SANDY BAY COMMUNITY HEALTH ASSESSMENT: A COMMUNITY IN NEED

By: Zac Penner

Home for the Summer – July – August 2019

Portage la Prairie, Manitoba

Supervisor: Dr. Alan Macklem

ABSTRACT

Rural First Nations people are among the Canadians that experience the greatest level of health care inequity. Due to the effects of distal determinants such as colonialism, racism, social exclusion, and self-determination, First Nation people often delay seeking medical care, have late presentation of disease, have a reduced quality of care, have poorer outcomes, have increased acute and chronic diseases and early deaths. The purpose of this study was to construct a community health picture that included both subjective perceptions and objective measures of health in a rural First Nations community that is set to lose their community family physician. The study consisted of two parts, which included completed patient surveys and a patient chart review for chronic diseases. The study identified that patients who visit the community medical centre are often young females, have larger families, and are of a lower socioeconomic status. Most people are happy with the care received in the community and prefer it over traveling to the surrounding medical centres. Perhaps most importantly, there was an overwhelming response to it being difficult to be required to seek health care outside the community. Recommendation include an updated integrated electronic medical record, on-site lab and blood draws, and a full-time health care practitioner. Major improvements are required to the current health centre or else outcomes and patient care will continue to worsen before they improve.

INTRODUCTION

Health equity for all groups and populations within Canada has been a public health goal for many years now. With the increasing diversity and multiculturality in the Canadian population, this poses the challenge of an ever-moving target. However, one population that is constantly overlooked is paradoxically those who were first, the Indigenous people. As a population, their health care inequities have been well documented, receiving a reduced quality of care, poorer reported outcomes, higher rates of acute and chronic illnesses, increased reporting of mental unwellness, and early deaths.[1 2,3,4,5] This topic has generated discussions on the national and international stages with the releases of the Health Inequalities and Social determinants of Aboriginal peoples' health, and the United Nations Declaration on The Rights of Indigenous Peoples.[6,7] One common theme is the impact of social determinants of health on the Indigenous person. Distal determinants of health such as colonialism, racism, social exclusion, and self-determination form the foundation for the proximal and intermediate determinants of health and are therefore the most destructive.[6] As a result, Indigenous people tend to delay seeking medical attention to avoid entering the medical system under stereotype.

Rural location is another important determinant of health, limiting the health care access of many Manitobans. A national study was completed in 2006 to look at the health status and specific determinants of health faced by rural populations. It identified that rural populations report overall a lower socioeconomic status higher rates of obesity, higher rates of smoking, higher rates of chronic diseases, and reduced life-expectancy.[8] The challenges of accessibility to family physicians, lab tests, diagnostic imaging, and specialists are not

something new for rural populations, however with the advent of new technologies such as MBTelehealth we are trying to narrow the gap.

Southern Health-Santé Sud Regional Health Authority, containing the four cities of Steinbach, Morden, Winkler, and Portage la Prairie, is the fastest growing RHA in Manitoba with an annual growth rate of 1.6%, and 20% growth over the past decade.[9] Southern Health's population growth is due to a combination of an increased birth rate and immigration.[10] A portion of this growth is attributed to the Indigenous population, over 16,000 people both on and off reserves, equating to approximately 12% of the RHA.[10] The on-reserve populations have a higher birth rate and therefore a much younger population when compared to the rest of Southern Health-Santé Sud, and a projected annual growth rate of 2.3%.[10]

Sandy Bay is the largest of the four First Nations reserves that are situated near Portage la Prairie, with an on-reserve population over 4,000.[9] Sandy Bay is located approximately an hour drive north of Portage la Prairie on the banks of Lake Manitoba. It is located in the Seven Regions Health District, which ranks poorly in many categories of health. The district is the lowest ranked by socioeconomic status, the highest in premature mortality, the highest rates of cardiovascular disease (hypertension, ischemic heart disease, myocardial infarctions), and the highest rates of diabetes and lower leg amputations.[10] The community health centre serves as a walk-in clinic and a pharmacy 2-3 afternoons a week and also provides a variety of wellness and education services for mental health, addictions, maternal and child health, chronic diseases, and communicable diseases. The walk-in operates with a first-come-first-serve template, with a maximum limit of patients set at 45 for an afternoon. The physicians travel from Portage la Prairie or Gladstone, and the Pharmacist travels from Gladstone. Due to limitations within the operation of the health centre, the health centre is independent from the Portage Clinic where all patient records are hand written with no electronic medical record. Most people in the community receive their primary health care at the community health centre, with some opting to go to Gladstone or Portage la Prairie. With the family physician that has been traveling to Sandy Bay for the last 33 years set to retire, in October, I was interested in conducting a community health assessment as on-reserve health is commonly overlooked in some of the larger studies. As Manitoba has one of the highest Indigenous population proportions in the country, recognizing and addressing health care inequity is critical for improving the overall health in the province.

Project Objective

The objective of this project was to conduct a community health survey of the people living in Sandy Bay, in an effort to measure the community's perception of health in the setting of the retirement of the community family physician.

MATERIALS AND METHODS

Survey

In order to qualitatively understand the perception of health by Sandy Bay community members, I developed a survey that was offered to the patients at the Sandy Bay Medical Centre as they came in to the waiting room. I indicated that the survey was voluntary and anonymous, and that their responses were to help me with a summer project. The Community Health Assessment Survey was 3 pages long and consisted of 5 categories; demographics, satisfaction, health status, health access and availability, and health care use. Question response options were "circle/check the answer(s) that apply" and "fill-in-the-blank with given options". As this survey was to be filled out by multiple patients at a time in a remote clinic, the distribution of the survey was done through printed copies instead of digitally. Furthermore, close attention was applied to the language, format, and length of the survey, so it could be inclusive to all patients. A copy of the survey can be found in Appendix 1.

Chart review

To supplement the results of the survey, a chart review query for Sandy Bay residents with chronic diseases was run using the Accuro system at the Portage Clinic. The query was designed with the qualifiers of:

(1) diagnosis of at least one of the following; diabetes, hypertension, congestive heart failure, ischemic heart disease, asthma, and chronic obstructive pulmonary disease
(2) diagnosed within the last 2 years
(3) resident of Sandy Bay based on their postal code
(4) patient of Dr. Macklem at the Portage clinic

The information collected on each patient included their sex, age, and diagnoses.

RESULTS

During visits to Sandy Bay, a total of 58 surveys were filled out by patients to varying degrees of completeness. Almost all of the patients, 93%, reported living in Sandy Bay, with only 4 reporting living off reserve in the surrounding area. Under the demographics category I chose to present the data on five questions pertaining to sex, age, number of children, highest level of school completed, and employment status (Figure 1). A majority of the patients who filled out the survey were female at 69% versus male at 31% (Figure 1A). The age distribution of patients was varied with 5% being younger than 18, 10% being between the ages of 18-24, 21% being between the ages of 25-34, 21% being between the ages of 35-44, 17% being between the ages of 45-54, and 26% being over the age of 55 (Figure 1B). The distribution of number of children the patients had were; 21% had 0 children, 14% had between 1-2 children, 42% had between 3-4 children, 21% had between 5-6 children, and 2% had over 7 children (Figure 1C). The distribution of the highest level of school completed by patients was 20% elementary/middle school, 59% high school, 21% university/college/trade (Figure 1D). The distribution of patient employment status was 31% full time employment, 15% part

time/seasonal employment, 20% unemployed/do not work, 4% student, 11% retired, 19% unable to work (Figure 1E).

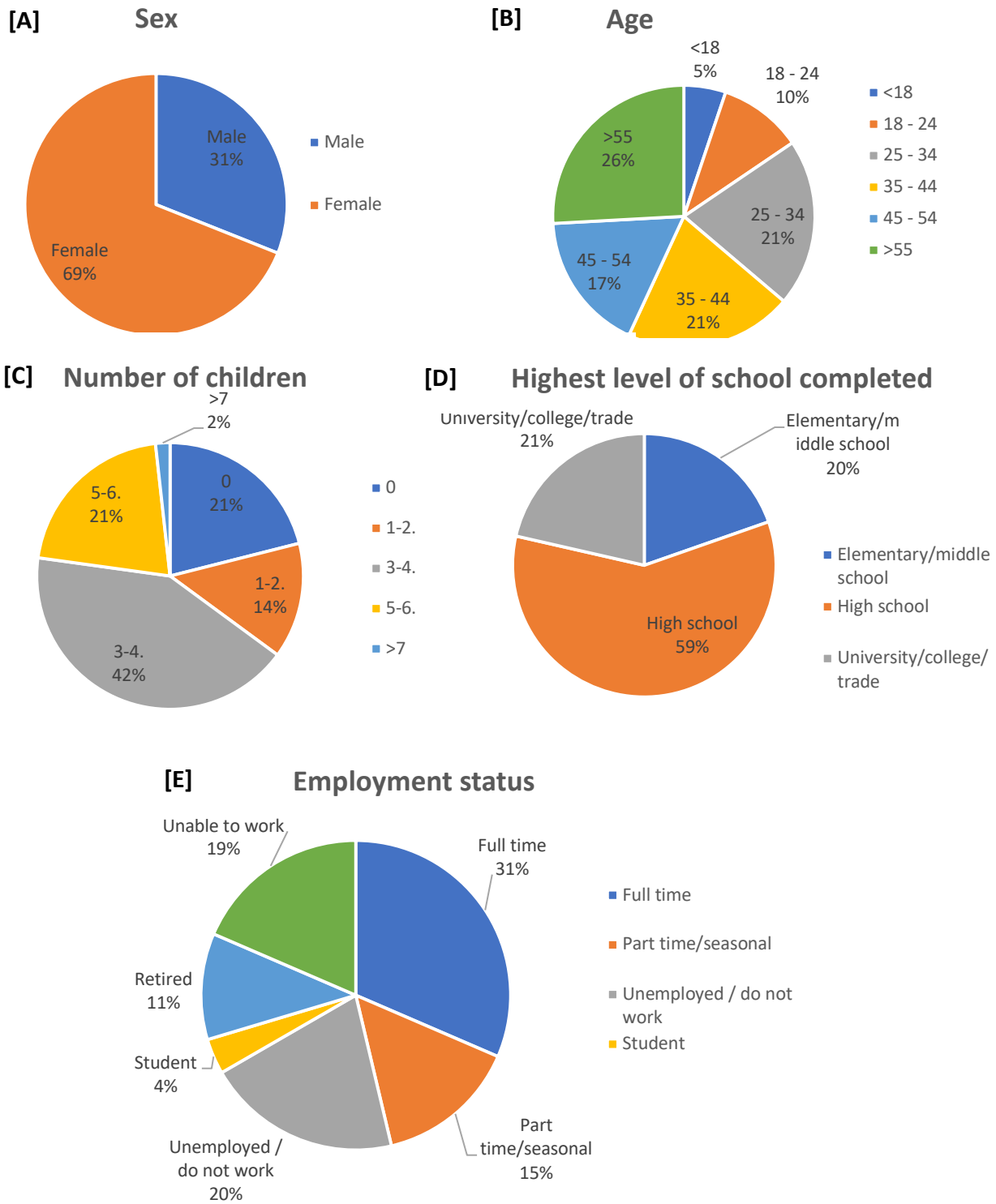


Figure 1. Sandy Bay patient demographics by percentage of [A] Sex, [B] age, [C] number of children, [D] highest level of school completed, and [E] employment status.

The satisfaction category had two questions based on the health care they have received in Sandy Bay and in Portage la Prairie (Figure 2). The satisfaction responses for health care received in Sandy Bay were 3 very unhappy, 1 unhappy, 18 neutral, 31 happy, and 5 very happy. The satisfaction responses for health care received in Portage la Prairie were 2 very unhappy, 12 unhappy, 23 neutral, 15 happy, and 3 very happy.

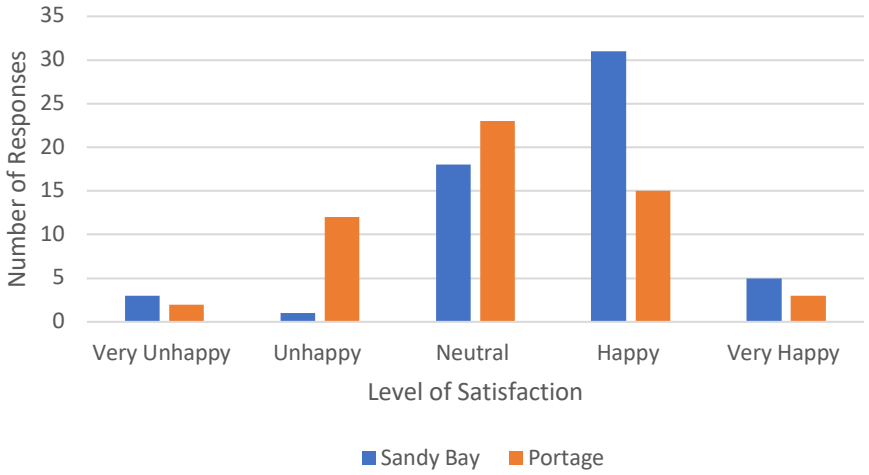


Figure 2. Patients' reported level of satisfaction with health care received in Sandy Bay and Portage la Prairie.

The health status category had multiple questions from which I decided to present the data on four questions, general health status, body pain in the last month, diagnosis of chronic diseases, and adverse health behaviours (Figure 3). For general health responses, 0 people said "very bad", 8 people said "bad", 11 people said "neutral", 33 people said "good", and 4 people said "very good" (Figure 3A). For the level of body pain reported in the last month 14 said "a lot" of pain, 15 said "a little", 14 said "some", 10 said "not much" and 5 said "none" (Figure 3B). For chronic disease diagnoses, 2 people reported cardiac diseases, 4 people reported pulmonary diseases, 18 people reported diabetes, 3 people reported cancer, and 33 people reported none of the diagnoses (Figure 3C). For adverse health behaviours, for daily alcohol consumption 9 people responded "yes" and 46 responded "no", for daily cigarette smoking 27 people responded "yes" and 28 people responded "no", for daily marijuana use 10 people responded "yes" and 45 people responded "no", and for daily use of other illicit drugs 3 people responded "yes" and 52 people responded "no" (Figure 3D).

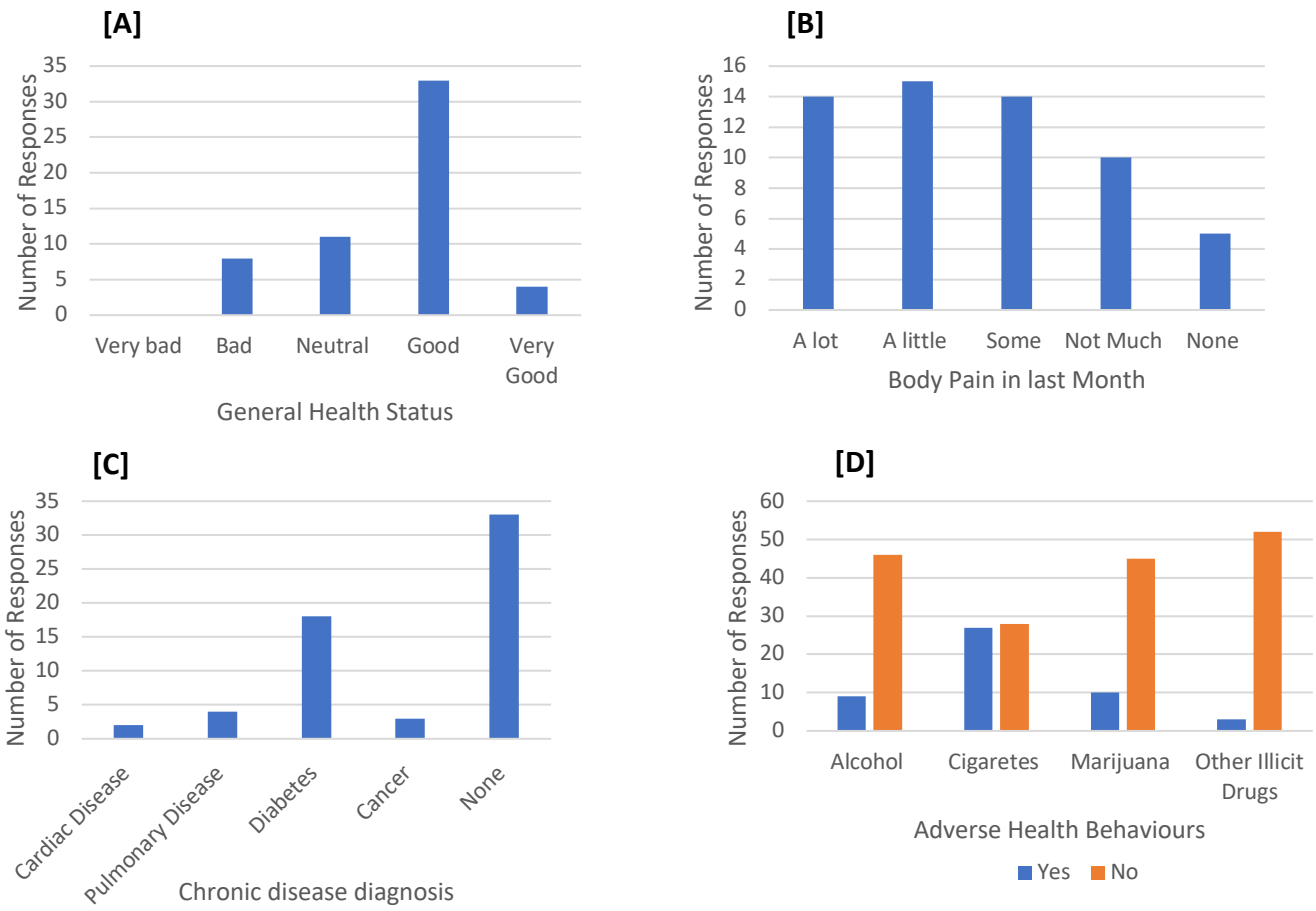


Figure 3. Patients' reported health status questions pertaining to [A] general health status, [B] amount of body pain experienced in the last month, [C] chronic disease diagnoses, and [D] adverse health behaviours.

From the health access and availability category I identified three questions related to their preferred location to see a physician, the level of difficulty of going to Portage la Prairie to see a physician, and their usual method of transportation to the Sandy Bay clinic (Figure 4). Responses for preferred location to see a physician heavily favoured Sandy Bay with 42 votes, followed by Portage with 16 votes, Gladstone with 5 votes, Winnipeg with 3 votes, and 1 vote for other (Figure 4A). Driving to the Sandy Bay Medical Centre was the most common method of transportation with 33 responses, having a family/friend drive them had 15 responses, walking/riding a bicycle had 7 responses, and having the shuttle/taxi/health care worker drive them had 6 responses (Figure 4B). Most people rated that it would be either "very difficult" or "difficult" to be required to go to Portage la Prairie as opposed to Sandy Bay with 16 and 14 responses respectively, followed by "no difference" with 17 responses, "easy" with 6 responses, and "very easy" with 4 responses (Figure 4C).

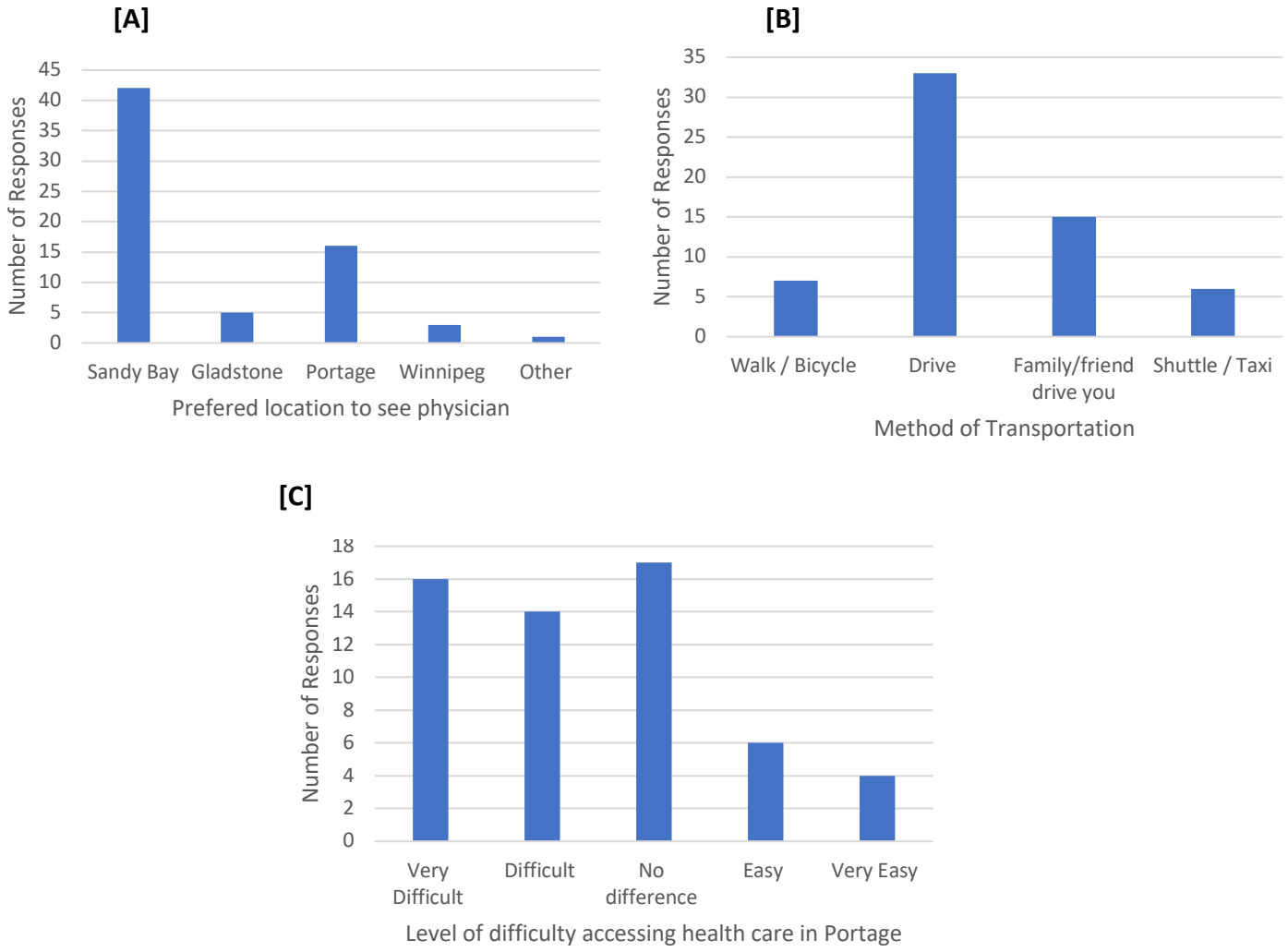


Figure 4. Patients' reported health access and availability questions pertaining to [A] preferred location to see a physician, [B] usual method of transportation to the Sandy Bay Medical Centre, [C] level of difficulty accessing health care in Portage la Prairie as opposed to Sandy Bay.

In the health care use category, the questions were related to how many visits patients had to the Sandy Bay medical centre, Portage Clinic, Portage emergency, and overnight hospital stays in the last six months respectively (Figure 5). With regard to seeking health care in Sandy Bay, 6 people responded with this visit being "1st visit", 27 people responded with "2-3 visits", 11 people responded with "4-5 visits", 9 people responded with "6-7 visits", and 3 people responded with ">8 visits" (Figure 5A). With regard to seeking health care at the Portage Clinic, 22 people responded "0 visits", 24 people responded "1-2 visits", 6 people responded "3-4 visits", 2 people responded "5-6 visits", and 2 people responded ">7 visits" (Figure 5B). With regard to seeking health care at the Portage emergency, 31 people responded "0 visits", 18 people responded "1-2 visits", 5 people responded "3-4 visits", 1 person responded "5-6 visits", and 1 person responded ">7 visits" (Figure 5B). With regard to overnight Portage hospital stays, 46 people responded "0 stays", and 8 people responded with "1 stay" (Figure 5B).

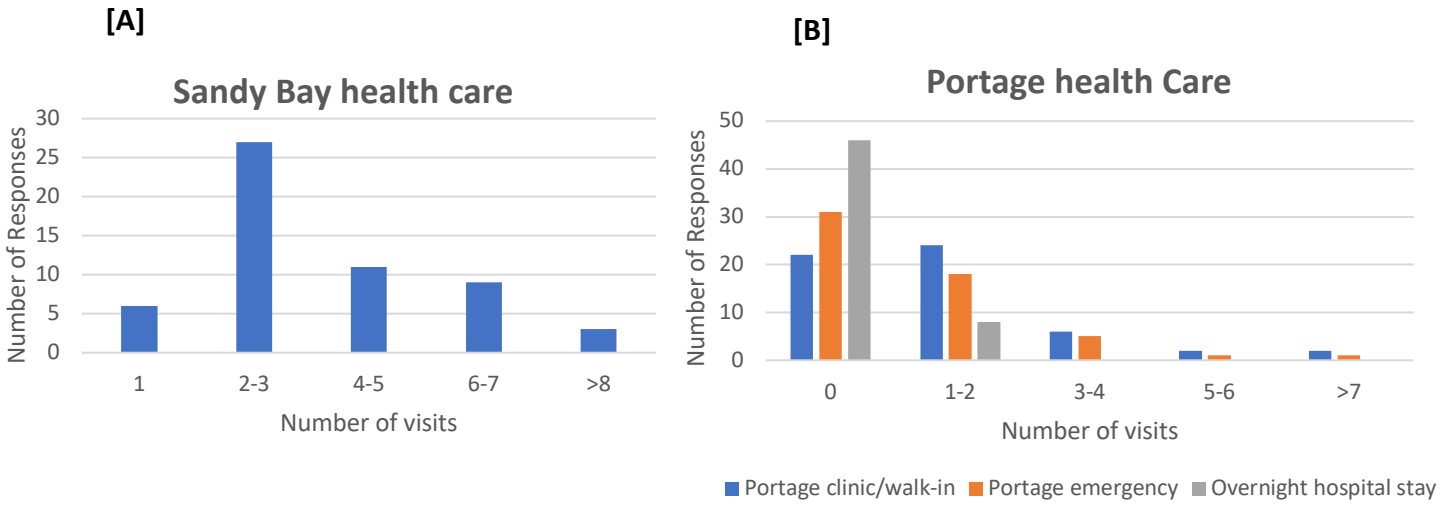
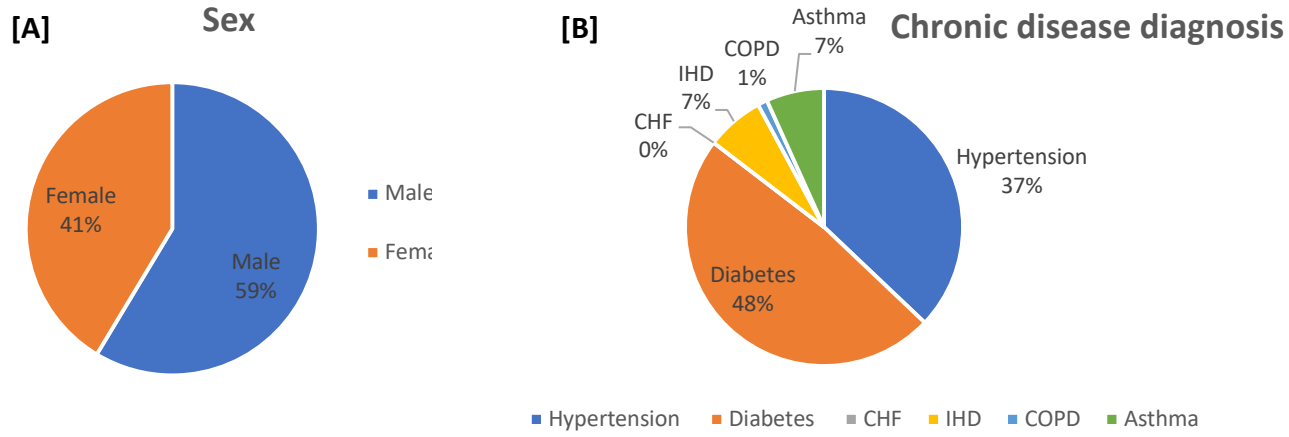


Figure 5. Patients' reported health care use at [A] Sandy Bay medical centre, [B] Portage Clinic, [B] Portage hospital emergency, and [B] Portage overnight hospital stays.

In addition to the patient surveys, an Accuro chart review query was done for Sandy Bay residents of whom Dr. Macklem is the family doctor, operating out of Portage Clinic. The chart review query was based on residents with chronic diseases diagnosed within the last two years and was done to identify 6 major diagnoses; diabetes, hypertension, congestive heart failure, ischemic heart disease, asthma, and chronic obstructive pulmonary disease. The query identified 58 people that matched the qualifiers and identified the sex of the patients, chronic disease diagnosis, and disease co-morbidity (Figure 6). A majority of the patients identified in the search were male, 59% compared to females at 41% (Figure 6A). Based on diagnoses, diabetes was the most common at 48%, followed by hypertension at 37%, Ischemic heart disease (IHD) at 7%, Asthma at 7%, COPD at 1%, and chronic heart failure (CHF) at 0% (Figure 6B). The most patients had a single diagnosis being 50%, followed by having two diagnoses at 45%, and three diagnoses at 5% (Figure 6C).



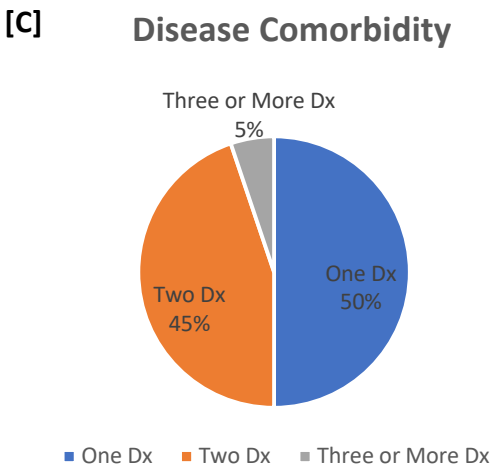


Figure 6. Portage Clinic Accuro chart review query of Sandy Bay residents with chronic diseases (diabetes, hypertension, congestive heart failure, ischemic heart disease, asthma, and chronic obstructive pulmonary disease) diagnosed within the last two years, [A] sex demographic, [B] chronic disease diagnoses, and [C] disease comorbidity.

DISCUSSION

Health equity among First Nations and in particular rural First Nation reserves has consistently been an issue that the Canadian government has raised and committed themselves to achieving. However, this promise has been gravely underdelivered upon. Whether it be the proximal, intermediate, or distal determinants of health, the impact of these social determinants of health have been well documented in delayed seeking of medical care, late presentation of disease, reduced quality of care, poorer outcomes, and early deaths.[1 2,3,4,5,6] As a nation that was built upon the foundation colonialism, we as a country are indebted to the people whom were here first.

The purpose of this study was to construct a community health picture that included both subjective perceptions and objective measures of health in a rural First Nations community that is set to lose their community family physician. Based on the completed patient surveys and the Accuro Sandy Bay patient chart review, this study has identified a number of areas where improvements can be made. Figure 1A highlighted that over two thirds of the people that completed the survey were women. Which when viewed alongside of Figure 1B gives the impression that the age of the patients were fairly evenly distributed between the ages of 25-55+. However, it is misleading because a majority of those that filled out the survey were mothers of the young children for whom the appointments were actually for. This concept is reflected in Figure 1C which shows that most people (42%) have between 3-4 children. Figures 1D and E also support the previously listed data on low socioeconomic status as a majority (79%) of the people have a grade 12 education of less and a majority (54%) of the population is not currently employed due to unemployment, inability to work, student, or retired. In summary, Figure 1 identifies a young population, with many children, and a large

number of adults without a source of income. The combination of these demographics in a population is the manifestation of a racialized low socioeconomic status for which there is a documented association between poverty and adverse childhood experiences to disease onset in adulthood.[11,12,13]

Figure 2 shows that the people at Sandy Bay are largely happy with the health care they receive in the community, where as they are more neutral for the care received at Portage la Prairie. This could be due to a multitude of reasons including ease, accessibility, transportation, level of comfort, cultural safety, severity of injury and more. As the community family physician has been traveling to the community for 33 years, level of comfort with the attending physician is likely a factor and one that will soon be gone. Figure 3A, B, C and D give some insight into the types of patients who come to the medical centre. Most are generally in self-reported good health who present with some chronic diseases and a lot of acute pain and illnesses. Diabetes is by far the most common chronic disease in the community; therefore, a large proportion of visits include diabetes management (medications, diet and lifestyle modification, blood glucose monitoring, symptom management, foot care). Smoking cessation is also common in visits as it presents a large burden to disease management and the production of second hand smoke in cramped households. Figure 5 A and B also reflect the level of acuity and chronicity of patients concerns, as the majority reported between 2-3 visits to the clinic over a 6-month period. However, there was still a relatively large population that reported more than 6 visits in the same period. It also showed that most people in the same period of time did not go to Portage la Prairie for care.

Figure 4A related to access and availability of health care identified that most people prefer to seek health care in Sandy Bay as opposed to other locations such as Portage la Prairie, Gladstone, or Winnipeg. This with Figure 4B, people also report that being required to go to Portage la Prairie for all health care would be either very difficult or difficult. This is despite most people already reporting in Figure 4C that they get to the Sandy Bay medical centre by driving. Therefore, the issue of accessibility is more than simply having access to a car. With the clinic in the community, people are able to easily bring their children with them or sign-in their name at the beginning of the clinic period and come back later for their appointment. If all were required to drive the hour to portage and wait for their scheduled appointment or a walk-in slot it would be much harder. As previously mentioned, the lower socioeconomic status of people in the community would also be negatively affected by this change.

The Accuro chart review in Figure 6 A, B, and C were done to generate a larger picture of the chronic diseases in the community to supplement the survey as they may be missed based on the population that attends the Sandy Bay medical centre versus the Portage Clinic. This population was largely male (59%) and again the most common chronic disease measured was diabetes followed by hypertension. As this population is likely on average more ill than the population attending the Sandy Bay medical centre the prevalence of increased disease comorbidity was not surprising, with it split 50-50 between patients having a single diagnosis and those with two or more.

Recommendations

Based on the findings identified in this report, it is clear that there is more that needs to be done in terms of reaching health care equity for rural First Nations populations. The first recommendation that needs to happen is an improvement to the infrastructure currently in place in the Sandy Bay health centre. The health centre functions independently from the Portage Clinic, in that all the charts at the health centre are still written by hand and stored as paper copies without access to Accuro electronic medical records (EMRs). If the medical centre functioned similarly to the one in Elie (a full satellite to Portage with integrated EMR) or even Gladstone (partial satellite with Accuro but not integrated) the level of care deliverable to patients would be increased greatly. This is especially concerning in the setting of the retirement of the community doctor, as it would be too much for any new doctor starting out there to properly read through. If an integrated EMR was to be implemented it would facilitate better tracking of patient progress, medications, past medical history and transfer to portage and other Southern Health-Santé Sud hospitals. The limiting factor here are the costs involved in starting, operating and maintaining a full satellite clinic requiring a high-speed internet connection and full support from the operators of the medical centre. The second recommendation is to improve the diagnostic tools available in the medical centre, which would include blood draws and an on-site lab. For anything more than a urine culture, pregnancy test, blood glucose, and crude hemoglobin estimation, all lab work for patients must be done in Portage la Prairie or Gladstone. This presents a large barrier for patients as these are often not followed up with. A lab on site with a person trained to draw blood would help with the continuation of care and follow-ups. The final recommendation is that there be a more permanent nurse practitioner, or a physician stationed there. Currently there is only a doctor there 2-3 afternoons per week, with a corresponding patient volume that can exceed 40 people in that time period. With a more permanent health care practitioner stationed there, the patient demand on a single day would be much more manageable. If recommendations one and two are implemented, it would present a better situation for retaining a health care professional, who will know the patients better, and thus be able to deliver better overall care.

Limitations

The limitations of this study include the smaller sample size of 58 patients who filled out the community health assessment survey in Sandy Bay. Another is related to the survey it-self as there were people who did not want to participate in the survey for whatever reason which could present some selection bias in the population that did opt to complete the survey. Finally, the last limitation has to do with the chart review. The query was designed to identify any patient that was diagnosed with diabetes, hypertension, congestive heart failure, ischemic heart disease, asthma, or chronic obstructive pulmonary disease in the last two years, who was a resident of Sandy Bay, and a patient of Dr. Macklem. However due to system updates and incomplete labeling of chronic disease diagnoses in a select tab, many of those included in the study were in fact diagnosed with their disease much earlier than within the last two years. By the same though process, I suspect that there were also may patients missed by the query due to mislabeling. This is likely why the percentage of asthma, COPD, IHD, and CHF are underrepresented.

CONCLUSION

Health equity among all Canadians is topic that will only continue to grow over the coming years. With more people moving to larger urban centres, there is a pressure to keep the smaller rural hubs to date. Rural First Nations reserves are often the first the feel the effects of health inequity due to distal determinants of health that include colonialism, racism, social exclusion, and self-determination. These manifest as delayed seeking of medical care, late presentation of disease, reduced quality of care, poorer outcomes, increased acute and chronic diseases and early deaths. In order to close the health care inequity gap more needs to be done to update and maintain current clinics situated in or near First Nations communities. Be it through infrastructure, technology, or health care practitioners, the current Sandy Bay medical centre requires major improvements, or else outcomes and patient care will continue to worsen before they improve.

REFERENCES

1. Jacklin KM, Henderson RI, Green ME, Walker LM, Calam B, Crowshoe LJ. Health care experiences of Indigenous people living with type 2 diabetes in Canada. *CMAJ*. 2017;189(3):E106-E112. doi:10.1503/cmaj.161098
2. Paradies YC, Cunningham J. The DRUID study: Racism and self-assessed health status in an indigenous population. *BMC Public Health*. 2012;12(1):131. doi:10.1186/1471-2458-12-131
3. Veenstra G. Racialized identity and health in Canada: Results from a nationally representative survey. *Soc Sci Med*. 2009;69(4):538-542. doi:10.1016/j.socscimed.2009.06.009
4. Anderson I, Robson B, Connolly M, et al. Indigenous and tribal peoples' health (The Lancet–Lowitja Institute Global Collaboration): a population study. *Lancet*. 2016;388(10040):131-157. doi:10.1016/S0140-6736(16)00345-7
5. Czyzewski K. Colonialism as a Broader Social Determinant of Health. *Int Indig Policy J*. 2011;2(1). doi:10.18584/iipj.2011.2.1.5
6. Reading C, Wien F. National Collaborating Centre for Aboriginal Health Centre De Collaboration Nationale De La Santé Autochtone. 2009. www.nccah-ccnsa.ca.
7. United Nations. Declaration on the Rights of Indigenous Peoples United Nations. *Resolut Adopt by Gen Assem 13 th Sept*. 2007. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.
8. CIHI. *How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants*.; 2006. doi:http://www.phac-aspc.gc.ca/publicat/rural06/pdf/rural_canadians_2006_report_e.pdf
9. Population Statistics 2018 | Southern Health-Santé Sud. 2019;(April).
10. Southern Health - Santé Sud [SRHA]. A picture of our health. Community Health Assessment. 2014:1-242. http://www.southernhealth.ca/data/cha/21/2014 Community Health Assessment_Southern Health-Sante Sud_FINAL.pdf.
11. Felitti VJ, Anda RF, Nordenberg D, et al. Household Dysfunction to Many of the Leading Causes of Death in Adults The Adverse Childhood Experiences Study. *Am J Prev Med*. 1998;14(4):245-258.
12. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *Lancet*. 2009;374(9683):65-75. doi:10.1016/S0140-6736(09)60914-4
13. Harasemiw O, Milks S, Oakley L, et al. Remote Dwelling Location Is a Risk Factor for CKD Among Indigenous Canadians. *Kidney Int Reports*. 2018;3(4):825-832. doi:10.1016/j.ekir.2018.02.002

APPENDIX 1.

Sandy Bay Community Health Assessment

This survey is voluntary and anonymous – DO NOT write your name

My name is Zac Penner, I am a 2nd year Metis medical student working in Portage for the summer. The purpose of this study is to collect health responses from community members to be used in my summer research project, measuring health perception in Sandy Bay.

Your responses are greatly appreciated, thank you/miigwetch

1. Demographics – circle answers that applies to you
   a. **Age**

      Under 18 | 18 - 24 | 25 - 34 | 35 - 44 | 45 - 54 | Over 55

   b. **Home**

      Sandy Bay | Surrounding area / off reserve | Visiting / other

   c. **Sex**

      Male | Female | Prefer not to say

   d. **Marital Status**

      Single/dating | Living with partner | Married | Divorced | Widowed

   e. **# of Children**

      0 | 1 – 2 | 3 – 4 | 5 – 6 | Over 7

   f. **Highest level of school completed**

      Elementary – Middle school | High school | University / College / Trade

   g. **Job status**

      Full time | Part time / Seasonal | Unemployed/ do not work | Student | Retired | Unable to work

2. Satisfaction – Fill in the blank
   a. In general, you are _____ with health care **in Sandy Bay**?

      Very unhappy Unhappy Neutral Happy Very Happy

   b. In general, you are _____ with health care **in Portage la Prairie**?

      Very unhappy Unhappy Neutral Happy Very Happy

3. Health Status – Fill in the blank
   a. In general, would you say your health is _____?

      Very bad Bad Neutral Good Very Good

   b. Compared to other people your age, your health is _____?

      Worse Same Better

   c. How much body pain have you experienced in the past month?

      A lot A little Some Not much None

   d. Has your health ever limited you doing _____?
      - ○ Nothing / Not limiting at all
      - ○ Moderate / intense activity
      - ○ Walking up stairs
      - ○ Walking around
      - ○ Eating, dressing, bathing, using the toilet

   e. Have you been diagnosed with any of the following? - check all boxes that apply
      - ○ **None**
      - ○ **Heart disease** (hypertension, heart attacks, strokes, heart failure)
      - ○ **Lung diseases** (asthma, COPD, lung fibrosis)
      - ○ **Diabetes**
      - ○ **Cancer** (any type)

   f. Do you use any of the following regularly (every day)? – check boxes that apply

	Yes	No
Drink alcohol		
Smoke cigarettes		
Smoke marijuana/weed		
Other drugs (specify)		

4. Health Access and Availability
   a. Do you have a regular doctor (Dr. Macklem at Sandy Bay counts)?

      No Yes

   b. How do you usually get to the Sandy Bay clinic? – check all that apply
      - ○ Walking or bicycle
      - ○ ATV/ 4-wheeler
      - ○ Drive a Car
      - ○ Have family/friend drive
      - ○ Shuttle/taxi/picked up by health care worker

   c. Your preferred location to see a doctor is in _____?

      Sandy Bay Gladstone Portage Winnipeg Other

   d. Going to Portage to see a doctor instead of Sandy Bay would be _____?

      Very difficult Difficult No difference Easy Very easy

5. Health Care Use – circle answers that applies to you
   a. Number of visits to the **Sandy Bay medical centre in the last 6 months**?

      1st time 2 – 3 4 – 5 6 – 7 Over 8

   b. Number of visits to the **Portage clinic or walk-in in the last 6 months**?

      0 1 – 2 3 – 4 5 – 6 Over 7

   c. Number of visits to the **Portage hospital emergency department in the last 6 months**?

      0 1 – 2 3 – 4 5 – 6 Over 7

      If yes, what was the reason: _____

   d. How many times have you **stayed overnight in a hospital in the past 6 months**?

      0 1 – 2 3 – 4 5 – 6 Over 7

      If yes, how long did you stay: _____