOD(S): The Yukon Vital Statistics Registry provided all cancer deaths for Yukon residents between January 1st 1999 to December 31st 2013. Age-standardized mortality rates were calculated using the direct method and compared to Canadian rates. Standardized mortality ratios (SMRs) were calculated relative to age-specific mortality rates from Canada, British Columbia (BC), and three sub-provincial administrative health regions from BC: Interior Health (IH), Northern Health (NH) and Vancouver Coastal Health (VCH). Trends in smoothed age-standardized cancer mortality rates were examined with graphical methods.

RESULTS: Yukon's all-cancer mortality rates were elevated compared to national and provincial rates for the entire period. Disparities were greatest compared to the urban VCH: prostate (SMRVCH = 246.3, 95% CI 140.9-351.6), female lung (SMRVCH = 221.2, 95% CI 154.3-288.1), female breast cancer (SMRVCH = 169.0 95% CI, 101.4-236.7) and total colorectal cancer (SMRVCH = 149.3, 95% CI 101.8-196.8) were all significantly elevated in Yukon. Total stomach cancer mortality was significantly elevated compared to all comparators (SMRBC = 325.4, 95% CI 175.1-475.8, SMRCanada = 259.5, 95% CI 136.1-382.9, SMRIH = 350.0, 95% CI 188.3-511.7, SMRVCH = 299.9, 95% CI 161.3-438.4, SMRNH = 257.7, 95% CI 138.6-376.6).

CONCLUSION: All-cancer and cancer-specific mortality in Yukon is elevated compared to national and provincial rates, as well as urban and rural sub-provincial comparators in southern BC.

138 - "Prevalence of visual hallucinations in patients undergoing intravitreal anti-VEGF agents in northern British Columbia"

Objective: To determine the prevalence and characteristics of visual hallucinations (Charles Bonnet Syndrome) in patients receiving intravitreal anti-VEGF treatment in a northern community.

Study Design: Cross-sectional survey.

Methods: Participants were recruited from an anti-VEGF injection clinic in Prince George for treatment of age-related macular degeneration (AMD), diabetic retinopathy, and retinal vein occlusion. Anti-VEGF agents included bevacizumab, ranibizumab, and aflibercept. Patients were screened for visual hallucinations, and vision was tested (visual acuity and contrast sensitivity).

Results: 122 patients were screened in a period of 6 weeks. 73/122 were female (59.8%), 49/122 were male (40.1%). Average age of participants was 75.3 years. 92 participants had AMD (75.4%), 21 had diabetic retinopathy (17.2%), 17 had retinal vein occlusions (13.9%). The prevalence of Charles Bonnet syndrome in this cohort was 8/122 (6.6%).

Conclusion: Approximately 1 in 16 patients who have eye diseases may experience visual hallucinations. Thus, healthcare professionals can benefit from greater awareness of Charles Bonnet syndrome.

139 - Population-based assessment of relationship between volume of practice and outcomes in head and neck cancer patients

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Purpose: Recent literature has suggested that higher volumes of practice are associated with better survival outcomes for head and neck cancer (HNC) patients. However, these studies are limited by only looking at the volume of practice on a cancer center level (i.e. not a provider level) and not controlling for rurality of patient residence. The objective of this study was to evaluate the effect of treatment center on the overall survival (OS) and cancer-specific survival (CSS) of HNC patients in British Columbia (BC), while controlling for physician case volume and rurality of patient residence.

Methods and Materials: The BC Cancer Registry (BCCR), a population-based provincial database, was used to identify all patients in BC diagnosed for the first time with a primary non-thyroid HNC and treated with radiotherapy between 2006 and 2011. Patients were categorized as residing in large, small and rural local health authorities (LHAs) using BC Stats and BC Ministry of Health information. Physician case frequency was defined as low (0-14 cases per year), medium (15-29 cases per year) and high (>30 cases per year).

Results: 2,330 HNC patients were included in our study. On multivariable analysis, after controlling for age, gender, cancer stage, anatomical site, treatment and physician case frequency, neither head and neck CSS (HNCSS) (HR range=0.92-1.03; p=0.57-0.91) nor OS (HR range=0.93-1.07; p=0.47-0.92) was significantly different by center. OS was also not significantly different for patients treated by physicians with low case frequency (HR=0.96; 0.77-1.19; p=0.72) and medium case frequency (HR=1.01; 0.83-1.23; p=0.91) in reference to high case frequency.

Conclusions: There was no significant difference in survival among BC Cancer Agency treatment centers after controlling for differences in rurality, physician case volume and other potential confounding variables.

140 - Putting Evidence into Practice – Reducing Surgical Site Infection Rates at UHNBC

Karen Newman RN SCR on behalf of the Surgical Site Infection Group at UHNBC

According to several consecutive semiannual reports released by the National Surgical Quality Improvement Program, UHNBC rated in the tenth decile and with an occasional “visit” into outlier status with the occurrence of surgical site infection (SSI). Previous efforts had been made to reduce SSI rates by moving towards an evidence based approach of increasing the ambient temperature in the OR and ensuring the administration of antibiotics within an hour of pre incision. Building on the success of using available evidence to lower SSI rates the surgical site infection working group at UHNBC aimed to decrease superficial surgical site infection by 50% through the implementation of

evidence based practice.

Through a team based approach evidenced based information was implemented using quality tools and data to support the monitoring of progress. The first approach saw the use of 2% Chlorhexidine Gluconate Antiseptic Wipes on all elective adult (> 18 years) on total primary hip and knee arthroplasties commencing January 11, 2016. (One treatment wipe package in pre op area). The outcome was one SSI between January 11, 2016 and March 30, 2016. The second approach focused on the expansion of 2% Chlorhexidine Gluconate Antiseptic Wipes to all elective adult surgeries. Due to a recall of Chlorhexidine Gluconate Antiseptic Wipes, UHNBC has been unable to expand the program. UHNBC has experienced a significant decrease in SSI infections as a result of putting evidence into practice. The working group is continuing to focus on spreading the use of 2% Chlorhexidine Gluconate Antiseptic Wipes and exploring additional evidence based approaches for reducing SSI.

141 - Exploring reasons behind patient non-participation in telehealth interventions: A closer look at two randomized control trials for patients with multiple chronic conditions

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Background: Patients living in rural and smaller urban areas face numerous challenges when accessing healthcare services more readily available in larger urban environments, including geographical and financial barriers. The use of telehealth has been proposed as a means to address these access barriers however, despite increasing access to the Internet and wider availability of technology to enable Internet-based telemonitoring, patient uptake of telehealth services remains stagnant. In this study, we sought to identify factors associated with patient non-participation in two Internet-based telehealth interventions for chronic disease promoting self-management.
Methods: Thematic analysis was used to understand factors that prevented patients from participating in Internet-based telehealth interventions.
Results: Several key themes behind non-participation were identified including, lack of computer confidence, perceived need and value for services, poor clarity surrounding diagnosis and personal patient-level factors including, time and feeling overwhelmed with their diagnosis.
Conclusion: Telehealth presents a potential solution for effective healthcare service delivery for patients residing in non-urban areas. However, as the current data suggest, there is need for further, more targeted approaches to increase patient uptake of such interventions as strong patient recruitment and retention in telehealth interventions is essential to the success of this model of healthcare service delivery.

142 - Acute hyperglycemia alters prefrontal blood volume and cerebral oxygenation during long-term memory tasks.

AUTHORS:
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ABSTRACT:
The goal of this study was to test the hypothesis that, in participants with experimentally induced hyperglycemia, oxygen saturation (O2Sat) and total hemoglobin (tHb, a validated measure of local blood flow) both would decrease when completing learning tasks on day 1 of testing, but then increase during recall on day 2. Participants performed a Symbol-Digit Modalities Test (SMDT) during which they matched 9 arbitrary symbols to corresponding digits (1-9), completing 105 learning trials and 15 recall trials on day 1, and 15 recall trials on day 2. We measured O2Sat and tHb using near-infrared spectroscopy (NIRS) a non-invasive instrument designed to measure these and related parameters in the brain and other body tissues. When comparing day 1 to day 2, control participants' SDMT recall

performance was unchanged, but the hyperglycemic participants' performance decreased by 11% ($p = 0.0173$). During learning, control participants had no change in tHb between learning and recall. In contrast, hyperglycemic participants had significantly lower tHb during learning, but tHb values returned toward control values during recall ($p = 0.0012$). During learning compared to baseline levels, control participants exhibited significantly lower O2Sat, whereas hyperglycemic participants exhibited significantly higher O2Sat ($p = 0.021$). We speculate that, during learning, the control brain demands more hemodynamic and metabolic resources due to lower glucose availability, and therefore 'works' harder, whereas the hyperglycemic prefrontal cortex has plenty of available sugar and therefore exhibits decreased "effort." These results may have relevance to rehabilitation approaches to memory loss, as, for example, after concussion.

145 - Prince George Coaching Team – A look at the work on the ground
(Presenters Tammy Bristowe & Karen Gill)

The Prince George coaching team consists of three coaches for approximately 75 Physicians. This has enabled the coaches to provide one-on-one coaching which has been one of the most successful approaches to quality improvement in physician offices. The relationship built between the coach and physician team is a cornerstone in the work done. The ability to work with a coach on a one-to-one basis allows a physician and their team to discuss topics that are most pertinent to their office. It also allows the coach to support in a way that compliments the existing workflow and office values. Topics routinely covered include:

- EMR optimization
- AMCARE Data and data quality
- Running different reports to complete audits
- Screening rates and preventative medicine.

Improving processes and office workflow

- Practice Support Modules, practice assessments and action period work
- Succession planning

We are excited to share a few examples highlighting Prince George physicians that have excelled with the support of coaches. We will include AMCARE (Aggregated Metrics for Clinical Analysis Research and Evaluation) data that displays quarterly improvements in various clinical and documentation metrics. We will speak to how data quality and consistent coaching can break even the most daunting tasks into achievable goals for the Physician team. For example, a physician may set a goal to replace his prescription pad with a prescription printer, with the larger goal being a paperless office.

While one-to one coaching occupies majority of time spent for the Prince George coaches, other interactions with coaches may be in the form of monthly meetings with group practices, larger sessions bringing together the Division's membership, to actively taking part in conversations about implementing team based care. This flexibility compliments the busy schedules of physician offices and our highlights how the coaching team supports physicians with the end goal of supporting our community of patients. We invite you to learn about coaching in Prince George and how it may touch the work you are doing in other parts of our health care system!

147 - A Culture of Quality Improvement: The Prince George Coaching Strategy
(Presenters Dr. Garry Knoll & Megan Hunter)

Since its inception, the Prince George Division of Family Practice has had the development and support of excellent Primary Care Homes as one of its core strategic directions. A key component to building this culture of quality improvement has been the use of coaching.

The coaching strategy is an over-arching framework for all practice improvement in Primary Care Homes in Prince George. While it is dependent on a robust electronic medical record (EMR) and accessible, accurate practice and population data, it is not just about EMR optimization. It is about the meaningful use of data to objectively assess and plan strategic improvements in all aspects of patient care from office flow to complex care for individual patients. It draws on many teaching and learning methodologies to support physicians and their teams as they strive towards a common vision of quality care. Though one-on-one coaching has been the backbone of the coaching work in Prince George, a number of other methodologies have been put to use including: small group learning, peer mentoring, and reflective practice opportunities.

We will trace the development of this work in Prince George over the last 5 years, looking at increases in engagement with practice coaching and corresponding increases in the quality of EMR usage across the community. We will use

the example of development of Care Plans within the EMR to show how quality EMR usage is now being taken a step further, as Family Physicians in Prince George begin to make use of the data within their EMRs to improve transitions in care for their patients. Remaining physician led has been essential to the success of this strategy; none of this could have happened without the strong partnership and shared vision that exists between the Division and Northern Health.

152 - Metabolic and hemodynamic adaptations in respiratory muscles after 4 months of training in varsity soccer players

AUTHORS: Komal Sandhu, Tanya Grob, R Luke Harris, and Timothy Schwab
All authors affiliated with the UNBC School of Health Sciences

The purpose of this study was to test the hypothesis that mobile, wireless near-infrared spectroscopy (NIRS) instruments can be used during standard lung function tests to measure changes in respiratory muscle metabolism over a period of weeks to months. In eight varsity soccer players at 0 weeks and after 16 weeks of routine training, commercially available mobile, wireless NIRS instruments were used to measure oxygenation and hemodynamics in the sternocleidomastoid (SCM), an accessory muscle of inspiration found on each side of the neck. During maximal expiratory pressure (MEP) and forced vital capacity (FVC) maneuvers we determined peak or antipeak changes, relative to baseline, in oxygenation and hemodynamics: Δ%Sat (change in muscle oxygen saturation), ΔtHb (change total hemoglobin, a validated measure of local blood flow), ΔO2Hb (change in oxygenated hemoglobin), and ΔHHb (change in deoxygenated hemoglobin). Subjects reported that the average training load was ~13.3 h/week during the 16 study weeks, compared to ~10.4 h/week during 12 prior weeks. After 16 weeks of training compared to 0 weeks we found statistically significant increases in SCM Δ%Sat (57.7%), ΔtHb (55.3%), and ΔO2Hb (56.7%) during MEP maneuvers, and in SCM Δ%Sat (64.8%), ΔtHb (29.4%), and ΔO2Hb (51.6%) during FVC maneuvers. Our data provide preliminary evidence that NIRS measurements during standard lung function tests are sufficiently sensitive to detect improvements or declines in respiratory muscle metabolism over periods of weeks to months due to training, disease, and rehabilitation exercise.

154 - Community Nursing – Increasing Access &Quality

Northern Health Authority
Author: Sujata Connors R.N., M.PA., Dip CN, B.N., B.Sc.

Northern Health Authority is advancing toward the goal of providing integrated person and family centered services. In February 2016 Community Nursing was to achieve the following goals:

a. A seamless experience for clients requiring acute nursing care in the community by redesigning access
b. An integrated & seamless experience for referring sources requiring acute nursing for clients in the community by redesigning access
c. Appropriate care at the right time and the right place by the right clinician by redesigning the staffing model
d. Established a Quality Improvement approach to service delivery.

The Community Nursing leadership team at NH decided to undertake a quality improvement project to assess the current state of community nursing workflow processes. The reason we needed to do this related to referring sources' needs, transition of services from one program to another, increasing service volumes, and an inefficient staffing model and rotation.

The Community Nursing program including the intake service was assessed with respect to the referral processes and Community Nursing's capacity to support a smooth transition of clients and service volumes within the current staffing model and rotation. Challenges and opportunities to improve collaboration between referring sources and the Community Nursing program were identified along with an opportunity to reallocate resources to direct care that will enable the program to support service volumes within allocated resource funding.

This presentation will present the quality improvement approach that was used to redesign the Community Nursing Program. I will highlight how the redesign supports better use of resources to provide care and how the implementation of a quality improvement approach to change better supports sustainability further advancements in service quality.

155 - Using a Quality Lens to Integrate Prince George Public Health Services into Community Programs

Sujata Connors R.N., M.PA., Dip CN, B.N., B.Sc.
Rhoda Viray R.N., M.A., B.N.

Northern Health (NH) continues to make advancements towards integrated person/family centered services. NH is transitioning to deliver traditional public health (PH) services within newly formed Interprofessional Teams (IPTs). In January 2016 Prince George (PG) needed to develop a plan to redesign PH services.

PG is a unique community due to size and complexity. To facilitate the transition towards idealized NH system of services in PG, specifically, PH services will be delivered in IPTs and a PH Clinic. As part of this ongoing transformational change the previously described transitional operational structure will be continually evaluated and modified in order to fully realize the NH idealized system. Preventive PH has been redesigned to provide best practices guidance/support to the organization and to assist communities with this transition.

The following quality improvement (QI) techniques were used in PG:

- Current state mapping
- Future state mapping
- Issues and opportunities identified
- Maintaining parking lot for out of scope issues
- Plan Do Study Act (PDSA) approach to changes
- Establish a collaborative approach with appropriate stakeholders including PH, acute care, and community partners

The following findings were identified:

- The transitional PG redesign of PH services necessitated shifting PH staff to five IPTs and a PH clinic
- Reduction of staff in PH Clinic has increased the need for more effective collaboration with community partners
- Service redesign requires an intentional public engagement strategy
- Point of care staff and leadership require support
- There is a need to change communication pathways in order to deliver appropriate information to the right individuals at the right time

This presentation reflects on QI techniques used when managing large scale change and implementing evidence to support sustainability. We will highlight how the service redesign supports the transition to NH's idealized system of services, including the necessity to work collaboratively with internal and external NH stakeholders.

158 - A cross-season investigation of the impacts of wildfire smoke on respiratory health of wildfire fighters in northern BC

Mike Eadie, BHSc
Chelsea Pelletier, PhD
Luke Harris, PhD

Purpose: In partnership with BC Wildfire Services, researchers sought to observe the effect of occupational exposure to wildfire smoke on respiratory health of northern BC wildfire fighters (WFFs).

Methods: An exploratory cross-season study of a northern BC wildfire unit crew was done during the 2016 wildfire season. Primary measures of respiratory health were measured using spirometry and conducted early-season (mid-June) and post-season (early September). Outcomes of interest included anthropometrics, Peak Expiratory Flow (PEF), Forced Vital Capacity (FVC), and Forced Expiratory Volume in one and six seconds (FEV1, FEV6).

Findings: Participants included 18 unit crew members (15 males, 3 females), mean age 24 ± 3.9 years. Mean exposure was 7 ± 2.5 fireline days. There was a statistically significant increase in PEF between early season (9.03 ± 2.07 L/min) and post-season (9.65 ± 2.18 L/min; $p < 0.01$). Following exposure, there were decreases in FVC (Pre: 5.62 ± 0.89 L:, Post: 5.54 ± 0.89 L, $p < 0.01$) and FEV1 (Pre: 4.45 ± 0.77 L, Post: 4.37 ± 0.74 L, $p < 0.05$). Mean FVC/FEV1 values were below 80% (Pre: 79.32 ± 6.4%; Post: 79.14 ± 7.25%, $p = 0.74$). Body weight decreased from early (85.47 ± 13.53 kg) to post (84.46 ± 13.35 kg, $p < 0.01$) season; there was no significant change in waist circumference ($p = 0.14$).

Conclusion: Increase in PEF is indicative of improved central airway and expiratory muscle force exertion, possibly

due to improved physical fitness. However, declines in FVC and FEV1 indicate possible restrictive respiratory impairment, likely a result of exposure. Our data suggests that even with minimal smoke exposure, statistically significant declines in respiratory health indicators in WWFs are observed.

159 - Mobility, Marginalization, Gender, and Violence
Health Implications of Hitchhiking in Rural and Remote British Columbia
Dr. Jacqueline Holler
Anita Shaw

Strictures on women's mobility are often associated with the Global South, and particularly with nations in which the status of women is relatively low. Literature on gender and mobility in the Global North tends to focus on urban settings and –as Robin Law noted in 1999 and as remains true today—on daily travel to work. The total population of Northern British Columbia is small 250,000 people in a landmass only slightly smaller than France. In this context, women must travel to access employment, to visit their families, and to access any government services (including healthcare and women's' shelters) that cannot be provided within the small and remote communities throughout the region. Women (and men) travel without access to affordable transportation. In the proposed paper, the authors attempt to investigate the intersection of mobility and health in Northern British Columbia, based on a study of hitchhiking conducted by the authors. We conducted an online survey completed by over 200 hitchhikers. The resultant data allow us to investigate connections among mobility, marginalization, gender, and violence in Northern British Columbia, and to consider mobility as a (gendered) health issue.

160 - Enhancing Outreach Visits
Authors: Dan Horvat, Northern Partners in Care, General Practitioner Co-Lead
Matt Graveline, Northern Partners in Care, Manager
Laura Parmar, Northern Partners in Care, Evaluator
Presenters: Dan Horvat and Matt Graveline

Abstract:

The Northern Isolation Travel Assistance Outreach Program (NITAOP) provides funding from the Joint Standing Committee (JSC) to allow physicians to perform outreach visits to BC communities where specialist care is not available within 105 km. Northern Partners in Care (NPiC) identified an opportunity to enhance these visits by coordinating and supporting visiting specialist physicians to spend structured time with family physicians while in these communities. Use of this structured time was informed by extensive consultation between family & specialist physicians. The goals are to improve patient care and family physician capacity and confidence, improve the effectiveness of the working relationship between specialist and family physicians, and provide visiting specialists with a more complete understanding of practice in the communities they visit. Feedback indicated that patient-specific case-based discussions are preferable to a lecture. To date, NPiC has supported, evaluated, and arranged continuing professional development (CPD) credits for 94 structured case-based sessions with extremely positive feedback. A series of 10 interviews were conducted with NITAOP sponsored specialists who have not yet participated in the structured CPD sessions to gather information, gauge interest in the project, ascertain challenges, and inform the next steps for this work.

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Acknowledging the inevitable: Getting your ducks in a row

Madeline Meikle, Shannon Freeman, Donna Flood, and Davina Banner-Lukaris

Introduction: Planning helps ensure care provided at end-of-life aligns with the needs and preferences of the individual. Yet, the process to acknowledge death and to plan in advance remains challenging. Therefore it is paramount to better understand the benefits of end-of-life planning and to identify barriers to engaging in planning activities.
Purpose: This study was a first step to gather end-of-life planning information and resources from experts in the Prince George community. The key research questions examined were: What does end-of-life planning mean and how is it done in Prince George?
Methods: Using a qualitative research design, eight interviews were conducted. One-on-one telephone interviews with experts in financial, legal, social work, community case management and nursing, palliative care, grief counselling, geriatric medicine, gerontology, funeral services were recorded, reviewed, and then main themes were

identified and analyzed. This study used a Rapid Realist Review research methodology to aid in the facilitation of connecting research and policy change.
Results: A major theme noted was the lack of awareness that individuals had regarding each profession's involvement in the end-of-life planning process. Other themes such as the community's ideologies surrounding death, the availability of community resources, and family involvement in planning were also explored.
Discussion: End-of-life planning is a complex process which requires support and expertise from a wide range of community professionals. This research highlights the need for an inter-professional team approach to support end-of-life preparedness. This study aims to provide individuals with the independence to prepare for end-of-life in a way that reflects their own unique wishes.

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Quality of life in long term care in the North: Who is reporting what?

Authors: Tina Strudsholm, Shannon Freeman, Stacey Patchett, and Mary Henderson-Betkus
Affiliation: University of Northern BC

Background: In long term care (LTC) settings, quality of life (QoL) among residents is a key concern. LTC residents are a heterogeneous group and are likely to have different quality of life concerns or priorities. In this quantitative study, we investigated the association between LTC resident's demographic/clinical characteristics and their self-reported QoL.
Methods: The interRAI Self-Report Quality of Life Survey for LTC Facilities survey was completed by 89 residents from two LTC facilities in northern British Columbia in spring 2015. This survey includes 47 questions covering 10 unique QoL domains including: privacy, food, safety/security, comfort, autonomy, respect, responsiveness of staff, staff-resident bonding, activity options, and personal relationships. QoL scores were stratified by gender, age, physical and cognitive functioning, and psychological well-being to identify any associations.
Results: Analysis did not show consistent associations in scores attributed to cognition, gender, nor physical functioning. An exception to this trend was observed with food satisfaction. Residents with cognitive impairment were more likely to indicate that they enjoyed mealtimes, received their favourite foods, and reported getting food at the right temperature.
Discussion: Residents with mild-moderate cognitive impairment demonstrated sufficient discrimination to meaningfully complete the self-reported survey. However, in the food satisfaction domain, residents with cognitive impairment were more likely to report greater satisfaction as compared to residents with no cognitive impairment. Expanding the understanding of resident QoL priorities is critical to provision of high quality, evidence informed, patient centred care and should be prioritized.

ABSTRACTS – ORAL PRESENTATIONS

Abstracts appear as submitted and have not been edited except for formatting.

Tuesday, Morning, November 8, 2016	
Session A: Women's Health	**Room 101** 10:15 – 11:55

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Retrospective chart review exploring substance use, antenatal and perinatal outcomes associated with rural residence in Northern British Columbia

Pedersen H, Brouwer M, Duncan L, Coyle M, Enos M, Manhas D, Hartwig K, Holyk T, Mitchell S

Background: Women struggling with substance use in pregnancy in Northern British Columbia face multiple barriers to engaging in regular antenatal care and have high rates of neonatal apprehension. This medical chart review is the first phase of a project aimed to understand how substance use during pregnancy and post-partum is reported and recorded across Northern BC, with the goal of improving services for marginalized women.

Methods: Retrospective medical chart review to measure the prevalence of substance use obtained from perinatal and delivery records at the University Hospital of Northern British Columbia, the Central Interior Native Health Society (CINHS), and the Carrier Sekani Family Services (CSFS) from 2013 - 2014. Patients were classified as urban or rural based on residential postal code of residence. A univariate analysis was performed comparing urban and rural residence to substance use and other demographic and perinatal outcome factors of interest.

Results: In total, 572 patient records were reviewed, 435 of whom lived in Prince George (urban) and 137 who indicated rural residence. Rural patients had significantly higher reported rates of substance use of any kind (26.8% vs 14.8%, $p<0.01$). The majority of rural patients were Aboriginal (51.0% vs 22.6%, $p<0.01$). Other significant factors associated with rural residence were cigarette smoking (30.8% vs 18.0%, $p<0.01$), preterm birth (14.3% vs 8.8%, $p=0.08$), low birth weight (10.5% vs 4.9% $p=0.02$). Mean gravidity (2.93 vs 2.59, $p=0.06$), parity (2.10 vs 1.86, $p<0.01$) and rubella titer (128.70 vs 119.76) were also significantly higher in rural patients compared to urban. Other neonatal outcomes were not significantly different.

Discussion: Patients residing in rural Northern BC report increased substance use, smoking, and are disproportionately burdened with higher risk antenatal outcomes. Strengthened antenatal and perinatal services are needed for women living in rural settings, and should take a holistic approach to address cultural and social vulnerabilities women face.

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Identifying Barriers to Treatment for Women with Cervical Dysplasia in Rural and Remote Geographies

Presenting Author:
Sheona Mitchell, Department of Obstetrics and Gynaecology, University of British Columbia
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Gina Ogilvie, Faculty of Medicine, University of British Columbia, Vancouver, BC, Jessica Place, Northern Health Authority, Prince George, BC, Marette Lee, Division of Gynecologic Oncology, University of British Columbia, Vancouver, BC, Deborah Money, Department of Obstetrics and Gynaecology, University of British Columbia, Vancouver, BC, Ciro Panessa, Northern Health Authority, Terrace, BC, Melanie Murray, Faculty of Medicine, University of British Columbia, Vancouver, BC, Rebecca Collins, Department of Psychology, University of Northern British Columbia, Prince George, BC, Marie Jones, Northern Medical Program, University of British Columbia, Prince George, BC

Objectives: There are approximately 289,974 residents living across 592,116 square kilometers in Northern British Columbia (BC) with 17% of northerners identifying as Aboriginal peoples. Over 50% of women in BC diagnosed with invasive cervical cancer had attended screening in the past 5 years but did not have successful follow-up with colposcopy and treatment of cervical dysplasia. This study aimed to examine barriers to attendance for colposcopic examination and treatment, targeting women most at risk in this remote jurisdiction.

Methods: Colposcopy referrals from January-December 2015 (n=309) were reviewed at the four centers providing colposcopy across northern BC. A previously validated and adapted survey tool was administered to patients (n=44) recruited at the colposcopy clinic at the major regional center detailing perceptions of colposcopy, barriers to attendance and openness to potential patient engagement with smartphone platforms. Descriptive, univariate and multivariate logistic regression was used to identify key barriers.
Results: Factors associated with decreased engagement included higher parity (p=0.009), residing further from clinic (p=<0.0001), and referral cytology (p=0.043) with women referred for higher grade cytology more likely to miss appointments. There was overwhelming acceptance of integrating mobile technology into education around cervical dysplasia and the appointment scheduling process with significant differences noted between urban and rural residents.
Conclusions: Individual, health system and geographic barriers all contribute to non-attendance at colposcopy after referral for abnormal cervical cytology. There is significant potential for mobile and smartphone technology to increase engagement and improve care for women most at risk for cervical dysplasia across disparate geographies with implications for rural populations globally.

***Funding for this study provided by partnerships between Northern Health, PHSA and UNBC

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Prevention of RhD alloimmunization in Northern British Columbia

Author: Trina Fyfe, University of Northern British Columbia *(corresponding author)*
Dr. Josée Lavoie, University of Manitoba
Dr. Geoffrey Payne, University of Northern British Columbia
Dr. Davina Banner-Lukaris, University of Northern British Columbia

Despite best practice guidelines, international evidence suggests that the provision of anti-D prophylaxis to RhD negative pregnant women is suboptimal. Missing from the literature is research exploring the factors that continue to put RhD negative pregnant women at risk for RhD alloimmunization. The purpose of this project was to understand why RhD negative pregnant women continue to be at risk for RhD alloimmunization within the context of northern BC. The specific research questions are:
How do health care providers make decisions regarding the care of RhD negative pregnancies in northern BC?
How do RhD negative women in northern BC experience pregnancy?

This presentation describes a qualitative approach used to address the need for rural centric clinical guidelines. Using interpretive description, interviews and focus groups were conducted with RhD negative women that have been pregnant and health care providers experiences in caring for RhD negative pregnancies within northern BC. A focus group was used with health care providers adapting perinatal guidelines in a rural area in northern BC. A reference committee guided the research process and provided insight into data analysis to ensure applicability to practice. A qualitative approach with these two populations has provided a greater understanding into the depth of quality of care for RhD negative pregnancies and the decisions that inform patient safety. This study provides information into guideline adaptation, decision-making and health literacy in rural health care settings.

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The use of Vaginal Pessaries in a Primary Care Setting

H. Bourque MScN NP - F; Doctors D.and I Reddy; Dr. S. Nimmo/Dr. B. Grobbelaar
MOAs at Aurora Clinic - Prince George

According to the literature, about 50% of parous women experience some degree of pelvic organ prolapse. This problem can result in bowel/bladder/ intercourse/and the symptoms can be so severe that they can adversely affect the quality of life of the woman. A common primary care complaint from a female patient is that of either urinary incontinence or perhaps a concern about the sensation that something is descending in their pelvic floor. The term “Pelvic organ prolapse” “encompasses a number of different types of medical issues that can result in problematic symptoms for a female”. In our clinical setting, over the past 3 years, we have worked collaboratively to provide vaginal pessary care for females who are experiencing symptoms as a result of pelvic organ prolapse. A chart review reveals that 15 patients from 4 different practices have been fitted with a vaginal pessary for relief of symptoms. Of these women all except three are able to manage their pessary independently, and have

experienced relief from symptoms. Not every primary care practice is able to offer this service as there needs to be a sizing kit on site with the ability to autoclave the sizing pessaries; their needs to be a qualified individual present to provide the physical exam/fitting of the pessary, as well as the teaching/education and then the ordering of the equipment and follow through to the patient. In this clinical setting, 4 physician providers, and Nurse Practitioner worked together in order to provide this service for their patients. With an aging female population who experience symptoms that impede their daily function, many patients can be managed with the use of a vaginal pessary in a primary care setting to provide relief from symptoms and improve the quality of their lives.

Tuesday, Morning, November 8, 2016	
Session B: Northern Cancer Care Strategies and Prevention **Room 204-206**	10:15 – 11:55

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Renewed Northern Cancer Strategy – A five-year roadmap to improve the response to Cancer in Northern BC

Jaco Fourie, Medical Lead, NH Cancer Care, Northern Health
Stacy Miller, Regional Medical Director, BC Cancer Agency, Centre for the North
Jessica Place, Regional Manager, Chronic Diseases Strategic Planning and Evaluation, Northern Health
Ciro Panessa, Regional Director, Regional Chronic Diseases, Northern Health
LaDonna Fehr, Consultant
Crystal Rollings, Consultant

Compared to the rest of the province, Northern BC does not rate well in terms of cancer prevention, screening and outcomes. This presentation describes the 2016 Northern Cancer Strategy, a 5-year, person-centered, evidence-based strategy articulating a series of goals, actions and measures to promote meaningful improvement in the experience and outcomes of all people in Northern British Columbia (BC) whose lives are affected by cancer. The presentation also outlines how the use of measurements and targets will form the basis for ongoing progress reporting, and celebrates the success of bringing a diverse array of health system stakeholders together to achieve common goals.

The 2016 Northern Cancer Strategy is a joint initiative developed in partnership by Northern Health Cancer Care and the BC Cancer Agency and through consultation with stakeholders. It responds to the unique considerations of living in the North, builds on the previous Northern Cancer Control Strategy (2008), provides strategic direction (action plans and goals), and outlines a plan for monitoring improvements across the cancer care journey through combined Northern cancer care, primary care, and community systems.

The Strategy encompasses the complete cancer care journey and the transitions between each stage. The goals and of the 2016 Northern Cancer Strategy are to: prevent the development of cancer; increase the rates of cancer screening, ensure timely and effective diagnosis and staging; provide high quality cancer treatment; improve surveillance and survivorship (follow-up); and, ensure a multidisciplinary approach to palliative care and comprehensive end-of-life care. Success relies on a combination of priority actions specific to each goal as well as key changes made to strengthen the system and better integrate cancer care and primary care.

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Exploring Cancer Care in Haida Gwaii: A Perspective from a Model Island Community in British Columbia

Simran Lehal, UBC

This project explores the cancer journey of people in Haida Gwaii with a focus on describing cancer demographics during the study period of 1970-2014. The study merges data from Northern Health and the BC Cancer Agency to identify barriers and bottlenecks to care for more than 500 people who were diagnosed with cancer, with a focus on exploring contrasts between First Nations and the general population in Haida Gwaii. The study explores potential differences in areas including cancer incidence, delays to care, and survival outcomes. Recommendations to improve the cancer journey will be proposed which may be applicable to other rural and

remote communities. This study team was invited to conduct this study in partnership with community health care providers, and this study is supported by research grants from the Vancouver Foundation as well as the Canadian Breast Cancer Foundation.

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Northern British Columbian Mushrooms- Potential Source of Novel Immunomodulatory Compounds

Sumreen Javed1, Geoffrey Payne2, Chow H. Lee1
1 Biochemistry and Molecular Biology (Chemistry Program), 2Northern Medical Program, University of Northern British Columbia, Prince George, British Columbia, Canada.

Cancer is a global dilemma with the leading cause of deaths worldwide. Mushrooms are traditionally known as the strength pills for the ancient Greeks and the elixir of life for the Chinese. With the recent advancements in laboratory techniques, mushrooms are tested for their pharmacological benefits and are proven to have amazing therapeutic properties. Wild mushrooms, especially from North American region have not been greatly explored for their therapeutic potential.

Immunotherapy is based on the concept of targeting the immune system rather than targeting the cancer itself. Immunomodulatory compounds are the agents that can modify the host immune response to help them fight against the cancer cells. This occurs because of the dynamic interplay between tumor development and the anti-tumor immunity involving key innate and adaptive immune cells and mediators. Macrophages, innate immune system cells, are the first line of defense against the developing tumors. Once activated, they release various chemical weapons, cytokines, to combat the initial trespassing. Tumor necrosis factor alpha (TNF-α), an important cytokine, exhibit anti-tumor activity (when released in controlled manner) but adds to inflammation in case of uncontrolled release.

Here we report the screening of 8 wild mushrooms from North Central region of British Columbia for their immunomodulatory properties. This involves immunostimulatory and anti-inflammatory assays. Immunostimulatory activity is tested on RAW 264.7 macrophage cells for the mushroom's ability to activate macrophages and release TNF-α and anti-inflammatory activity is measured on same cell lines for mushroom's tendency to inhibit Lipopolysaccharide induced TNF-α. The results presented here will be useful in exploring novel anti-cancer and anti-inflammatory lead molecules for drug discovery and will be a step forward in revealing the untapped natural treasure of Northern British Columbia.

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Estimated Direct Health Care Costs of Tobacco Smoking, Excess Weight and Physical Inactivity among Northern BC Residents in 2013.

Drona Rasali * [1], Hans Krueger [2], Trish Hunt [1], Sandra Allison [3]
*Presenter.
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[3] Chief Medical Health Officer, Northern Health Authority, Prince George, British Columbia

Tobacco smoking, excess weight and physical inactivity are the three major risk factors of chronic diseases, and are significant public health concerns. A study by Krueger et. al. (2016, http://www.phac-aspc.gc.ca/publicat/hpcdp-pspmc/36-4/assets/pdf/ar-02-eng.pdf) showed that the residents of Northern Health region had incurred a total of $ 149.8 million in direct health care cost attributed to these risk factors in 2013. Using the same study model and year data, we further disaggregated the direct cost estimates by expenditure categories. Of this total cost estimate, 39.2% originated from hospitalization, followed by prescription drugs (20.6%), and the percentage costs for physicians, other health professionals and health research were 12.3%, 6.3% and 2.4%, respectively, while other direct cost was 19.3%. The overall cost attributed to the three risk factors in male residents ($ 82.9 million) was generally higher than in females ($67.0 million), especially due to higher cost of hospitalization in males. Following these overall patterns, the costs attributed to excess weight and physical inactivity, $ 62.5 and 23.8 million respectively comprised higher costs of hospitalization in males (34.5% and 35.6%, respectively) than in females (28.3% and 33.4%, respectively), while the corresponding costs of

prescription drugs was higher in females (28.5% and 26.2% respectively) than in males (23.8% and 25.0%, respectively). On the other hand, the cost attributed to tobacco smoking ($ 63.5 million) comprised higher costs of hospitalization in females (51.5%) than in males (47.2%), and the lower cost of prescription drugs in females (10.3%) than in males (14.7%). All these patterns of attribution in the region were similar across health service delivery areas, namely, North East, Northern Interior and North West which had total costs of $ 28.8 million, $ 78.0 million and $ 42.0 million, respectively for the three risk factors.

Tuesday, Morning, November 8, 2016	
Session C: Rural Professionals: Recruitment and Education **Room 208**	10:15 – 11:55

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It's Complicated: Staff Nurse Perceptions of Their Influence on Nursing Student's Learning

Sarah Hanson

The focus of this study was to extend our knowledge of teacher-led clinical practica from the perspective of the staff nurse. Nurses' self-appraisal of their contributions to student nurses' learning is an important element in enhancing our understanding of clinical education. This is particularly important in nursing education where much of the integrated learning takes place within the context of complex hospital environments and is often rooted in the informal interactions that take place between students and staff nurses. There is limited research focusing on the informal interactions between staff and student nurses during teacher-led practica.

This study used a qualitative descriptive approach to answer the question: How do staff nurses perceive their contributions to student nurses' learning during teacher-led practica? Interview transcripts of nine staff nurses in a northern British Columbia regional hospital were analyzed using a qualitative inductive approach. The findings show that nurses felt a significant burden of responsibility when having students on the wards. The sense of burden for the staff nurses was influenced by several main factors: nurses' experience of the practice environment, their experience of the clinical instructor, their experiences of the students themselves, and their understanding of their own contributions to student nurses' learning. Despite these challenges, the staff nurses remained committed to the training of their future colleagues. Implications for nursing education, nursing practice, and future research are discussed.

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Recruitment of Nurse Practitioners

Helen Bourque, Northern Health

In collaboration with HR, the NP Lead developed a robust strategy to recruit Nurse Practitioners to the various vacancies across Northern Health. This included developing a written plan that was shared with the present group of NPs for their feedback and input. Based on the feedback the plan was further developed to provide more direction in terms of recruitment. Other priorities included developing relationships with candidates, while engaging with health services administrators and medical directors as needed for site visits for candidates. The deliverables included providing support and mentorship for the new hire at the time they started with our organization. In order to provide every opportunity for success with their credentialing exams regular follow up and support for the provisional NP were also part of this work. Ongoing meetings between the NP Lead and the recruiter for excluded positions were essential to ensure that candidates continued to be engaged throughout the entire hiring process. In 2015 9 NPs were hired of those hired, all 5 brand new providers completed their credentialing exams. As of September 21 2016 we have another 4 NPs hired, with continued interest in our vacant positions. Lessons have been learned and with new knowledge and evaluation of the program we are pleased to see a growth of this difficult-to-fill profession within our health authority.

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Interprofessional education of rehabilitation professionals in a rural primary health care setting: Using evidence to improve patient care and student training in Prince Rupert

Jessica Inskip (1*), Caitlin DuBiel (1,2), Angenita Gerbracht (2,3), Robin Roots (1)
1. Department of Physical Therapy, University of British Columbia (UBC), Vancouver, Canada
2. Prince Rupert Regional Hospital, Northern Health, Prince Rupert, Canada
3. Department of Occupational Therapy, UBC, Vancouver, Canada
*. Presenting author

Northwest BC includes rural and remote communities with a high prevalence of chronic diseases. However, a lack of health care resources in this region results in long wait lists for rehabilitation for individuals with chronic disease. Chronic diseases are best managed by a team-based care approach; evidence also supports interprofessional student training because it reflects the realities of rural practice and positively influences recruitment and retention of rural rehabilitation professionals. Therefore, the Rehabilitation Department at the Prince Rupert Regional Hospital developed an innovative model to address these issues and improve quality of care - particularly for individuals living with chronic disease. The Prince Rupert Interprofessional Student Led-Model (PRISM) Clinic was created to improve timely access to rehabilitation services and opportunities for rural student training, without increasing the burden on existing services.

Since the opening of the student-led clinic in November 2013, students from Occupational Therapy (OT) and Physical Therapy (PT) training programs have seen 392 patients from 476 referrals. Wait times for individuals with chronic disease (from referral to first appointment) decreased substantially from before the clinic was established (> 200 days) to present (< 25 days). About a third of patients were treated by more than one rehabilitation professional (OT, PT, and Rehabilitation Assistant). Morning team huddles, case presentations, and shared care planning activities further reinforced interprofessional training for students. In an exit survey, students identified different ways that they observed interprofessional collaboration positively impacting patient care.

This initiative demonstrates the potential to improve both care and training using evidence for interprofessional practice. We hope that this model could be used in other regions to increase timely access to care and rural interprofessional training opportunities. Next steps include the full evaluation of the impact of the clinic on health service delivery, patient outcomes, and student competencies in interprofessional practice.

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Rural and Remote Nursing in British Columbia: Results from a National Survey

Leana Garraway (PRESENTER), UNBC
Janna Olynick (PRESENTER), UNBC
Steinunn Jonatansdottir, UNBC
Nadine Mix, UNBC
Martha MacLeod, UNBC
Norma Stewart, University of Saskatchewan

In British Columbia (BC) 7.2% of regulated nurses work in rural and remote locations and these nurses are responsible for caring for 11.9% of the provinces population (CIHI, 2015). In Canada, nurses play an important role in rural and remote health care and more needs to be known about the nursing workforce in order to inform health human resources (HHR) and health services planning in these areas.

Nursing Practice in Rural and Remote Canada II (*RRNII*) was a national survey implemented in 2014 and 2015 that aimed to collect information on the rural and remote nursing workforce, including nursing roles, work settings, and practice modes. The cross-sectional survey was sent to a sample of Registered Nurses (RNs), Nurse Practitioners (NPs), Licensed Practical Nurses (LPNs), and Registered Psychiatric Nurses (RPNs) in every province and territory in Canada with the assistance of the nursing regulatory bodies. The overall response rate for the survey Canada-wide was 40% with 3822 returned surveys; in BC the response rate was 38% with a total of 311 nurses completing the survey. Respondents were from a full range of practice settings including primary care, acute care, community health, home care, mental health and addictions, and long-term care.

This presentation will discuss study results by describing the sample of rural and remote nurses in BC including demographics (gender, age, and education), employment status, work settings, job satisfaction, participant's perceptions of their scope of practice and primary health care in their workplaces, and intentions to retire. The survey findings will provide information planners and policy makers will find useful as they plan for the future of HHR and health services in rural and remote BC.

Tuesday, Afternoon, November 8, 2016	
Session A: Women's and Men's Health	**Room 101** 12:45 – 2:00

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Voices in Thread: Women's Childhood Experiences of a Primary Caregiver that Remained in a Relationship with an Alleged or Known Sex Offender, an Arts-Based Inquiry

Presenting Author: Clarie Johnson (UNBC MSW Student)
UNBC School of Social Work Thesis Supervisor: Dr. Indrani Margolin

Voices in Thread is an arts-based inquiry that examines the overarching question "What are women's lived experiences of childhood, or young adulthood, when their primary caregiver remained in a relationship with a known or alleged sex offender?" Using quilting as an art form, women creatively document their reflections of lived experiences. The stories of four women were gathered through participatory fiber-art group sessions, journaling, and individual interviews and analyzed using thematic and metaphoric analysis. The women reflect on their lived experiences, experience of participation in the group sessions, their process of creating their fiber-art and, a description of their finished fiber-art. Through analysis of the dataset, five major categories emerged: caregivers' accountability; parentification; common characteristic of experiences, specifically loss of voice and safety; strategies of being an adult daughter in a relationship with a mother who remained in a relationship with a sex offender and; experiences of inadequate judicial and societal response. The women's stories become captured in a collective quilt that serves as a multi-vocal visual narrative of their lived experience. This research creatively provides insight and awareness to generate meaningful discussions that can support and/or enhance intervention strategies and policy responses to, and for, children and their families.

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Optimizing the implementation and uptake of stroke prevention guidelines in northern British Columbia

Davina Banner-Lukaris

Stroke is a major cause of morbidity and mortality in Canada. There are over 50,000 strokes per year, equating to one every ten minutes, and these cost the Canadian economy over $3.6 billion each year. In addition to healthcare costs, strokes have high personal costs and can result in devastating and lasting consequences for the individual and their family members. It is estimated that 50% of strokes are preventable. As rates of stroke are projected to rise sharply over coming decades, research is urgently needed to explore how best to optimize stroke prevention and care. This is particularly important in rural and remote settings, where rapidly ageing populations, increased levels of chronic disease and more limited access to healthcare services can adversely impact upon patient experiences and outcomes.

This emerging research team brings together collective research, practice and policy expertise to explore the implementation and uptake of clinical guidelines. In addition to exploring healthcare provider perspectives, our team has engaged with community organizations and patient experts to examine patient experiences and journeys as a means of exploring how patient-orientated outcomes can be integrated within health service delivery and planning. The findings of these consultations consist of regional and provincial recommendations that can be used to support the development of initiatives to optimize guidelines implementation and enactment.

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Considerations in developing a workplace mental wellness program for men in the north

Cherisse L. Seaton (University of Northern British Columbia)1,2, Kerensa Medhurst (British Columbia Cancer Agency)1, John L. Oliffe (University of British Columbia), Damen DeLeenheer (Northern Health), Joan L. Bottorff (University of British Columbia Okanagan), and Margaret Jones-Bricker (Canadian Cancer Society).

1. Presenting authors
2. Corresponding author

The workplace has been recognized as a promising setting for implementing mental wellness initiatives with men; however, little is known about best practices for the promotion of mental wellness among men working in northern British Columbia (BC). In partnership, the Canadian Cancer Society, BC Cancer Agency, and Northern Health, along with researchers at the University of Northern British Columbia and the University of British Columbia are developing the HEADS Up program, a workplace intervention to promote mental wellness for men in northern BC.

In phase I, a scoping review of the literature for strategies that support men's mental wellness was conducted. In phase II, men working and living in Northern BC participated in consultation groups to discuss how mental wellness may be positively influenced in northern and rural settings.

Using purposeful sampling, men were recruited through advertisements in Prince George and surrounding communities. Focus groups were held in June and Sept 2016 where men were asked to describe their perceptions of men's mental wellness, provide feedback on promising approaches identified in the scoping review, and provide input on the preliminary HEADS Up program components. All sessions were recorded and transcribed. Thematic analysis was employed to organize and describe emerging themes.

Themes inductively derived included: 1) stigma as a barrier to the promotion of mental wellness in the workplace, 2) factors in northern, male-dominated workplaces that influence mental wellness, 3) strategies men use to conquer stress and stay positive, and 4) reaching men by working with, rather than to change, masculine norms (e.g., self-reliance and problem solving). Overall, a healthy mind was viewed as vital for workplace health and safety. The findings will inform the development of a pilot program (HEADS Up) to promote mental wellness.

This research was supported by the Collaboration for Health Research in Northern BC Seed Grant Program offered jointly by UNBC, Northern Health, and the Provincial Health Services Authority.

Tuesday, Afternoon, November 8, 2016	
Session B: Chronic Disease Management Strategies **Room 204-206**	12:45 – 2:00

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Creation of the Regional HIV/HCV Specialized Support Team

Jennifer Hawkes, NH

Research has shown that interdisciplinary teams contribute to improved patient outcomes, greater job satisfaction for health care professionals (HCPs), and cost-savings for governments. This Chronic Disease Program, now known as HIV and Hepatitis C Care, began in 2009 with the STOP (Seek and Treat for Optimal Prevention) Pilot project to engage BC in testing, treatment and care of HIV. From 2012 to present STOP has been provincially expanded to "From Hope to Health: Towards and AIDS-Free Generation". A Regional HIV/HCV Care Implementation Plan was created to move towards meeting these goals as well as the UNAIDS 90-90-90 targets by 2020.

This interdisciplinary team of clinicians will collaborate with and support Northern specialists, primary care providers, persons living with HIV/HCV and their families, as well as connecting to community organizations (there are many community contracts being built). Some of the main goals include:

- Empower primary care to integrate prevention, testing and care into everyday practice
- Enhance use of tele-health technology to better reach and engage those living in the North in rural/remote communities and contexts (for example, those living on-reserve).

The challenge is to better communicate; this led to the creation of a clear communication process for the team. A referral form was also created as well as a resources package for testing and care and treatment; combining a

package for providers and persons/family. A further challenge is increasing the awareness of all available clinical supports and pathways for linkage to care for those living with HIV/HCV.

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Regional Chronic Diseases: A Program Supporting Integrated Health Services and Interventions for Chronic Diseases in Northern BC

Ciro Panessa, Regional Director, Regional Chronic Diseases, Northern Health
Jessica Place, Regional Manager, Chronic Diseases Strategic Planning and Evaluation, Northern Health
Sheri Yeast, Regional Manager, Chronic Diseases Specialized Services, Northern Health
Barbara Hennessy, Regional Manager, Chronic Diseases Regional Policy and Standards, Northern Health
Crystal Rollings, Consultant, CDR Consulting
Dr. Abu Hamour, Medical Lead, HIV and Hepatitis C Care
Dr. Jaco Fourie, Medical Lead, Cancer Care
Dr. Anurag Singh, Medical Lead, Kidney Care
Dr. Haidar Hadi, Medical Lead, Cardiac Care
Dr. Ronald Chapman, VP Medicine

This presentation introduces and describes Northern Health's Regional Chronic Diseases program, and its innovative approach to complex chronic diseases: bringing disease silos together, facilitating networking and knowledge sharing between diverse groups with common interests and goals, and supporting the development of research, evaluation and evidence-informed practice. The program's major areas of work are described, along with the intended outcomes to 1) reduce cardiovascular disease, stroke, cancer, diabetes, renal disease, respiratory disease, and chronic blood borne infections mortality; 2) promote healthy diet, physical activity, safer sex, and safer drug use; and, 3) support better reach and engagement of acute and tertiary care chronic disease services.

Northerners have a disproportionately higher incidence and prevalence of chronic diseases and die more prematurely from them compared to other British Columbians. The Regional Chronic Diseases program was developed in late 2013 to address the unique needs and challenges of the North, empower people and communities, and improve the health and well-being of all Northerners. With a mandate to work in collaboration with key stakeholder groups and support integrated health services and interventions, the Regional Chronic Diseases program provides strategic leadership and stewards NH's response to chronic diseases for the entire population of the North. It gathers information, creates tools, develops policy and helps create change to the health care system in order to directly deliver or support the delivery of "closer to home" chronic diseases health services where people live, learn, work and play. It also operates or supports the operation of specialized services, in close collaboration with Provincial Health Services Authority, in the areas of Cancer Care, Cardiac and Stroke Care including the NORTH Clinics, HIV and Hepatitis C Care, and Kidney Care.

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Hormonal control of energy metabolism in brown adipose tissue, a potential therapeutic target in obesity

Daemon L. Cline* and Sarah L. Gray
Northern Medical Program at the University of Northern BC

Obesity occurs when energy intake chronically exceeds energy expenditure, and is therefore a condition of dysregulated energy homeostasis. The hypothalamus is a key brain region regulating energy homeostasis. For example, in response to cold stress, neuronal pathways in the hypothalamus increase energy expenditure via upregulation of the sympathetic nervous system. One such sympathetic target is a specialized type of fat called brown adipose tissue (BAT) that burns excess energy to produce heat in a process called adaptive thermogenesis. Activation of BAT occurs in response to cold stress and in times of increased food consumption to "offset" excess energy intake. Until recently, it was thought only infant humans possessed BAT. In 2007, it was discovered that BAT is present in adulthood and its activity is correlated with body weight. This discovery has identified BAT as a possible therapeutic target to reduce or prevent obesity and its complications, including diabetes. The Gray Lab at the University of Northern BC is interested in the hormonal regulation of thermogenesis, specifically by a neuropeptide called pituitary adenylate-cyclase activating peptide (PACAP). There is strong evidence that PACAP acts centrally at the hypothalamus to increase sympathetic output to BAT. Additionally, PACAP may have

peripheral effects on the brown adipocytes themselves. This hypothesis will be tested by using quantitative PCR (qPCR) to detect if PACAP receptors are expressed in brown adipose tissue from mice acclimatized to 4°C or housed at thermoneutrality (30°C), when thermogenesis is not activated. If PACAP receptors are present in BAT, we will administer exogenous PACAP to mouse adipocytes in primary culture to elucidate its effect on brown adipocyte development and activation. This research will reveal valuable information about the hormonal control of energy homeostasis in the context of adipose tissue and may strengthen existing evidence that PACAP is a novel endocrine regulator of body weight.

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Tuesday, Afternoon, November 8, 2016	
Session C: Health Equity I **Room 208**	12:45 – 2:00

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Exploring well-being through an Indigenous lens: How hunting practices and land-relationships contribute to health.

Presenter: Katriona S. Auerbach. Master's Student of Interdisciplinary Studies UNBC.

Prior to settler contact, many North American Indigenous teachings linked well-being to land-relations and, in doing so, created a foundation for vibrant and healthy communities. Evidence suggests that hunting acted as a means of connecting individuals to the land in ways that strengthened human-land relationships and, in doing so, significantly improved mental, physical, emotional and spiritual health. However, when white euro-colonial settler populations arrived, we brought with us a worldview that desacralized the landscape and fractured Indigenous human-land identity. This disconnection continues to manifest today in land use conflicts, racism, and the impoverished health and well-being of Indigenous communities. This research is based on the premise that solutions to some of these social ills may be found in the Indigenous teachings that have nurtured the peoples who have practiced them for thousands of years prior to settler contact. More specifically, it seeks to address the question: How may hunting, and the human-land relationship that develops through specific Indigenous hunting practices, facilitate health, healing, and well-being among North American Indigenous peoples? The Interdisciplinary nature of this research merges concepts, theories and ideas from First Nations Studies, Health Geography, Health Sciences and Anthropology disciplines. This inquiry will be explored through an Indigenous lens and will draw on Indigenous informed decolonizing methodologies with the intent to acknowledge and validate Indigenous systems of knowing. As such, this research also seeks an ongoing engagement with Indigenous cultural revitalization and reconciliation.

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Engaging in Research to Advance Health Equity: The EQUIP Study at CINHS

Murry Krause, CINHS

Health inequities are a persistent problem in Canada and globally. Health care organizations are not equipped to resolve all disparities stemming from the social determinants of health, but they still have an important role to play in reducing health inequities. The Central Interior Native Health Society (CINHS) serves a population that is disproportionately affected by marginalizing conditions including structural violence, discrimination, low income and lack of affordable housing. This primary health care (PHC) clinic is committed to equity and to serving populations facing the greatest need.

The EQUIP research program designed an organizational-level intervention and implemented it at four PHC clinics in BC and Ontario, including CINHS. Partnering on this research was an opportunity for CINHS to push further in terms of strategies, knowledge and practices that can support equity-oriented care. The EQUIP intervention drew on decolonizing methodologies and interdisciplinary perspectives to deliver a multi-component intervention and measure its impacts.

The EQUIP intervention included staff education on health inequities, cultural safety, and trauma-and violence-informed care. A practice consultant facilitated sessions with CINHS staff to integrate the content into the context of their daily operations. In the second phase of the intervention, CINHS leaders and staff identified priorities for organizational change and EQUIP provided a small catalyst grant and other supports to begin to implement changes.

EQUIP's research findings show that the intervention shifted practices and organizational processes in important ways. This presentation will outline some of the equity-oriented strategies being implemented at CINHS and key lessons learned from the EQUIP intervention study.

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Exploring Indigenous-led collaborative planning in a watershed context: Perspectives from the Nechako headwaters

Kate E. Hewitt, BA, UNBC MNRES Candidate (*presenting author)
Supervisor: Dr. Margot Parkes
Committee: Agnes Pawlowska-Mainville and Scott Emmons

Increased demands for the allocation and extraction of land and water resources in British Columbia (BC) are adding pressure for collaborative watershed-based planning. In parallel, there is a growing movement towards incorporating Indigenous perspectives for exploring novel collaborative approaches. This is also due to greater legal recognition of Indigenous rights and title. Recent literature suggests Indigenous research data, stories and narratives are a critical piece in shaping effective, culturally acceptable strategies for land and water planning and management. Bridging knowledge systems between western, local and traditional to deepen the shared knowledge of watershed can have the potential to foster local objectives, such as well-being and healing. As a result of these increasing demands, there is a need to study novel approaches for advancing collaborative and culturally appropriate watershed planning.

Informed by new collaborative approaches to land and water allocation in BC, this research explores the perspectives of Cheslatta Carrier Nation (CCN). Guided by an Indigenous research methodology and the appreciative inquiry method, this research will explore how the CCN are advancing their own objectives of reconciliation and healing by increasing their presence on the landscape through openly sharing their rich history and traditional knowledge in a novel 'arms open' approach. This research poster will share preliminary research findings from the literature and CCN.

Tuesday, Afternoon, November 8, 2016	
Session A: Resources for Research **Room 101**	2:15 – 3:30

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Introducing RDC@UNBC

Abstract submitted by Dr. Cindy Hardy

In partnership with Northern Health and the Northern Medical Program, UNBC is opening a Statistics Canada Research Data Centre (RDC@UNBC). Research Data Centres are secure facilities where researchers can access confidential microdata owned by Statistics Canada. In this presentation, Dr. Hardy will provide an overview of the types of data available and the procedures researchers must follow to access the data. Examples of health research conducted by Dr. Hardy and her graduate students will be presented to demonstrate the types of health research that can be done using Statistics Canada confidential data.

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Introduction to the Women's Health Research Institute

Presenting Author: Dr. Lori Brotto (Executive Director, Women's Health Research Institute; Professor, Department of Obstetrics and Gynaecology, UBC)
Presenting Author Organization: Women's Health Research Institute, BC Women's Hospital

The Women's Health Research Institute (WHRI) is devoted to improving the health and health care of girls and women through knowledge generation by serving as a catalyst for research in women's health and supporting an expanding provincial and national network of women's health researchers, policy makers and healthcare providers. We are a leading academic women's and newborn health research institute embedded within BC Women's Hospital + Health Centre, as well as, a real and virtual organization designed to facilitate women's health research in British Columbia and provide a community for women's health researchers. The WHRI is one of only two research entities in Canada, and the only one in Western Canada, to focus exclusively on women's health.

We would like the opportunity to given an oral presentation at this year's Northern Health Research Days so that we can connect with researchers in Northern British Columbia in order to make researchers aware of our organization and our mandate and to communicate the ways in which the WHRI can help to support women's health investigators and facilitate and promote their research endeavours. We would also like to use opportunity to celebrate some of the exceptional women's health research currently being conducted in our province and to discuss issues that are central to elevating women's health research in British Columbia. We believe that Northern Health Research Days will provide a forum where Northern leaders in women-focused health research can connect and collaborate in order to advance future research and to improve the health of women in the province.

Tuesday, Afternoon, November 8, 2016	
Room 204-206 **Session B: Innovative and Creative Approaches to Research**	2:15 – 3:30

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Collaborating as Learning: An introduction to the Harmonization Manual

Featuring a hands-on experience of a community based workshop
Theresa Healy. Co-authors Holly Christian, Nancy Shelford and Sally Erry

A 4-year research collaboration between the Canadian Cancer Society, BC Cancer Agency, Northern Health, UBC-Okanagan and Athabasca University, termed the Harmonization Project, implemented two successful practice based projects (Stop Smoking Before Surgery (SBSS) and Powerplay: Men's Healthy Eating and Active Living in Northern BC Workplaces.) The results of this research endeavor have been the subject of formal research reports and publications have also been collated as a working manual: ***A Primer on Collaboration.*** The Primer, and the community based workshops utilized to launch and introduce the manual to potential collaborators in Northern BC communities, is a sterling example of translating research into action.

This presentation will review the primer as evidence based but practical tool, the collaboration involved in designing community appropriate workshops, and the process of establishing the fidelity needed for each agency to be able to deliver the workshop singly while referencing other partners and their work. The audience will be introduced to the manual in a similar fashion to the introductory workshops conducted in community. We will close the presentation with a review of the principles and elements that sustained the translation of the harmonization research into a practical tool which is sensitive to participant needs.

While funders, policy makers and others ask for evidence of collaboration, there is little practical "how-to" available. The harmonization research paid particular attention to this gap. The Primer, along with the customized workshop dissemination model, is highly regarded as a Northern BC community relevant and useful tool that brings the results of research back to communities as an effective made in Northern BC product.

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Intergenerational Influences on the Understanding and Use of Technology in Later Life

Janna Olynick (PRESENTER), UNBC

Shannon Freeman, UNBC
Hannah Marston, The Open University
Charles Musselwhite, Swansea University

Research on the use of various technologies by adults in later life is somewhat limited. The objective of this presentation is to describe the role that intergenerational and familial variables play in the understanding and use of such technologies by adults over 65 years of age. Data were collected from 37 participants across both rural and suburban sites in Canada and the UK. From analyses, it seems that adults in later life are adjusting to the information age and are using multiple forms of technology. Survey and focus group data suggest that older adults use technology as a digital 'gathering place' to connect with adult children and grandchildren and share information, especially when there is high geographic separation between them. Participants referenced younger family members as having introduced them to, and having taught them how to use, technologies such as digital devices, computers, and social networking sites. Findings add to a sparse literature on technology use in later life and can form the basis of future studies, which could be used to inform clinicians, researchers, and policy makers in the areas of technology, health, and gerontology.

Keywords. *Technology; Intergenerational communication; Gerontology; Aging; Family; Cross-cultural research; Gerontechnology*

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Data Visualization Software for NIRS devices

Shanthini Rajendran, Timothy Schwab, and Alex Aravind, UNBC

Near infrared spectroscopy (NIRS) is a non-invasive measurement modality that can be used to quantify and study oxidative metabolism of human tissue in vivo. We are working with a continuous wave NIRS device that determines the relative levels of oxygenated hemoglobin and deoxygenated hemoglobin based on diffuse reflectance of near infrared light through tissue. Such a NIRS device has a number of promising applications within clinics, sports training, and rehabilitation.

NIRS is an attractive imaging modality because the devices are both portable and non-invasive. These advantages have inspired exponential growth within the field of NIRS research and several devices are now commercially available. Despite its impressive potential, it can attract widespread adoption only if it is supported by software that is capable of transforming the raw data into useful information in easily interpretable visual forms. Building such software is not a straightforward exercise. It involves several challenges including seamless data collection, proper data management (locally and remotely such as a cloud based database), data filtering, data visualization, and intuitive interface design. End users of such software would benefit from having a user-friendly GUI and various visualization tools. Literature shows a huge dependence on MATLAB, a commercial signal processing and analysis toolkit, in order to process and visualize sensed optical data. This renders the software inextensible and platform dependent. We demonstrate the approach of using open source, scripting software libraries in order to address this challenge and make the software platform independent. In addition, the software will be flexible to accommodate both desktop and mobile platforms. In this presentation, we would like to report the status of our software and share our experience of its design and development.

Tuesday, Afternoon, November 8, 2016	
Session C: Health Equity II **Room 208**	2:15 – 3:30

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Creative and Collaborative Research Practices to Enhance Northern Health: Stories from the Health Arts Research Centre (HARC)

Sarah de Leeuw, Charis Alderfer-Mumma, Julia Petrasek MacDonald

The Health Arts Research Centre addresses rural, remote, marginalized, and Indigenous peoples' health inequities in northern BC. This requires outside-the-box, creative research that recognizes health, healing, and renewed well-being as an integrated endeavor equally involving sciences and arts. We advance strategies anchored in creative arts and social determinants of health that produce innovative ways of addressing health inequities; that expand these strategies based on strengths and resiliencies of northern and Indigenous communities, and; that use creative arts to increase interest in, sustain, and support multi-disciplinary and cross-community collaborations for addressing health and well-being issues. Researchers and collaborators are interested in creating and sustaining inclusive, strengths-based forums for innovative inquiry and practice. Activities and initiatives, such as Art Days and storytelling processes across the health region explore relationships between creative expression, health, and healing in northern BC. This presentation provides concrete examples of ways the HARC team has developed partnerships in the healthcare community and beyond, how we continue to identify research questions, and how we are exploring new methods of gathering perspectives about ways Northern Health and the region may embrace Indigenous employees and Indigenous ways of understanding health and well-being. The presentation will focus on ways social sciences and humanities approaches to knowledge production and dissemination might be mobilized to inform policies, models, tools, and interventions for strengthening and diversifying Northern Health's work environment, especially for Indigenous peoples. Participants can expect to gain insight into arts-informed means of conducting and mobilizing creative knowledge about health and well-being in northern BC.

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Advances in cumulative impact assessment for resource development operations in Northern BC: Towards holistic and integrated evaluation of environment, community and health data

Chris Buse, PhD, University of Northern British Columbia

Resource development is a primary driver of British Columbia's economy and the well-being of its communities. However, as the global thirst for lumber, minerals and energy grows, an increasing amount of stress is placed on the land and its ability to sustain life. An overwhelming degree of development activities are occurring in the northern half of the province and the impacts of those developments are therefore highly localized in northern communities. With multiple industries now operating adjacent to one another, the cumulative impacts of diverse land-use has become a significant area of concern, as it is increasingly recognized that project-based environmental assessment is limited in its ability to analyze the multiple forms of impact associated with diverse land-uses. This presentation introduces a new research tool being developed by the Cumulative Impacts Research Consortium--an outreach and research initiative located at the University of Northern British Columbia that seeks to understand the cumulative environmental, community and health impacts of resource development across northern BC. Designed in collaboration with rural, remote and indigenous communities with long and storied histories of resource development, the tool is explicitly designed to address shortcomings in the environmental assessment process; to bolster third-party monitoring initiatives at the regional level by integrating diverse forms of data into a historical understanding of cumulative impacts. The implications of utilizing cross-scale data to improve an understanding of the determinants of population health from resource development are discussed.

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Towards more robust indicators for monitoring the socioeconomic determinants of health as it relates to resource development in Northern BC

Katherine Cornish, UNBC

British Columbia is a province that is rich in natural resources. Northern BC has capitalized on these resources allowing industry to become the primary driver of the regional economy, and northern communities are therefore more vulnerable to the impacts of extractive industries. Environmental Assessments (EA's) are the primary mechanism for managing the impacts and risks of large resource development projects. Through this process, robust indicators that monitor the environmental impacts have been developed. However, indicators designed to measure the socioeconomic and health impacts that are felt across northern communities remain underspecified.

The current EA process does not adequately address the multiple dimensions of resource development. This gap identifies the need for new processes to be created to help us understand the impacts to the social determinants of health throughout the lifecycle of a resource development project. This project involving collaboration between researchers from UNBC, Northern Health, and the BC Centre for Disease Control examines the current state of socioeconomic indicator tracking in BC's EA process. A sample of documents from the EA process was examined to collect a list of socioeconomic indicators currently in use across a variety of sectors. These indicators were then compared with an analysis of the peer reviewed literature and existing available data sources to inform evidence-based recommendations for more robust monitoring and analysis. Specifically, we find that there are conflicting interpretations of socioeconomic indicators across resource development sectors in BC. We recommend that amendments be made to the current EA process to better reflect the contextual nuances of northern and rural communities. Lastly, we will describe areas identified as critical data gaps, and suggest socioeconomic and health indicators informed by the literature that are more robust and better suited to meet the needs of northern and rural communities.

Wednesday, November 9, 2016	
Session A: Quality of Care	**Room 101** 10:05 – 11:45

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State of Healthy Public Policy in Northern BC: Making the Healthy Choice the Easy Choice

*Dr. Henry Harder, *Dr. Sandra Allison, *Dr. Drona Rasali, Holly Christian, Sabrina Dosanjh-Gantner, Tamara Checkley, Rita Zhang, Kari Harder, Jeff Kormos
*presenters

Healthy public policy (HPP) encompasses a range of decisions made by provincial and local governments, community groups, health providers and stakeholders. This research aims to understand the critical success factors involved in developing, implementing, and evaluating HPP in northern BC. This includes the role of local government and community, and how local governments and community stakeholders define and measure the success of HPP. An environmental scan was conducted including 32 municipalities and 42 First Nations communities in order to establish baseline data. The scan was used to develop a database of publicly available bylaws, policies and programs in each municipality and First Nations community. Three case studies were selected from the environmental scan for interviews. Interviews occurred in two municipalities and one First Nations community, and provided the in-depth data not captured in the environmental scan. Data confirmed the breadth of HPP existing in northern BC, as well as revealing a wide variety in understanding and defining HPP in northern BC. Data also revealed a variety of approaches to developing, implementing and evaluating HPP in northern BC. Further research is required to establish a better understanding of the variety of HPP existing between communities in northern BC and the different circumstances enabling or restricting HPP development in northern BC.

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Implementation of a Community Based Convalescent Care Program (Gateway to Home) - 1 Year Quantitative and Qualitative Operational Evaluation

Contact: Gregory Marr, Manager, Residential Programs

As part of a focused effort by Northern Health leadership to improve capacity in acute care, in the winter of 2015, the 3rd floor of Gateway was renovated and prepared for opening. One component of the 3rd floor was the creation of a 5-bed Convalescent Care Program known as Gateway to Home (GTH).

The goal of GTH is to provide clients who no longer require acute care services with a short-term care environment for reactivation and recuperation prior to discharge home (Ministry of Health, HCC Policy Manual, Chapter 6, section A). The core of the program is to follow a "do with" rather than "do for" approach to care to

empower clients, maintain function, and promote optimal independence so that they can return to their homes safely.

One year into operation, results indicate that the program has saved an estimated 1673 acute bed-days. This was achieved maintaining an expected length of stay (LOS) of 5 weeks and achieving 92% bed utilization. Further, 75% of individuals attending the program returned home in comparison to a similar BC program benchmark of 50%. While a pairwise comparison between GTH participants and a similar acute care cohort did not result in a statistically different result for 28-day readmission rate ($p = 0.07$) and ALC designation ($p = 0.16$) (most likely due to the relatively small sample size), post participation surveys have indicated relative success at home in the community. Additional qualitative results from staff, participants, and stakeholders has identified environmental factors, interprofessional team aspects, home visits as part of program planning, and resident/family inclusion as key success factors.

Ongoing effort is being made to expand community integration components to build on current success. Consideration to future capacity is also being considered as 1st year results show an additional 35% unmet demand for services.

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A best practice model to maximize the health impacts of mass gatherings: Northern Health and the 2015 Canada Winter Games

Authors:
- Dr. Anne Pousette (Promotion of Wellness in Northern BC) *corresponding author; co-presenter
- Jim Fitzpatrick (Health Emergency Management BC) co-presenter
- Vince Terstappen (Northern Health) co-presenter

When a community hosts a large-scale event, what are the opportunities for excellence across multiple health perspectives? How can we ensure that host communities in northern B.C. identify and maximize those opportunities – all while ensuring excellence in medical services for the event, creating a healthy legacy, and maintaining local and regional health care responsibilities?

These questions and more loomed when Prince George was announced as the host community for the 2015 Canada Winter Games. As the event approached, Northern Health identified the need for far-reaching health service planning, the prospect of creating a health legacy, and an opportunity for comprehensive data collection and knowledge-sharing that was largely unprecedented for similar events.

What is emerging from the evidence gathered by Northern Health during the 2015 Canada Winter Games – and what the authors will introduce in this presentation – is an evidence-informed best practice model for large-scale event planning that places health benefits, legacy, regional health care responsibilities, training and education, public health, injury prevention, research and knowledge sharing, maintaining local operations, and more within a single, integrated framework.

We will discuss how the evidence suggests that this framework – the Emergency Management Continuum – was being used implicitly throughout the Canada Winter Games. Evidence also suggests that a more explicit and proactive commitment to this framework can have a positive impact on communities hosting large-scale events.

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Arts-based research methods and mentorship between older and younger northern women in the context of recovery from mental illness

Dawn Hemingway & Indrani Margolin
Associate professors, UNBC School of Social Work
Leadership Team, Northern FIRE: UNBC Centre for Women's Health Research

A gender based analysis of recovery from mental illness is gaining prominence in the literature. Also identified is the significance of peer-to-peer relationships in fostering self-esteem, self-efficacy, social support, and spiritual well-being as well as meaning making about recovery. The current project employed arts-based research methods and focused on a less studied aspect - the value of peer mentorship between younger and older women in their recovery journey. Located in a northern community-based activity centre for empowerment, the study used

creative, artistic processes (e.g., writing exercises; movement/dance/gesture; visual arts; and journaling with talking and reflection weaved throughout) to engage and facilitate potential connection/support between younger and older women in their recovery experience. Audio recording, photos and video captured data.

This arts-based mentorship process yielded positive results for both older and younger women. From personal experience, participants' recommendations to each other included maintaining a positive and realistic attitude, accepting the illness as a part of identity but not wholly encompassing of identity and remembering that "you're stronger than your illness". Older participants shared knowledge of mental illness, how to access resources and offered ongoing mentorship. Younger women shared their experience with modern technology (positives and negatives), offered to assist with instrumental/physical support and welcomed an ongoing mentoring connection. Relationships began and a seed of hope for moving out of isolation was planted. The project also provided validity for arts-based practice as a tangible support for women in recovery with its integrative and healing properties. In short, project participants – both younger and older - valued the innovative strategies through which they could guide their own recovery processes and engage in relationships with each other.

Wednesday, November 9, 2016	
Room 204-206 **Session B: Primary Care Transitions**	10:05 – 11:45

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A Culture of Quality Improvement: The Prince George Coaching Strategy

(Presenters Dr. Garry Knoll & Megan Hunter)

Since its inception, the Prince George Division of Family Practice has had the development and support of excellent Primary Care Homes as one of its core strategic directions. A key component to building this culture of quality improvement has been the use of coaching.

The coaching strategy is an over-arching framework for all practice improvement in Primary Care Homes in Prince George. While it is dependent on a robust electronic medical record (EMR) and accessible, accurate practice and population data, it is not just about EMR optimization. It is about the meaningful use of data to objectively assess and plan strategic improvements in all aspects of patient care from office flow to complex care for individual patients. It draws on many teaching and learning methodologies to support physicians and their teams as they strive towards a common vision of quality care. Though one-on-one coaching has been the backbone of the coaching work in Prince George, a number of other methodologies have been put to use including: small group learning, peer mentoring, and reflective practice opportunities.

We will trace the development of this work in Prince George over the last 5 years, looking at increases in engagement with practice coaching and corresponding increases in the quality of EMR usage across the community. We will use the example of development of Care Plans within the EMR to show how quality EMR usage is now being taken a step further, as Family Physicians in Prince George begin to make use of the data within their EMRs to improve transitions in care for their patients. Remaining physician led has been essential to the success of this strategy, none of this could have happened without the strong partnership and shared vision that exists between the Division and Northern Health.

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Prince George Coaching Team – A look at the work on the ground

(Presenters Tammy Bristow & Karen Gill)

The Prince George coaching team consists of three coaches for approximately 75 Physicians. This has enabled the coaches to provide one-on-one coaching which has been one of the most successful approaches to quality improvement in physician offices. The relationship built between the coach and physician team is a cornerstone in the work done. The ability to work with a coach on a one-to-one basis allows a physician and their team to

discuss topics that are most pertinent to their office. It also allows the coach to support in a way that compliments the existing workflow and office values. Topics routinely covered include:

- EMR optimization
- AMCARE Data and data quality
- Running different reports to complete audits
- Screening rates and preventative medicine

Improving processes and office workflow

- Practice Support Modules, practice assessments and action period work
- Succession planning

We are excited to share a few examples highlighting Prince George physicians that have excelled with the support of coaches. We will include AMCARE (Aggregated Metrics for Clinical Analysis Research and Evaluation) data that displays quarterly improvements in various clinical and documentation metrics. We will speak to how data quality and consistent coaching can break even the most daunting tasks into achievable goals for the Physician team. For example, a physician may set a goal to replace his prescription pad with a prescription printer, with the larger goal being a paperless office.

While one-to one coaching occupies majority of time spent for the Prince George coaches, other interactions with coaches may be in the form of monthly meetings with group practices, larger sessions bringing together the Division's membership, to actively taking part in conversations about implementing team based care. This flexibility compliments the busy schedules of physician offices and our highlights how the coaching team supports physicians with the end goal of supporting our community of patients. We invite you to learn about coaching in Prince George and how it may touch the work you are doing in other parts of our health care system!

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Partnering for primary health care reform: Rhetorics of intimacy and relations of scale

Hanlon, N* (UNBC), Reay, T (U of A), Snadden, D (UBC) and MacLeod, M (UNBC)
* Presenting author

Health care reform is typically a contested undertaking in which differences in the values and outlooks of agents and subjects of reform become magnified. Discord is often expressed with reference to a rhetoric that presents local points of health care delivery as intimate and vulnerable subjects of reform, while central levels of authority are cast as impersonal and un-caring reform agents. These discords are remarkably pervasive, even in instances where there appears to be greater levels of consultation and cooperation between reform agents and subjects. In this paper, we examine the efforts of the Northern Health Authority (BC) to partner with locally situated health care professionals and personnel to achieve primary health care reform, focusing on the discursive positioning of the different types of partners in this reform process. An overview of the reform initiative will be provided, including its promise of greater integration in the delivery of primary health care. We then analyze key informant interview data from a three year study involving locally situated partners in seven community settings (n=163) and senior health authority administrators (n=74). Findings suggest important similarities and differences in how community-based partners and central administrators position themselves with respect to four aspects of the partnering process: outlook, motivation, expertise, and efficacy. This discursive positioning suggests that network participants, whether situated locally or centrally, employ rhetorics of intimacy as a means to claim legitimacy and influence, while simultaneously concealing impersonal sources of authority and legitimacy that are necessarily present. We conclude with observations about the construction and contestation of relations of scale as a discursive strategy in negotiating and performing health care reform.

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Community Nursing – Increasing Access &Quality

Northern Health Authority
Author: Sujata Connors R.N., M.PA., Dip CN, B.N., B.Sc.

Northern Health Authority is advancing toward the goal of providing integrated person and family centered services. In February 2016 Community Nursing was to achieve the following goals:

a. A seamless experience for clients requiring acute nursing care in the community by redesigning access

b. An integrated & seamless experience for referring sources requiring acute nursing for clients in the community by redesigning access
c. Appropriate care at the right time and the right place by the right clinician by redesigning the staffing model
d. Established a Quality Improvement approach to service delivery.

The Community Nursing leadership team at NH decided to undertake a quality improvement project to assess the current state of community nursing workflow processes. The reason we needed to do this related to referring sources' needs, transition of services from one program to another, increasing service volumes, and an inefficient staffing model and rotation.

The Community Nursing program including the intake service was assessed with respect to the referral processes and Community Nursing's capacity to support a smooth transition of clients and service volumes within the current staffing model and rotation. Challenges and opportunities to improve collaboration between referring sources and the Community Nursing program were identified along with an opportunity to reallocate resources to direct care that will enable the program to support service volumes within allocated resource funding.

This presentation will present the quality improvement approach that was used to redesign the Community Nursing Program. I will highlight how the redesign supports better use of resources to provide care and how the implementation of a quality improvement approach to change better supports sustainability further advancements in service quality.

Wednesday, November 9, 2016	
Session C: Team Based Care **Room 208**	10:05 – 11:45

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Change Analysis: Beyond Plans of Care
Vanessa Evens, RN, BSN, CNE,
University Hospital of Northern British Columbia

Plans of care were a change initiative that the Lakeland Health Region implemented in 2015. The plans of care were in response to the overcapacity and care coordination issues in the region. The model came from the '48/6' which the British Columbia Patient Safety and Quality Council recommends to identify major health concerns in forty-eight hours of inpatient admission (BC Patient Safety and Quality Council, 2013). There were considerable issues with the implementation of these plans of care including the organizational design, lack of vision, analysis of the problem, lack of model, culture, conflict, and power. The good points were it forced the culture to be challenged and eventually some change occurred. The Change Group analyzes the issues and suggests remedies to the problems including a soft systems model, organizational development approach and using a problem solving and dissolving method.

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Who Needs Team-Based Care: Patient Perspectives

Presenter and Lead Author: Erin Wilson Co-Author: Dr. Martha MacLeod

Context: The primary care home is a model to provide team-based care with the potential to reduce silos and foster longitudinal relationships between patients and more than one professional, enhancing continuity and comprehensiveness of care for patients. A key action for primary care providers within the model is knowing when and how to involve the interprofessional team. Involving an interprofessional team impacts how patients feel known, how care is experienced, and health outcomes.

Objective: To discuss patient perspectives and practices that indicate how patients define “team” in terms of their health, how they feel known, and what aspects of clinician decision-making influence care being experienced as coherent and patient-centred.

Design: An interpretive study incorporating observational and interview data with twelve members of a non-co-located interprofessional team and seven patients.

Results: Patients’ judgment about when to seek care is influenced by how they define team, and how they are able to draw on existing supports and resources outside the health care system. Primary care provider judgment about involving interprofessional team members reflects an accumulation of tacit knowledge about patients. The extent to which primary care providers know patients affects management decisions with complex co-morbid patients, including when and how to involve the interprofessional team. The timing of interprofessional team involvement, the extent to which patients feel their situation is understood, and the location patients receive care influences patient engagement and satisfaction with care.

Conclusion: Patients value feeling known by health care professionals. Timely recognition of how patients can benefit from interprofessional team involvement can improve patients’ engagement in and outcomes of team-based primary care. Knowing patients helps providers and team members identify in a meaningful way who needs a team.

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Organizational Behaviour and Design

A Change in Structure

H. Bourque MScN – NP – F & K. Gunn VP Clinical Programs

In 2005, NH hired its first Nurse Practitioner and over the next several years, this group of health care professionals grew. In order to provide some regional direction and support to this portfolio, the position of NP lead was developed in July of 2014, and subsequently in February of 2015, the reporting structure within NH formally changed, in that all the Nurse Practitioners reported to the NP Lead. Prior to the actual change in reporting structure, there were a number of facilitated conversations with the group of Nurse Practitioners to hear their concerns and develop an action plan that was a ‘road map’ in order to help guide this group over the next year. One piece of this work was to understand and see ‘where’ the NPs were in terms of organizational design and structure. Prior to the change in reporting the NPs reported to a health services administrator, and /or a clinical services manager. In this structure the NPs did not show up on the organizational chart which reinforced the disconnection between this group and the health authority. By having a regional NP Lead this new structure now provides an avenue for information dissemination, clinical support, recruitment strategies, and evaluation of current positions, and needs of various communities as well as development of a mentorship program, and orientation, and the ability to be a ‘voice’ for the organization in regards to Nurse Practitioners. The NP Lead is both operational as well as regional, and works in conjunction with professional practice and many other areas of the organization in order to support this group of health care professionals. The NP Lead reports to the VP Clinical programs and the NPs are now visible on the organizational chart.

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Nutrition Care Process Terminology in Northern Health: Dietitian use, knowledge, attitudes, and learning needs

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3 BC Cancer Agency, Oncology Nutrition, Prince George

Objectives: To determine the status of Nutrition Care Process Terminology (NCPT) implementation in hospitals and long-term care (LTC) facilities in Northern Health (NH), and to identify knowledge, attitudes, and education needs around NCPT for registered dietitians (RD) in NH. Methods: An electronic cross-sectional survey adapted

from an existing Dietitians of Canada survey was distributed to all RDs employed at NH hospitals and LTC facilities in clinical roles using FluidSurveysTM. Descriptive statistics (frequencies) were generated using SPSS®. Results: The majority (67%) of RDs are using NCPT language in any capacity in documentation. The majority of RDs (73%) have implemented nutrition diagnosis language, 47% have implemented nutrition assessment language, 27% have implemented nutrition intervention language and 20% have implemented nutrition monitoring and evaluation language. The most important factors reported to have helped implement NCPT language over the four components were use of the Pocket Guide for IDNT Reference Manual, prior education, and support from colleagues. The most frequently reported barriers for NCPT language implementation were a lack of education, resources and time across all four components of NCPT. Eighty percent of respondents agreed that implementing the NCPT within their practice was important. RDs reported to benefit the most from additional training in the forms of in-person workshops (67%), mentorship (53%) and printed resources (53%). Implications & Conclusions: NCPT use is important for documentation and communication of RD practice. While nutrition diagnosis language is used most frequently by NH RDs, opportunities exist to further implement NCPT language. The results of this study can help inform additional training needs around NCPT use to help support NH RDs.

Making Research Matter: Celebrating Evidence Implementation in Northern BC

Research posters are an important knowledge sharing strategy. Review the posters and chat with presenters to find the answers to the **10 questions** below.

Drop your completed form in the basket on the registration desk before 7:00 pm (19:00) on November 8th to be eligible for the Poster Viewer **Prize Draw.**

Your name (Please print): _____

1	What does NITAOP stand for?	
2	How many people completed the survey on health implications of hitchhiking?	
3	What instrument is proposed to measure changes in respiratory muscle metabolism? * Hint-subjects were soccer players	
4	What was the aim of the UHNBC surgical site infection working group?	
5	From what time (month/year) to what time (month/year) did researchers collect survey data assessing ethnic food habits and dietary patterns in ethnic populations?	
6	What does PRISM stand for?	
7	What were the monthly average food costs (in 2015) in the northwest region of Northern Health?	
8	List result two themes identified in the research exploring reasons behind non-participation in telehealth interventions	
9	What research methodology did Alexandra Marleau use in her study of patients with atrial fibrillation?	
10	What three outcomes of interest were measured to observe the effect of wildfire smoke on respiratory health?	

Research Days 2016

Making Research Matter: Celebrating Evidence Implementation in Northern BC
November 7-9, 2016
Prince George, BC - Civic Centre

Conference Evaluation

Conference Objectives

- Celebrate and share research, evaluation and implementation of evidence from northern BC.
- Support the development of research, evaluation and evidence-informed practice
- Facilitate networking and knowledge sharing between diverse groups with common interests and goals
- Showcase and encourage diverse partnerships and broaden the involvement of different stakeholders invested in the health of northerners.

Please rate the conference overall on the following scale (*circle the appropriate response)*:

Poor	Fair	Good	Very Good	Excellent
1	2	3	4	5

General Conference

Please circle the number that reflects your level of agreement with each statement below:

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The conference objectives were met	1	2	3	4	5
I learned about a research/ evaluation/quality improvement project that could inform my work	1	2	3	4	5
The conference was a valuable opportunity to network and make or strengthen existing contacts	1	2	3	4	5
I have gained new knowledge to build or enhance health policy, research or quality improvement partnerships	1	2	3	4	5
I have a better understanding of the resources that exist to support research in Northern BC	1	2	3	4	5
This conference provided good value for the time spent here	1	2	3	4	5
Overall the conference was well organized	1	2	3	4	5

What could have been done to improve the conference?

Conference Sessions

Please rate the conference sessions on the following scale (*circle the appropriate response)*:

	Poor	Below Average	Average	Above Average	Excellent
November 7 Morning Workshops *(Donna Ciliska & Susan Snelling or Rob Olson)* **(Circle the session you attended)**	1	2	3	4	5
November 7 Afternoon Workshops *(Jude Kornelsen or Martha MacLeod & Dawn McArthur)* **(Circle the session you attended)**	1	2	3	4	5
November 8 - Keynote Speaker: Dr. Janet Smylie, We Are All Doing Implementation Research (and we didn't even know)	1	2	3	4	5
November 8 Morning, Concurrent Sessions *(Themes: Women's & Men's Health, Northern Cancer Care Strategies and Prevention, Rural Professionals: Recruitment and Education)* **(Circle the session you attended)**	1	2	3	4	5
November 8 , Afternoon, Concurrent Sessions *(Themes: Women's & Men's Health, Chronic Disease Management Strategies,Health Equity - I)* **(Circle the session you attended)**	1	2	3	4	5
November 8 , Afternoon, Concurrent Sessions *(Themes: Resources for Research, Innovative and Creative Approaches to Research, Health Equity-II)* **(Circle the session you attended)**	1	2	3	4	5
November 8 - Rapid Fire Poster Presentation	1	2	3	4	5
November 8 - Poster Viewing/Reception	1	2	3	4	5
November 9 - Breakfast Tables	1	2	3	4	5
November 9 - Plenary Session: Dr. Janis Shandro – *Health Impact Assessment of the Mount Polley Mine Tailings Dam Breach: Screening and Scoping Phase Findings*	1	2	3	4	5
November 9 Concurrent Sessions *(Themes: Quality of Care, Primary Care Transitions, Team Based Care)* **(Circle the session you attended)**	1	2	3	4	5
COMMENTS about any of the sessions above:					
Is there anything you plan to do differently because of having attended this conference?					
What was the most valuable part of the conference for you? **(List the sessions, discussions, presentations etc. that were especially beneficial to you)**					
Do you have any suggestions for future conference topics:					

If you would be interested in participating on an Advisory Group or Planning Committee for Research Days 2018, let us know! Please contact idc@northernhealth.ca

THANK YOU FOR YOUR FEEDBACK

Please drop off your evaluation form at the registration table.