**Winter 2017 Epidemiology Practicum Abstracts**

MPH Epidemiology students conduct placements at a variety of organizations and on a variety of topics. As a requirement of their first practicum, students work with data, conducting analysis and interpretation of their work. Below you will find a selection of practicum abstracts from the winter 2017 practica. Students have provided their consent to share these abstracts, which were submitted to the DLSPH as a part of their final practicum package. The structure of the abstract varies depending on the amount of information that could be shared by the student and the student’s preferences in format.

**A.P., eHealth Centre of Excellence**

During my practicum at the eHealth Centre of Excellence, I had the opportunity to work on three main projects that assessed the benefits eHealth systems and tools on patients, providers, and the health system as a whole. My latest project involves conducting a brief evaluation for each of the four Health Links in the WWLHIN. Health links is an approach to care developed by the Ontario Ministry of Health and Long-Term Care (MOHLTC) in which teams of local health care providers co-ordinate treatment and care for complex and vulnerable patients, ensuring care is consistent and effective for each individual. It encourages providers in a geographic area (CCAC, primary care, hospital, community support services, long-term care providers, community support agencies and other community partners) to collaborate to coordinate care delivery for these patients. There are four Health Links in Waterloo Wellington: KW4, Cambridge-North Dumfries, Guelph, and Rural Wellington. I am deciding on a focus area for each Health Link, developing a case study for each through clinical narratives and the integration of health system data, and writing a final report for WWLHIN to demonstrate the impact the Health Links approach is having on patients and providers.

**A.S., World Health Organization (WHO)**

During the Winter of 2017, I had the great pleasure of working as part of the Maternal, Child and Adolescent Health team at the World Health Organization (WHO) in Geneva, Switzerland. My project was to utilize data from the African Neonatal Sepsis Trial (AFRINEST) in order to identify independent predictors of treatment failure and mortality among neonates and young infants (0-59 days old). I was tasked with: 1) Cleaning and preparing the African Neonatal Sepsis Trial (AFRINEST) data set for risk factor analysis, 2) Developing a model to identify independent predictors of treatment failure and mortality, 3) Producing and validating an appropriate regression model using R statistical software, and 4) Drafting a manuscript for peer-reviewed publication. This involved performing a literature search, preparing the AFRINEST data set for analysis, developing a multivariable logistic regression model and drafting a manuscript for publication. Receiving the opportunity to be part of a supportive team in order to develop my skills in public health research in addition to the invaluable exposure to international health research has made me quite thankful for my practicum experience at WHO.

**A.W., Cancer Care Ontario**

I completed my second practicum project at the Prevention and Cancer Control portfolio at Cancer Care Ontario (CCO), under the guidance of Dr. Anna Chiarelli. My project focused on validating administrative breast cancer treatment information with data obtained from medical chart abstraction, which is considered the gold standard for collecting breast cancer treatment information. However, chart abstraction can be laborious and costly, especially when conducting large population-based epidemiological research. An alternative method is the use of administrative databases, however, the validity of CCO's Activity Level Reporting (ALR) database, which collects radiotherapy and chemotherapy data from regional cancer programs in Ontario, has not been examined. A retrospective cohort design was used to identify eligible women aged 50-69 diagnosed with invasive breast cancer within the Ontario Breast Screening Program between 2006 and 2009. During the project, I was responsible for conducting a literature review on the accuracy of breast cancer treatment data in administrative databases compared to medical records, for conducting statistical analyses for comparing administrative treatment data vs. abstracted medical records using SAS and for interpretation and summarization of findings to be included in presentations and manuscripts. This project gave me an introduction to cancer screening and how research is conducted at the provincial level in Ontario.  I also gained valuable data analysis skills in SAS, and expanded my knowledge of breast cancer treatment. Further analyses will examine the validity of surgery data obtained from the Canadian Institute for Health Information’s (CIHI) Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS).

**B.W., Centre for Global Health Research (CGHR)**

My project with the Centre for Global Health Research consisted of an epidemiologic analysis of trends in childhood (aged 1 month to 15 years) measles mortality using a nationally representative sample in India as well as an analysis of vaccination coverage and health services treatment of measles complications using a national survey. Data were obtained from the Million Death Study (MDS) through 2001 to 2013 and various installments of the District Level Household Survey (DLHS) through 2002 to 2012. The analysis of measles mortality trends in children and vaccination coverage allowed me to develop essential skills in survey analysis and regression modeling, to apply epidemiologic and statistical concepts in a global health context, and to further develop skills in data analysis and project management. Having the opportunity to develop my own research proposal and to conduct each step of the analysis plan and framework afforded me the opportunity to be involved in every aspect of the project and to tailor my analysis in light of the project’s various complexities and limitations.

At the CGHR, I was able to work with a talented team from diverse academic backgrounds who facilitated my research and provided the resources to improve my understanding of the project and the relevant data analysis techniques. This practicum was a highly enriching and rewarding experience; one that I recommend to future students in the program.

**C.E., Cancer Care Ontario (CCO)**

Background:Build environment (e.g. walkability) and neighbourhood socioeconomic factors are important to consider when looking at health-related measures in secondary school students. In Ontario, data on student enrolment is rarely available. As an alternative, “artificial” catchment areas can be constructed to assign census neighbourhoods as a proxy for identifying which students are likely to go to which schools.

Objectives:The purpose of the scoping review was two-fold: 1) To identify what methods have been used to model “artificial” school catchment areas when student enrolment data were unavailable, and 2) for each method, what common parameters or conventions were followed across similar studies.

Methods:EMBASE and the grey literature were searched for relevant articles, with a focus on identifying key themes across studies and feasibility of applying the methods found to the

Ontario context. 16 full text articles were included in the scoping review.

Results:Catchment areas were modelled using radial / street network buffers, polygon algorithms, location-allocation algorithms, and complex regression models Individual studies were mostly cross-sectional in design. The distance used for the radial / street network buffers varied from 0.5 km to 1.6 km around a school. Variables in more complex algorithms typically included school capacity and distance of neighbourhoods to schools.

Conclusions:A number of methods are available. No one method was deemed superior. The method and parameters of choice were dependent on the region (urban vs. rural) and data available (e.g. street network data, school enrolment counts).

**E.M., Well Living House and the Northern Ontario School of Medicine**

My second practicum focused on a variety of epidemiological projects related to Indigenous health equity at the Well Living House and the Northern Ontario School of Medicine. By working with two separate teams, I was exposed to a variety of projects that also focused on different Indigenous groups and environmental contexts. I also had the opportunity to participate in both applied and research projects. This practicum allowed me to apply the skills acquired from most of my core epidemiologic courses through the following projects: drafting a research ethics board application, drafting a manuscript on Indigenous surveillance systems, data analysis and statistical significance testing, critical appraisal of scientific literature, conducting and designing a systematic review, and strategic planning, program evaluation and program implementation. This practicum allowed me to gain confidence applying the skills learned from the degree in both research and applied settings.

**E.D., Public Health Agency of Canada (PHAC)**

For my second practicum, I had the opportunity to work at the Public Health Agency of Canada as a student epidemiologist under the Surveillance and Epidemiology division. During my time at PHAC, I worked on a study seeking to describe the epidemiology and trends of fall-related traumatic brain injury among Canadian seniors using data from the National Ambulatory Care Reporting System (NACRS). This practicum experience provided me the opportunity to develop my skills in SAS coding, large dataset analysis, and multidisciplinary team collaboration. Completing my second practicum at PHAC was an ideal experience as I was able to develop my technical skills to working proficiency, which was helpful in facilitating my transition from school to full-time employment.

**G.D., Public Health Agency of Canada (PHAC)**

Working for a governmental agency like the Public Health Agency of Canada provides practicum students with a sound experience of the roles and responsibilities of applied epidemiologists. A practicum through the PHAC strikes a good balance between data analysis and applied epidemiology. My practicum experience was centred around the trend analysis of verotoxigenic *E. coli* (VTEC) testing by the *E. coli* Reference Laboratory, which monitors VTEC in animal/host reservoirs. I was fortunate enough to acquire working knowledge of the various public health surveillance systems in place within Canada which monitor pathogens responsible for enteric illness. Trends in O157:H7 remains a significant public health concern, with sporadic outbreaks occurring annually across Canada. This practicum experience will prove to be beneficial in future career opportunities through working knowledge of surveillance data in Canada. My short 12-week placement at PHAC has provided great exposure to the role and expectations of an applied epidemiologist working within a governmental setting. Objectives outlined in the Learning Contract included an understanding of foodborne surveillance systems in Canada; trends in VTEC from non-human sources; relational database manipulation using SQL procedures; and generating a governmental report using research and surveillance data. There were also potential plans to create a SAS system to generate routine reports using lab data as well as describing VTEC trends using clustering/networking methods.

**J.H., Peel Public Health**

 Within the Communicable Disease Surveillance unit, I worked for the Infection Prevention and Surveillance section. Individuals within this section work with external partners as well as staff within the Communicable Diseases and Environmental Health program areas to monitor communicable disease activity and detect new public health threats that may impact the residents of Peel. My main project was to lead the assessment of vaccine wastage in Peel. High vaccine wastage increases unnecessary vaccine procurement and costs. With limited supply of vaccines, excessive wastage could result in individuals not receiving required immunizations. The objectives of my project were to quantify the wastage of publicly-funded vaccines in Peel and to determine the most common causes of vaccine wastage, utilizing data from the Vaccine Inventory module of Panorama. Results from this assessment will provide a baseline for monitoring vaccine wastage in Peel, inform the improvement of current wastage reduction strategies, and advise the future development of targeted interventions to reduce wastage.

**J.R., St. Michael’s Hospital**

At my winter practicum, I was responsible for applying the skills I learned as an Epidemiology student in the MPH program on a community based research project at St. Michael’s Hospital. My assigned task was to systematically synthesize the findings of existing interventions to increase bacterial sexually transmitted infections (STI) in the literature. The overall goal is to use this information to design an intervention to increase bacterial STI screening in Toronto men who have sex with men (MSM). Working on this community based research project, I was provided with ample learning opportunities, which included conducting literature searches, designing and carrying out the data extraction, completing a systematic synthesis of findings and preparing summaries. I was also able to get involved with other areas of the research project such as participating in focus group meeting discussions and helping to write sub-study protocols. From this practicum, I take away an understanding of community based research principles and a desire to further improve systematic review skills. As an epidemiologist, this has been great experience to see how research can influence public health policy.

**J.F., The Hospital for Sick Children (SickKids)**

Background: Hemodialysis is a primary intervention for end stage renal disease. Patients undergoing hemodialysis are at greater risk of cardiovascular (CV) death, particularly sudden cardiac death (SCD), than the general population. Frailty and abdominal adiposity are two predictors of mortality in the general population as well as hemodialysis populations. The independent influence of these two factors on the risk of all-cause mortality, CV death, and SCD in an incident hemodialysis population has not yet been investigated.

Objectives: i) To estimate the association of frailty and abdominal adiposity with the risk of SCD, CV mortality, and all-cause mortality in a prospective cohort of incident hemodialysis patients. ii) To investigate the interaction between abdominal adiposity and frailty, and its influence on the risk of SCD, CV mortality, and all-cause mortality.

Methods: Baseline characteristics were obtained from incident hemodialysis patients enrolled in the Predictors of Arrhythmic and Cardiovascular Risk in End Stage Renal Disease Study. Frailty and abdominal adiposity were assessed using the Fried frailty phenotype and waist-to-hip ratio (WHR), respectively. The primary outcomes were all-cause mortality, CV death, and SCD. Associations between these primary outcomes and frailty and/or WHR were estimated using Cox proportional hazards regression.

Results: 374 participants contributed 925.8 person-years of data to this analysis. During the study, 82 deaths occurred, of which 35 were CV deaths. Of these 35, 15 were SCD. After adjusting for possible confounders, frailty was associated with increased risk of all-cause mortality (HR: 1.24 95% CI: 1.01, 1.52); this association may be partly explained by nutritional status. Increased WHR was associated with increased risk of both CV mortality (0.1 increase, HR: 1.65, 95% CI: 1.02, 2.69) and SCD (0.1 increase, HR: 2.41, 95% CI: 1.15, 5.04), after adjustment for demographics characteristics, comorbidities, BMI, and serum albumin concentration. There was no evidence of interaction between frailty and abdominal adiposity on the risk of SCD, CV mortality, or all-cause mortality (all P > 0.05).

Conclusion: Frailty was independently associated with increased risk of all-cause mortality but not CV mortality or SCD. WHR did not modify this relationship. Conversely, abdominal adiposity was independently associated with increased risk of CV mortality and SCD, but not all-cause mortality. Frailty status did not modify these relationships.

**J.W., Public Health Ontario (PHO)**

A 12-week practicum at the Public Health Ontario and the Institute for Clinical Evaluative Sciences was undertaken to learn about the operations of the organizations, understand the activities of epidemiologists in public health, and develop skills in communication, epidemiological methods, statistical analysis, and interpretation. An original research study was completed. We assessed the long-term trends of the incidence and prevalence of dementia and Parkinsonism across different ethnic groups (Chinese origin, South Asian origin, and General Population) in Ontario. We established a retrospective population-based cohort by linking population-based health administrative databases from 2001 to 2015 in Ontario. The study population comprised all residents aged 20 to 100 years with an incident diagnosis of dementia or Parkinsonism ascertained using validated algorithms. We used a validated approach involving surname lists to identify persons of Chinese and South Asian origins. We calculated age- and sex-standardized incidence and prevalence of dementia and Parkinsonism, stratified by ethnicity. We assessed trends in incidence using Poisson regression and prevalence using the Cochran-Armitage trend test. We found similar trends in the prevalence of dementia and Parkinsonism when stratified by ethnicity and immigration status. Overall, the practicum at Public Health Ontario and the Institute for Clinical Evaluative Sciences offered a positive learning environment for future epidemiologists.

**J.W., Public Health Ontario (PHO)**

Under Ontario’s Immunization of School Pupils Act (ISPA), students may be suspended from school if immunizations against select diseases are not up-to-date (UTD) or if documentation of a medical or philosophical exemption is not provided. The immunization schedule for Ontario includes two valid measles-containing vaccines before age 7, with the first occurring on or after the individual’s first birthday. Several jurisdictions have adopted a grace-period, where doses administered prior to the first birthday may be counted as valid, commonly using a 4-day interval. During my 12-week practicum at Public Health Ontario, I collaborated with members of the Immunization and Vaccine Preventable Diseases (IVPD) team in order to describe the number of Ontario students receiving measles-containing vaccines prior to their first birthday, and to quantify the impact of allowing a 4-day grace period by estimating the change in UTD coverage, the reduction in number of doses administered, and the reduction in philosophical exemptions. This was done by using SAS to assess the immunization records of over 400,000 children. By utilizing a fairly large and complex dataset, I greatly improved my technical SAS skills. As well, I have been involved with communicating the project’s results to important stakeholders, such as the Ministry of Health and Long-Term Care. One of the highlights of my practicum was producing evidence that will inform future decisions regarding policies such as ISPA.

**J.M., Cancer Care Ontario (CCO)**

My second practicum experience was with the Aboriginal Cancer Control Unit at Cancer Care Ontario under the supervision of Dr. Amanda Sheppard. This experience differed from my first in that it dealt with applied epidemiologic work. My main project involved creating a novel health indicator for First Nations and Métis people in Ontario. Additional projects included helping to produced updated estimates of cancer risk factors in First Nations, Métis and Inuit populations in Ontario, drafting reports for various stakeholders, and presenting my work in the form of an oral and poster presentation. A lot of the learning in this practicum was also on cultural competency and First Nations, Métis, and Inuit-specific determinants of health. This theme was embedded in all of the work being carried out by the group and often was driving force behind the important work being done. I had the opportunity to work with an extremely knowledgeable and supportive team, and I learned immensely form the mentorship. Overall, working with the ACCU was a positive experience that provided valuable insight into applied epidemiologic work as it relates to First Nations, Inuit and Métis populations.

**K.Y., Health Quality Ontario (HQO)**

One project I completed for my practicum at Health Quality Ontario was to conduct an environmental scan of tools used to incorporate the consideration of health equity into quality standard, clinical practice guideline, or policy development. The purpose of this project was to identify a tool which Health Quality Ontario could use to advance health equity through the development of its quality standards. Due to the scope of the project, a thorough search of the peer-reviewed and grey literature was done, with the grey literature searched using the CADTH Grey Matters tool. The results of the scan were mapped onto the current prioritization, development, and implementation process for the quality standards to demonstrate steps which were addressed by the tools. After synthesis of the results, it was found that none of the existing tools would adequately include equity considerations in the quality standards process, therefore a new template based on the synthesis of findings was designed. This project resulted in five key recommendations which HQO intends to incorporate into its processes.

**M.M., BlueDot Inc. at the Li Ka Shing Institute of Knowledge**

 BlueDot Incorporation, a Toronto-based corporation at the Li Ka Shing Insititute of Knowledge, aims to better understand the global dispersion of infectious diseases. This is achieved through a diverse set of teams comprised of experts from fields such as public health, medicine, ecology, data and computer science, data engineering and visualizations. Through my practicum at BlueDot, I participated in the analytics and research team, whereby my primary contributions were two-fold: 1) to contribute to a manuscript on global, national-scale population mobility and vulnerability to infectious diseases, and 2) to create data visualizations on national inbound travel volume from municipalities with suspected or confirmed cases of Yellow Fever in Brazil. Through these projects and various other tasks performed throughout the practicum, I was able to contribute to both client-based and company-based needs.

**M.D., Centre for Addiction and Mental Health (CAMH)**

Dysthymia (i.e., an episode of depression which lasts for 2 or more years) is an important topic. Pharmacotherapy has been shown to be an effective option in the acute treatment of dysthymia. A recent network meta-analysis demonstrated that multiple selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants may be more effective than placebos in the treatment of dysthymia. While there is substantial evidence in examining the role of SSRI and tricyclic antidepressants in the acute treatment of dysthymia, to our knowledge, there are no reviews examining the efficacy and tolerability of selective serotonin and norepinephrine reuptake inhibitors (SNRIs) in the treatment of dysthymia. In addition to targeting the serotonergic pathway, SNRIs also address the norepinephrine system, which has also been linked to depression11. With past evidence suggesting that SNRI may be more effective than SSRI in improving response rates among those with major depressive disorder23, it is important to examine whether these findings are applicable for individuals with dysthymia. Furthermore, since SNRIs are efficacious in alleviating somatic symptoms such as pain and fatigue13, this antidepressant may prove to be a better option than SSRIs given that cases of dysthymia are likely to present comorbid somatic disorders (e.g., fibromyalgia)14. Thus, we conducted a systematic search of the literature to examine whether SNRI is an efficacious and tolerable treatment for dysthymic disorder.

**R.C., Institute of Health Economics**

The Institute of Health Economics (IHE) is a non-profit organization that provides expertise and support to government, academia, and industry. IHE aims to provide timely evidence to assist decision makers and inform health policy. They specialize in economic evaluations, costing and cost-effectiveness analyses, and health technology assessments.

At IHE I worked on two major projects commissioned by Alberta Health. The first was a systematic review of the effects of different physician compensation models on cost and various patient outcomes in primary care, acute care, and long-term care settings. In total, 198 studies were included. We found mixed effects for most outcomes, and no payment model had a positive impact on all outcomes. Payment models incent a variety of physician behaviors and can have unintended effects due to complex relationships within the health system.

The second major project was an environmental scan of key performance indicators (KPI) used in select jurisdictions around the world. In total, 13, 822 indicators were abstracted from 135 sources. Current work has been focused on de-duplicating this list and consolidating the indicators into a refined list that will serve as a database for Alberta Health. The environmental scan will be used for further work assessing the validity and reliability of indicators from the database to inform performance reporting activities in Alberta.

**R.H., Women’s College Research Institute**

The Appropriate Prescribing Demonstration Project (APDP) is a two-topic evaluation which was created by members of the Ministry of Health and Long-Term Care (MOHLTC), Health Quality Ontario, and the Ontario Medical Association (OMA) to measure the impact of educational strategies- specifically, academic detailing- on the rates of appropriate antipsychotic prescribing in long-term care homes across the province of Ontario. A second outcome measure was added, that of the rates of falls in long-term care homes. The intervention was delivered by the Centre for Effective Practice (CEP), and a program evaluation team at Women’s College Research Institute (WCRI) was tasked to measure the impact of the implementation. My practicum encompassed the data collection, analysis, and summation of the mixed-methods and qualitative evaluations, as well as manuscript writing for the qualitative paper, report writing for the MOHLTC, and the dissemination of results (through presentations) to stakeholders including CEP and the MOHLTC.

**S.S., Public Health Ontario (PHO)**

I completed my second practicum project at Public Health Ontario and the Institute for Clinical Evaluative Sciences to explore the associations between air pollution and cardiovascular diseases. It allowed me to apply many epidemiological and analytical concepts I had grasped through courses at Dalla Lana School of Public Health. I conducted a literature review at the start of my practicum to learn more about cardiovascular disease, air pollution, and the relationship between these pre-determined exposure and outcome. By linking multiple health administrative databases, we conducted a population-based retrospective cohort study to examine the association between exposure to ambient air pollution, particularly PM2.5, NO2, and O3, and the development of stroke and atrial fibrillation in Ontario from 2001 to 2015. The study population comprised all residents aged 35 to 85 years, and we identified stroke and atrial fibrillation cases using validated algorithms. We applied state-of-the-art methods, such as satellite-based sensing approaches, to assess air pollution exposures. Results suggest the plausibility of an association between ambient air pollution and stroke and atrial fibrillation. Overall, I had memorable educational experiences that not only enabled me to practice analytical skills, but also to understand the importance of epidemiological research.

**L.C., Toronto Public Health**

I completed my second MPH epidemiology practicum at the Communicable Disease Surveillance Unit of Toronto Public Health, which is responsible for monitoring disease trends, detecting outbreaks, and reporting infectious disease data for the city of Toronto. My project involved creating a profile describing the socioeconomic status of active TB cases in Toronto. During this process, I conducted a literature review, learned about local and provincial surveillance systems and limitations, established an analysis plan, analyzed multiple datasets and communicated the results to the management team. The practicum helped me meet my learning objectives and core competencies outlined in the learning contract. In addition to working on my practicum project, I networked with epidemiologists, health information analysts, and a program evaluator to learn about the various roles of public health practitioners. I also got to witness the process of operation at a public health unit, and I am quite thankful for this unique opportunity.

**S.S., Public Health Ontario**

Ontario recently passed the Healthy Choices Act mandating chain restaurants, with 20 or more locations in Ontario, to place calories information on menus and menu boards for all food and drinks, including alcoholic beverages. The impact of this legislation is currently being investigated in a number of studies being conducted at Public Health Ontario. The restaurant menu labelling study is investigating changes in the nutritional composition of restaurant food and beverages. This is a longitudinal study that began in 2010, and restaurants have been followed up for the nutritional information of food and beverage items in 2013 and 2016 (pre-legislation). We are currently collecting data in 2017 (legislation effective January 1st, 2017) to understand if changes have taken place in “real time”, and the restaurants will be followed up again in 2 years. The Healthy Choices Act is the first legislation that we know of to mandate calorie information for alcoholic beverages. Calorie labelling can provide consumers with the necessary tool to assess energy intake to make informed decisions for alcohol consumption, however, the consequences of calorie labelling for alcoholic beverages is largely unknown. The alcohol menu labelling study aims to experimentally test the effect of various formats for displaying calorie information for alcoholic beverages on young adults’ purchase intentions to inform menu labelling policy in Ontario as well as other jurisdictions in Canada.

**S.L., Northwestern Health Unit**

The Northwestern Health Unit (NWHU) serves a catchment area of 80,000 persons distributed over a region approximately 1/5th the size of Ontario. One-third of this population is Indigenous peoples. My time at the NWHU was in the capacity of a foundations team member; a division that supports the analytics of all health unit streams with their individual programme needs (e.g. communicable diseases, environmental health, injury prevention, substance abuse). My central project entailed conducting a 10-year regional assessment of blastomycosis, a fungal disease unique to central and eastern North America (in which the NWHU catchment area is estimated to have the highest rates of blastomycosis worldwide). Ad-hoc duties included working with the Medical Officer of Health and senior health officials around the province to investigate a suspected blastomycosis outbreak in a nearby First Nations community. Other deliverables involved formulating a guided metadataset to support the evaluation of NWHU organizational performance-indicators, against a newly devised 2017-2020 NWHU Strategic Plan. Lastly, preliminary analysis assessed a prominent 2013-2016 high school survey in the region, entitled ‘COMPASS’, assessing various health behaviours in youth (i.e. nutrition, physical activity, substance abuse and school perception). Mixed throughout the duration of this practicum was exposure to several side projects upon request of various health department staff. Overall, my time at the NWHU has provided me with a valuable & humbling experience to working in a small-sized health unit, and addressing the unique needs of a northern, remote community.