

A Strengths-Based Profile of Aging in First Nations Communities



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FNIGC Research Series

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FNIGC is a First Nations-led organization committed to gathering and disseminating data that reflects the diversity of life in the 634 First Nations reserve and Northern communities across the country. It has a mandate to oversee data collection on First Nations reserves and Northern communities, and envisions that every First Nation will achieve data sovereignty in alignment with its distinct worldview.

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Executive Summary



The number of First Nations people in Canada aged 60 years and older is expected to grow at a faster rate than non-First Nations populations. As the number of older First Nations people continues to increase, so too will the number of people experiencing chronic conditions and health-related activity limitations. This report presents a holistic and strengths-based profile on aging and wellness in First Nations communities and will be used to inform policy, advocacy and program development in First Nations communities and organizations.

This profile is based on the analysis of national-level data provided by the First Nations Information Governance Centre's (FNIGC) First Nations Regional Health Survey Phase 3 (RHS Phase 3) and the First Nations Regional Early Childhood, Education and Employment Survey (FNREEES). Specifically, this profile is based on data describing the experiences of First Nations seniors aged 55 and older who live in First Nations reserve and Northern communities. Associations and outcomes of wellness indicators are broken down by sex and age groups.

Self-reported health and self-reported mental health are two of the three primary health outcome indicators used to analyze the data. A third outcome variable, "holistic balance," is a composite derived from variables indicating self-reported balance in four areas: physical, mental, emotional, and spiritual balance.

Bivariate associations between independent and outcome variables were further examined using logistic regressions adjusting for age and sex. To help in the interpretation and contextualization of the results from these analyses, preliminary findings were presented for discussion to a group of First Nations community health care providers and Knowledge Holders in webinar format.

Physical health is only one of several factors associated with self-reported feelings of wellness among First Nations seniors. First Nations seniors consider emotional, spiritual, mental and physical health to

be integral to holistic understandings of wellness. Accordingly, efforts to optimize wellness among First Nations older populations should consider the balance between all four spheres of health. A strengths-based vision of aging for First Nations seniors must consider holistic wellness and community factors to support seniors in achieving balance across these diverse areas of their lives.

Key Findings

- With increasing age, lower proportions of First Nations seniors reported having good-to-excellent general health, yet holistic balance and self-rated mental health did not change significantly across age categories.
- Controlling for age and sex, factors associated with the highest odds of good-to-excellent general health among First Nations seniors include having a high level of mastery¹, currently working, having good work-life balance and feeling valued at work (among those currently working)², having a university education or higher, being physically active, and being food secure.
- Controlling for age and sex, factors associated with the highest odds of good-to-excellent mental health include currently working, having good work-life balance and feeling happy at work (among those currently working), having a high level of mastery, having a university education or higher, having good social support, having good health care services available in the community, eating a nutritious balanced diet, and having a strong sense of belonging to the community.
- Controlling for age and sex, factors associated with the highest odds of feeling holistically balanced include having a high level of mastery, having a strong sense of belonging in the community, having good social support, having a university education or higher, being food secure, eating a nutritious balanced diet, and feeling valued at work (among those currently working).

¹ A measure of how much one perceives themselves as being in control of forces that significantly impact their life.

² Some variables and their related findings apply only to seniors who were employed at the time of the survey. Regression findings control for age and sex; therefore, work-related associations remained regardless of age group.

Introduction



Population projections show that the number of Indigenous people in Canada is expected to exceed 2.5 million persons by 2036 (Statistics Canada, 2017a). A disproportionate amount of the growth will be among those aged 65 and older, which is expected to more than double by 2036 (Statistics Canada, 2017a). As the numbers of older First Nations people continue to grow, so too will the number of people experiencing chronic conditions and health-related activity limitations. This shifting population age structure will likely have a large impact in First Nations communities, many of which have not yet established effective community-wide aging strategies and lack the supports required for managing complex medical needs that arise from multi-morbidity and frailty³ in older populations (First Nations Information Governance Centre [FNIGC] & Walker, 2017).

Wellness is often framed in relation to sickness and is frequently described through medicalized, deficit-based lenses (Keyes, 2002). Previous studies have contributed important findings to the knowledge base of frailty, chronic health conditions and other important factors that may contribute to or are negatively associated with aging experiences among First Nations people (FNIGC & Walker, 2017). However, one of the keys to preparing First Nations communities for the increase in numbers

of seniors is to understand the key determinants of wellness throughout the life course from First Nations' perspectives. By focusing on wellness and its key determinants using a strengths-based approach, this report will help prepare communities to care for their older populations and inform their policy programs and services.

A strengths-based approach to aging is complementary to First Nations' perspectives of health and wellness (Lind & Smith, 2008). The First Nations Information Governance Centre's Regional Health Survey (RHS) cultural framework encompasses "the total health of the total person in the total environment" (FNIGC, 2018a, p. 8). Exploring well-being in its entirety thus requires looking at strengths—not just deficits. In the spirit of the RHS cultural framework, the goal of this research is to provide a comprehensive, analytic, and strengths-based profile on aging in First Nations communities. Its purpose is to help inform policy, advocacy, and program development in First Nations communities and organizations. This report presents an analysis of aging-related health and wellness indicators using national-level data from the First Nations Regional Health Survey Phase 3 (RHS Phase 3) and the First Nations Regional Early Childhood, Education and Employment Survey (FNREEES).



³ Frailty is a broad concept used to describe an individual's state of health. Someone who is considered "frail" experiences a reduction in physiological reserve, a limited ability to resist environmental stressors, has an increased risk of functional decline and is otherwise considered vulnerable (Bergman et al., 2007; Strandberg & Pitkala, 2007).

Literature Review



Demographics

Demographically, First Nations are experiencing a dual phenomenon: overall, they have notably younger populations than the national average and yet have a faster growing number of seniors (Rosenberg et al., 2009; Wilson, Rosenberg, & Abonyi, 2011). According to 2015 projections prepared by Statistics Canada, the proportion of Registered Indians⁴ aged 65 and older could almost triple, increasing from 5.7% in 2011 to between 14.2% and 15.5% in 2036, depending on the projection scenario (Morency, Caron-Malenfant, Coulombe, & Langlois, 2015).

Figure 1 below illustrates the age structure of the First Nations population compared to the non-Indigenous Canadian population and effectively highlights the comparably younger First Nations population (Statistics Canada, 2017d). In 2016, the average age was 30.6 years for First Nations, which is ten years younger than the average age among the general Canadian population (40.9 years) (Statistics Canada, 2017d). One-third of the First Nations population was 14 years of age or younger, whereas 6.4% was 65 years of age and older (Statistics

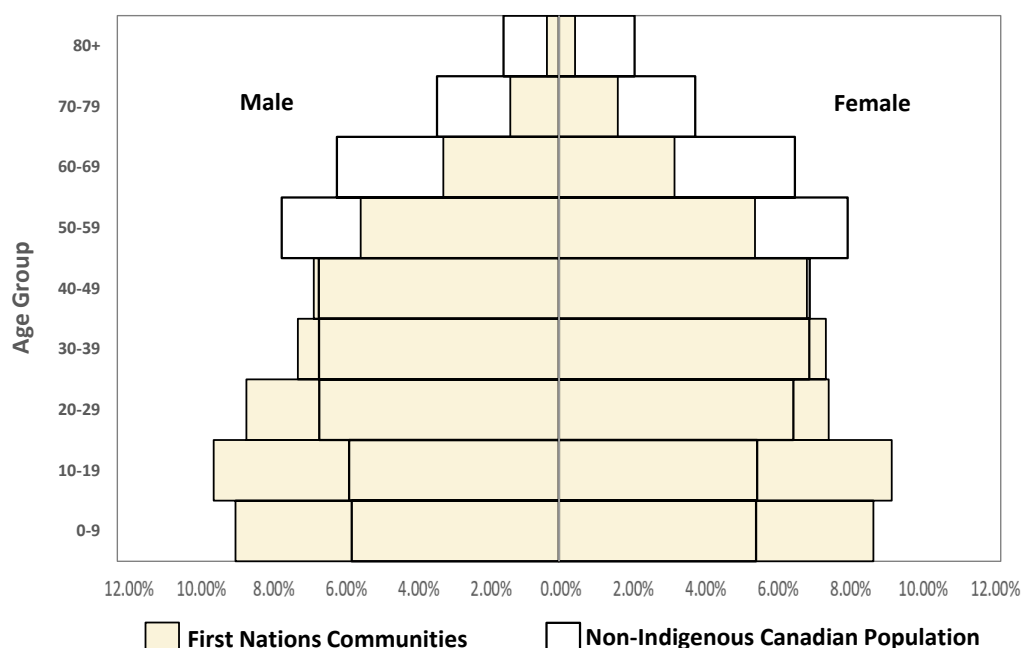
Canada, 2017a). This difference in population structure speaks to the urgency in preparing communities for the inevitable health, policy, and programming needs that a large, aging population will require.

Health Status of First Nations Seniors

Important sociodemographic factors that influence wellness among older First Nations populations include high rates of frailty (FNIGC & Walker, 2017), difficulties accessing health care services (Beatty & Berdahl, 2011; Beatty & Weber-Beeds, 2013; Ryser & Halseth, 2012; Simon, 2010), lack of pension plans (Obeng Gyimah, White, & Maxim, 2004), disproportionately low life-expectancies (Public Health Agency of Canada, 2016; Wilson, Rosenberg, & Abonyi, 2011), and higher rates of co-occurring chronic illnesses (O'Donnell, Wendt, & National Association of Friendship Centres, 2017).

Compared to Inuit (43%), Métis (55%), and off-reserve First Nations populations (56%), First Nations individuals living on reserves are more likely to report having at least one chronic health condition (63%) (MacDonald, Ward, & Halseth, 2018). First Nations

Figure 1: Population pyramid comparing the proportions, by sex and ten-year age increments, of First Nations living on reserves and in Northern communities and the non-Indigenous Canadian populations in 2016



Source: Statistics Canada Census of Population 2016; First Nations Information Governance Centre RHS Phase 3 tabulations, 2020.

⁴ “Registered Indian” is a legal classification – or “status” – under the Indian Act and refers to First Nations individuals who have this status.

people who live on reserves are also more likely to report high blood pressure and obesity compared to First Nations people who live off reserves and other non-First Nations populations (MacDonald, Ward, & Halseth, 2018). Diabetes is a particularly prevalent chronic condition: the prevalence of diabetes in First Nations communities is three times higher than that of the general Canadian population (Halseth, 2019). Accordingly, First Nations people are more likely to develop diabetes-related complications, and this is especially true for those who live in rural or remote communities (Halseth, 2019).

In part, a high rate of co-occurring chronic health conditions contributes to high rates of frailty. Indeed, First Nations adults are more likely to become frail at earlier ages than adults in the general Canadian population (FNIGC & Walker, 2017). The onset of frailty for First Nations adults living on reserves typically occurs in middle age, between 35 and 64 years of age, rather than after age 65 for the general population (FNIGC & Walker, 2017).

Despite the evidently high risk for severe chronic health conditions, such as diabetes, and frailty, First Nations seniors often self-rate their well-being as good, even if their physical health is sub-optimal (FNIGC & Walker, 2017; Halseth, 2018; Wilson, Rosenberg, & Abonyi, 2011). This apparent contradiction illustrates the importance of looking beyond the usual indicators of physical health, illness, and frailty and considering other factors that may contribute to First Nations seniors' wholistic well-being.

Social Determinants of Health

The health status of First Nations seniors must be set in the context of the broader social determinants of health. By every measure of the social determinants of health, First Nations people across Canada generally fare worse than other populations, on average (Kolahdooz, Nader, Kyoung, & Sharma, 2015). For example, poverty⁵—a known determinant of overall physical health that also affects other social determinants of health—disproportionately impacts the well-being of Indigenous people, including First Nations populations (Beatty & Berdahl, 2011; Public Health Agency of Canada, 2016; Wingert, 2013). The proportion of First Nations people who experience low income⁶ (30%) is twice that of non-

Indigenous Canadians (15%) (Statistics Canada, 2016).

Restrictions under the Indian Act and other colonial policies and structures have given rise to systemic inequalities faced by First Nations (Greenwood, Reading, Lindsay, & de Leeuw, 2015). Colonialism and racism are distal determinants of First Nations people's health, in that they are the root cause of disparities for factors like education, food security, and income (Reading & Wien, 2009). Poverty can be linked to significantly increased likelihood of diabetes and obesity due to a shift in food sources, post traumatic stress and depression, along with other social impacts (Hovey, Delormier, & McComber, 2014; Reading, 2009; Reading & Wien, 2009).

Housing and food security, two income-related social determinants of health, also have the potential to negatively impact the quality of life for seniors. Housing is still a significant unmet need in First Nation communities. More than one-third (36%) of First Nations people who live on reserves, and 20% of those who live off reserves, live in homes that require significant repairs (Kelly-Scott, 2016). Additionally, according to Statistics Canada, nearly one-quarter (23.1%) of First Nations people lived in crowded housing in 2016 (Statistics Canada, 2017b). The proportion of First Nations people with Registered or Treaty Indian Status living in a crowded dwelling was higher on reserves (36.8%) than off reserves (18.5%) (Statistics Canada, 2017b). However, when asked to report on the number of rooms and individuals living in their households, more than 90% of First Nations seniors living on reserves and in Northern communities report that they do not live in a crowded (i.e., more than one person per habitable room) home (FNIGC & Walker, 2017).

Food security—defined as having reliable access to sufficient, affordable, and nutritious food—is also closely linked to poverty (Public Health Agency of Canada, 2016). The geographic location of a community also influences food security. According to the Public Health Agency of Canada, slightly more than half of First Nations adults living on reserves reported that they were at least moderately food insecure (Public Health Agency of Canada, 2016). However, almost 63% of First Nations seniors report being food secure (FNIGC & Walker, 2017). This suggests that there may be other factors which have yet to be identified that help mitigate low-

⁵ Poverty has many definitions but can be understood as “the condition of a person who is deprived of the resources, means, choices, and power necessary to acquire and maintain a basic level of living standards and to facilitate integration and participation in society” (Government of Canada, 2018, *Chapter 1: Opportunity for all*, para. 2).

⁶ Low income is defined as “any income that is less than half of a country's average income, calculated after taxes and transfers” (Public Health Agency of Canada, 2016, p. 22).

income conditions for First Nations seniors, and thus help this population age well.

Other social determinants that inform the well-being of First Nations seniors include language, culture, belonging, and kinship ties. These are meaningful protective factors that support wellness (Greenwood et al., 2015). Consequently, Pace and Grenier (2017) have suggested that the understanding of successful aging among Indigenous populations be broadened to include health and wellness, empowerment and resilience, engagement, and connectedness.

Continued use of language and connection to First Nations culture are signs of resilience among First Nations seniors. Recent data suggests that First Nations seniors aged 65 and older are more likely to speak an Indigenous language than their younger counterparts: As of 2016, 35.6% of First Nations seniors could speak an Indigenous language, compared with 24.5% in the 25–64 age group, 16.5% in the 15–24 age group, and 15.8% in the 0–14 age group (Statistics Canada, 2017c). The First Nations Regional Health Survey Phase 2 (RHS Phase 2) data, collected in 2008–2010, showed that a majority (50.5%) of First Nations seniors indicated that Traditional Spirituality is very important in their lives (FNIGC, 2012). In consideration of the reality that 43.9% of the same population reported having attended Residential School, the large proportion of those who believe spirituality is important is significant (FNIGC & Walker, 2017). First Nations seniors who attended Residential School as children experienced

isolation from their family and community, loss of cultural identity and language, and multiple forms of abuse (Reading & Wien, 2009). Enduring connections to language, culture, and community among First Nations seniors are testaments to the resilience of this population.

Policy Connections

Canada's National Framework on Aging (Health Canada, 1998) presents a multi-faceted perspective on healthy aging that allows for a broader interpretation of the contributors to overall well-being. According to this framework, healthy aging includes experiences of dignity, independence, participation, fairness, and security (Turcotte & Schellenberg, 2006). These goals, in turn, are supported by health and income security, ongoing learning and contributing to society, and community-based care (Turcotte and Schellenberg, 2006). This nuanced approach, which recognizes “the contributions of economic, social, psychological and physical factors on health,” has much in common with First Nations conceptualizations of wholistic well-being (Turcotte and Schellenberg, 2006, p. 244). The synergy between *Canada's National Framework on Aging* and wholistic, strengths-based conceptualizations of healthy aging may open up opportunities for evidence-based policy reform. This report seeks to contribute to this dialogue by offering a strengths-based profile of aging among First Nations seniors which presents a picture of the major factors that support their health and wellness.



Methods



Overview

This report uses quantitative and qualitative methods to generate a comprehensive picture of well-being, health, and social determinants of health among First Nations seniors aged 55 and older living on reserves and in Northern communities.

The quantitative component includes an analysis of associations between age, sex, and indicators relevant to the above topics, while the complementary qualitative component engaged Knowledge Holders and Subject Matter Experts (SMEs) on seniors' wellness and culture in First Nations communities in order to ensure that the analysis findings appropriately reflect the data needs and lived experiences of First Nations peoples.

Quantitative Component: Data Analysis

The quantitative component of this report is based on analyses of data from the FNIGC's First Nations Regional Health Survey Phase 3 (RHS Phase 3), and the 2013/15 First Nations Regional Early Childhood, Education and Employment Survey (FNREEES). Both RHS Phase 3 and FNREEES are cross-sectional surveys of First Nations children, youth and adults living on First Nations reserves and in Northern communities across Canada. The surveys are designed to collect information that is representative of on-reserve First Nations populations in all provinces and territories (except Nunavut). Data collection for the third phase of the RHS was conducted between March 2015 and December 2016. FNREEES data collection was conducted between fall 2013 and spring 2015. Surveys were typically self-administered in the home using customized computer-assisted personal interviewing (CAPI) software on laptop computers, although fieldworkers were present to offer assistance or translation as needed. Aggregated data for participants aged 55 or older were analyzed to develop a profile of wellness of First Nation seniors who live in First Nations communities.

The sampling frame for each survey was based on Indigenous and Northern Affairs Canada (INAC)⁷ Indian Registry counts of those living on a reserve or on

Crown land. The sample designs used complex sampling that incorporated a two-stage sampling strategy. The first stage involved the selection of communities to participate in the survey. First Nations communities were stratified by region, sub-region and community size. The size of communities was determined by community population and were categorized into small (fewer than 300 people), medium (300 to 1,500 people) or large (more than 1,500 people) communities. Large communities were automatically included in the sample, while medium and small communities were randomly selected with equal probability within their respective strata. Communities with a population of less than 75 were not included in the survey. The second stage of the sampling process pertained to the random selection of individuals within age and sex groups in each community in the national sample. Community members were identified using band membership lists. Individual responses were then weighted using the INAC Indian Registry counts to reflect the representation of the population (FNIGC, 2018a).

The RHS Phase 3 achieved a 78.1% response rate, surveying 23,764 individuals in 253 communities in total (FNIGC, 2018a, p. 13), while the FNREEES surveyed a total of 20,428 individuals in 243 communities, achieving a 69.5% response rate (FNIGC, 2016, p. 8). The RHS Phase 3 and FNREEES final datasets included 12,137 and 9,428 adults, respectively. However, as mentioned above, only a subset of each sample (those aged 55 years and older) was analyzed for this report.

IBM SPSS version 24 (or higher) was used for all analyses. Proportions of categorical variables were estimated overall and by age groups and sex. Estimates were weighted and confidence intervals were calculated using the SPSS Complex Samples Module. The module goes beyond the simple-random sampling assumptions of standard statistical analyses, producing estimates based on the relevant details of the sample's design. The weights and specifications of the RHS Phase 3 and FNREEES's complex stratified samples were programmed into the module to produce appropriate design-based variance estimates.

⁷ In 2017, INAC was dissolved into two separate departments: Indigenous Services Canada (ISC) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC).

For statistical reliability, the estimates with a coefficient of variation (CV) between 16.6% and 33.3% reflect moderate to high sampling variability and were noted with an 'E' to advise cautious interpretation. The estimates with a coefficient of variation (CV) greater than 33.3%, reflecting extreme sampling variability, or cell counts less than 5, for both confidential and statistical reliability, were suppressed (denoted by an 'F' within tables). In some instances, estimates are suppressed to avoid residual disclosure, which is deduction of suppressed estimates in the table based on available information (i.e., where estimates sum to 100% and a single suppressed estimate can be calculated by subtracting available estimates from this total). These are also noted with an 'F'.

For the bivariate analyses, including crosstabulations in Tables 1-52, the difference in proportional estimates between groups or categories is considered statistically significant if the 95% confidence intervals for each estimate do not overlap. Where confidence intervals do overlap, differences in estimates may still be presented; however, they are not to be interpreted as statistically significant.

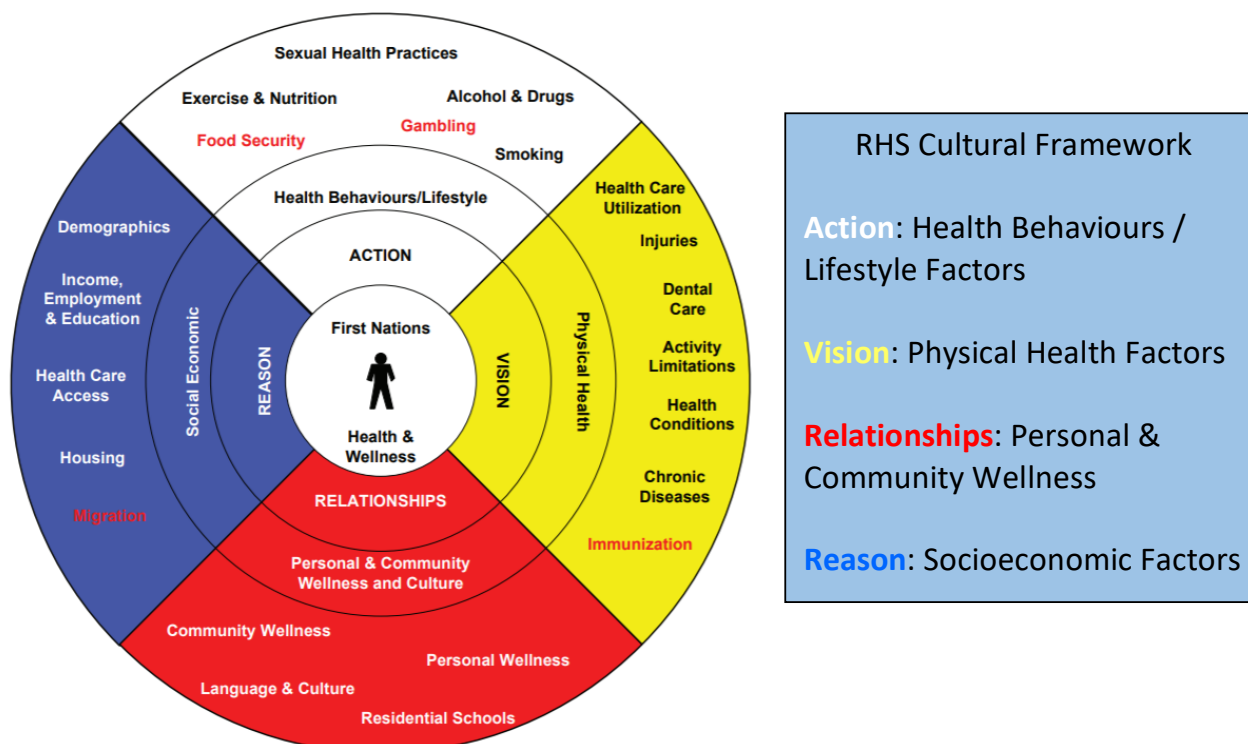
In order to avoid multi-collinearity⁸, separate logistic regression models were also carried out for each independent variable to identify potential associations

between independent and dependent variables (i.e., wellness outcome indicators). Age and sex adjusted odds ratios (OR) were also calculated for all logistic regression models to account for any effect on the association that could be attributable to age and/or sex and not the independent variable itself. When an OR is less than 1, the odds of a predicted outcome (e.g., having good self-reported health or wholistic balance) are lower for the corresponding group than for the reference group; when the OR is equal to 1, the odds of the predicted outcome are the same for that group as for the reference group; and when the OR is greater than 1, the odds of the outcome are higher for that group than for the reference group.

Variables

Variables for bivariate analysis were selected based on relevance and knowledge gaps as revealed by the literature review, the RHS Cultural Framework and principles of strengths-based analysis (Chapin & Opal Cox, 2002; FNIGC, 2018a). That is, relevant variables that best reflected Action, Vision, Relationships, and Reason, the four components of the cultural framework, were chosen for analysis (FNIGC, 2018a, p. 8). In their *National Report of the First Nations Regional Health Survey Vol. 1*, the FNIGC visually illustrates the concept of wellness using Figure 2 provided below. In summary, all four categories contribute to conceptualizations of wellness within First Nations communities.

Figure 2: RHS Cultural Framework



Source: National Report on The First Nations Regional Health Survey Phase 3: Volume One, First Nations Information Governance Centre, 2018a.

⁸ High correlations between two or more independent variables. I.e., one of the variables can predict the other, creating redundant information and skewing results.

Where cell counts permitted, all variables were analyzed across four age groups (55–59, 60–64, 65–69, 70+) and stratified by sex. Not all the survey respondents answered all eligible questions and the degree of non-response varied from question to question. With the exception of a few key demographic variables, respondents had the option of refusing to answer or saying they did not know the answer to all questions; those who did so were excluded from the analyses of the respective indicator.

Variables to be included in the logistic regression tables (Table 53 to Table 57) were selected if they met at least two of the following three criteria: significance based on bivariate analyses, contribution to a strengths-based profile, and importance emphasized by participants of the community engagement session.

Determinants of Wellness.

Information for all variables, excluding the outcome indicators described below, can be found in Appendix A, which summarizes the original question and response option wording and method of regrouping or calculation for analysis for each indicator.

Wellness Outcome Indicators.

Self-reported general health, self-reported mental health, and wholistic balance were chosen as wellness outcome indicators. All three indicators were included in the RHS Phase 3 and the FNREEES surveys, allowing associations among variables to be determined across both surveys.

Self-reported general health and mental health were based on participants' responses to the following questions, respectively:

- ✦ In general, would you say that your health is...?
 - Excellent
 - Very good
 - Good
 - Fair
 - Poor
- ✦ In general, would you say that your mental health is...?
 - Excellent
 - Very good
 - Good
 - Fair
 - Poor

For the purposes of this report, responses to each of these questions were recoded into two groups: 1) "Excellent," "Very good," and "Good;" and 2) "Fair;" and "Poor."

Wholistic balance was determined based on the following question and response options (which apply to each of the four dimensions of health):

- ✦ How often do you feel in balance physically, emotionally, mentally, and spiritually?
 - All of the time
 - Most of the time
 - Some of the time
 - Almost none of the time
 - None of the time

For each dimension (physical, emotional, mental, and spiritual), five response options were regrouped into two categories indicating the presence or absence of balance: Balanced ("All of the time" and "Most of the time"); Not balanced ("Some of the time," "Almost none of the time," and "None of the time").

Individuals with four "balanced" elements were considered wholistically balanced, while those with three or fewer dimensions in balance were considered "not in balance." Cases were excluded from analysis if missing responses (i.e., don't know or refuse to answer) for any of the four elements.

Qualitative Component: Subject Matter Expert and Knowledge Holder Engagement

In addition, to support knowledge exchange with First Nations communities and to explore the context, interpretation, and implications of the research results for policy and decision making in First Nations communities, the research team facilitated a two-hour engagement session to share and discuss the preliminary results from the analyses of the RHS Phase 3 and FNREEES data on September 11, 2019. The engagement session elicited community and culturally informed feedback from Subject Matter Experts, practitioners in the field and other Knowledge Holders. This feedback is critical to ensure that the findings, and their interpretation, are relevant and meaningful for First Nations communities.

A summary of key results from the analyses was shared with participants in the engagement session via Zoom, a free web conferencing platform (see Appendix B for selected slides). The presentation was followed by a guided discussion.

The discussion portion of the engagement session was guided by a series of overarching questions. These

questions included the following:

1. Comments and general feedback?
2. Are the findings consistent with the lived experiences of First Nations seniors? In what ways are they similar or different?
3. What should we keep in mind when interpreting these findings?
4. How would you define wholistic balance? Is it a useful way to consider aging well in First Nations communities?
5. What are the most important things we can learn from these findings?

6. How do you think these findings should be shared? What should be highlighted in the report?

This feedback from First Nations communities played an essential role in the interpretation of the research results that are shared in the Discussion section of this report, as well as the suggestions and links that are made to policy and programming about First Nations' seniors' health and wellness.



Results



Quantitative Results: Data Analysis

Bivariate Analyses

Vision: Physical Health Factors.

*Self-rated Health.*⁹

Most First Nations seniors (63.2%) described their general health as good-to-excellent. The proportion of seniors who reported good or better health was significantly lower among seniors aged 70 years and older (56.6%) compared to those within the 55–59 age group (67.2%). This remained true among female seniors (54.6% vs. 67.2% for ages 70+ and 55–59, respectively), but the difference between age groups was not significant for males. The proportion of seniors who reported better health among those aged 70+ was not significantly different than the proportion in the 60–64 age range. (See Table 1, Appendix C for all percentages and confidence intervals for this variable.)

Health Change.

Eight out of ten (81.6%) seniors reported that their health was the same or better compared to one year ago. Overall, the percentage reporting this beneficial or neutral health change was lower among those aged 70 years and older (73.2%) compared to the 55–59 (82.8%) and 60–64 (88.5%) age groups. However, this finding did not hold true for females aged 55–59, as the proportion who said that their health was the same or better compared to a year ago (78.9%) was not significantly higher than that of females aged 70 or older (73.8%); in fact, this proportion was significantly lower than that of females aged 60–64 years (87.8%). Further, a significantly lower proportion of females in this age group reported beneficial or neutral health change compared to the proportion of males aged 55–59 (87.3%). (See Table 2, Appendix C for all percentages and confidence intervals for this variable.)

Self-rated Oral Health.

Three out of five (61.8%) seniors rated the health of their teeth and mouth as “Excellent,” “Very good” or “Good.”

Overall, a higher proportion of females (64.8%) rated the health of their teeth and mouth as good or better compared to males (58.5%). No significant difference in self-rated oral health was found between age groups. (See Table 3, Appendix C for all percentages and confidence intervals for this variable.)

Body Mass Index (BMI).

Approximately one-in-five (19.1%) First Nations seniors have a normal weight or BMI score. The percentage of males with BMI scores in the obese range (37.2%) was significantly lower than that of females (44.6%). However, the proportion of female seniors who have a BMI score classified as overweight (35.1%) was significantly lower than that of their male counterparts (42.1%).

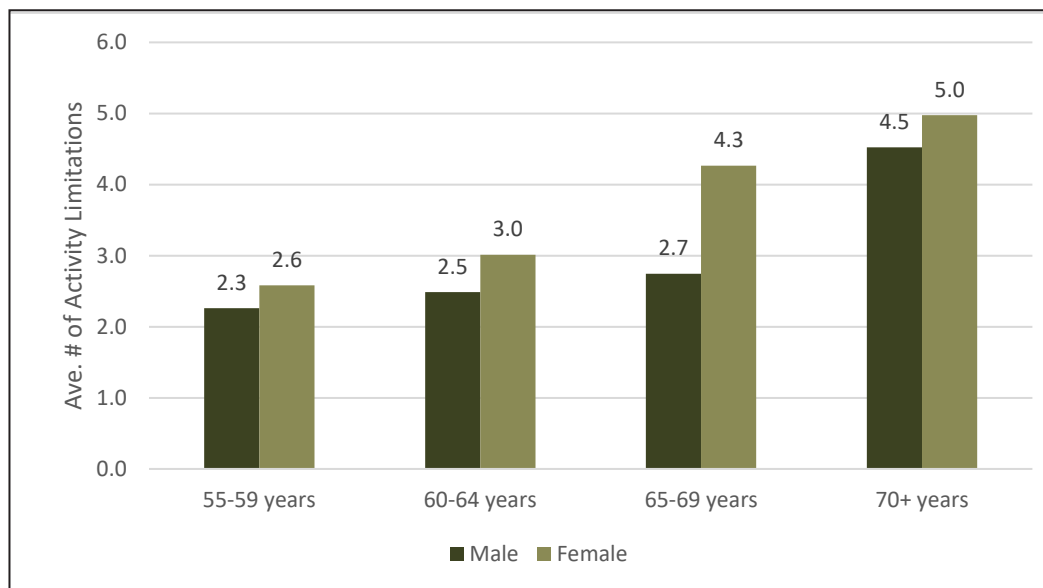
The proportion of seniors aged 70 years or older with a BMI score in the obese (34.0%) range is significantly lower compared to seniors in the 60–64 (42.6%) and 65–69 (50.0%) age groups. No significant difference in BMI categories was observed when seniors aged 70 years or older were compared to those in the 55–59 age group. (See Table 4, Appendix C for all percentages and confidence intervals for this variable.)

Activity Limitations.

Among all First Nations seniors, the average number of activity limitations (e.g., difficulty seeing, walking, eating, remembering, etc.) was 3.3; this average increased as age group increased (see Figure 3). Specifically, the average number of such limitations reported by the 55–59 age group was 2.4 (out of a maximum of 14), compared to 2.7 for the 60–64 age group, 3.6 for the 65–59 age group and 4.8 for the 70 years and older age group. At 3.6, the average number of activity limitations for females overall was significantly higher than the average for males (3.0). (See Table 5, Appendix C for all confidence intervals for this variable.)

About a third of seniors (27.9%) reported having no activity limitations. The proportion of female seniors who reported three or more activity limitations (50.8%)

⁹ While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset

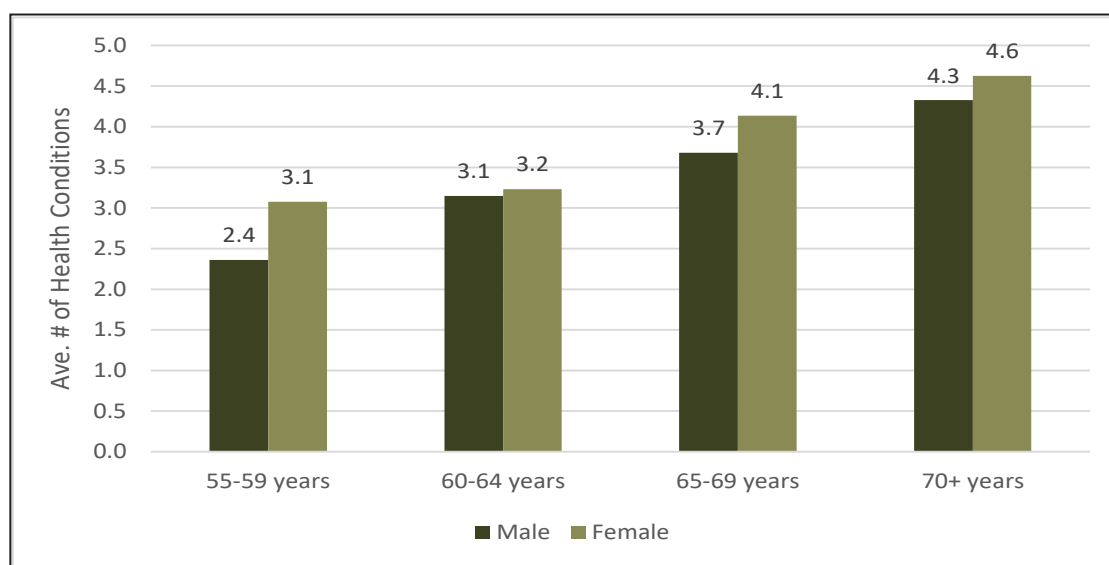
Figure 3: Average number of activity limitations among First Nations seniors, by sex and age group

was higher than that of male seniors (42.3%). Seniors aged 70 and older most frequently reported having three or more activity limitations (62.9%). (See Table 6, Appendix C for all confidence intervals for this variable.)

The five activity limitations due to physical or mental conditions most commonly reported by seniors were seeing/reading (40.4%); climbing a flight of stairs (36.8%); bending down and picking up an object from the floor (34.5%); lifting or carrying 10lbs (34.3%); and remembering (30.2%). (See Table 7, Appendix C for all confidence intervals for this variable.)

Health Conditions and Multi-morbidity.¹⁰

The average number of long-term or chronic health conditions¹¹ among seniors, from a list of 35 possible conditions, is 3.5; this average increases significantly with age (see Figure 4). The mean number of health conditions reported by seniors in the 55–59 age group was 2.7, increasing to 3.2 chronic health conditions in the 60–64 age group, 3.9 for the 65–69 age group, and 4.5 for those aged 70 and older. On average, female seniors reported a higher number of chronic health conditions (3.7) than male seniors (3.3). (See Table 8, Appendix C for all averages and confidence intervals for this variable.)

Figure 4: Average number of health conditions among First Nations seniors, by sex and age group

¹⁰ While this set of variables appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

¹¹ The First Nations Regional Health Survey Phase 3 defines long-term health conditions to be those which are “expected to or have already lasted 6 months or more and that have been diagnosed by a health care professional.” See RHS Phase 3 questionnaire p. 5-6 for full list of chronic health conditions: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

About sixteen percent (15.9%) of seniors reported having no chronic health conditions, while 36.1% reported having three to five health conditions. Female seniors were less likely to report having no health conditions (13.7%) when compared to males (18.3%). This sex difference is particularly evident in the 55–59 age group, where 18.6% of females reported having no health conditions compared to 30.4% of males. About one in five seniors (20.8%) reported having six or more chronic health conditions, a proportion that was significantly higher among those aged 70 and older (31.5%) compared to younger age groups (13.9% for the 55–59 age group; 17.4% for the 60–64 age group; and 22.4% for the 65–69 age group). (See Table 9, Appendix C for all percentages and confidence intervals for this variable.)

The five most common self-reported health conditions, in descending order (see Figure 5), among seniors were high blood pressure, arthritis, diabetes, high cholesterol, and allergies. The three most common chronic health conditions for female seniors were arthritis, high blood

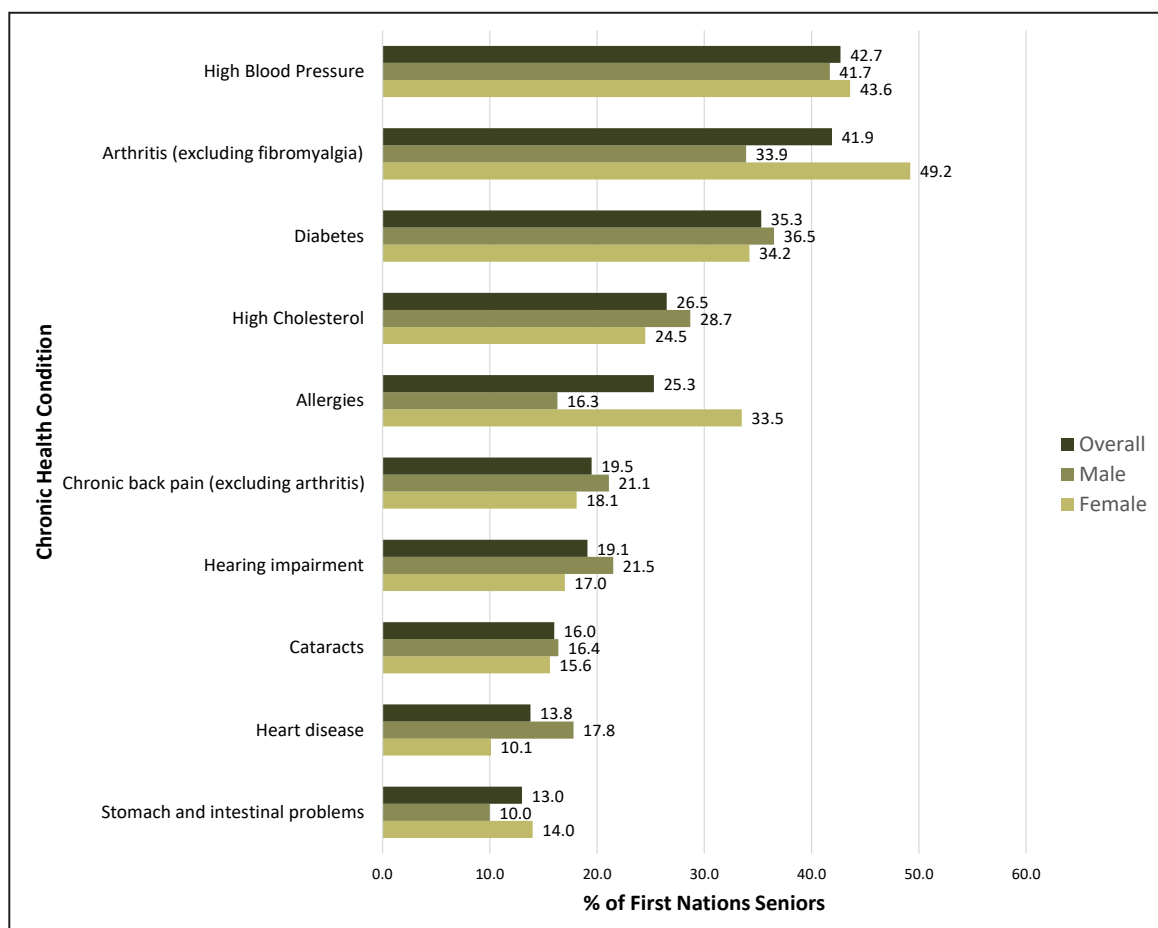
pressure, and diabetes. Among male seniors, the most common conditions were high blood pressure, diabetes, and arthritis.

Relative to their male counterparts, female seniors were more likely to report having arthritis, allergies, thyroid problems, anemia, anxiety disorder, asthma, and osteoporosis. Male seniors were more likely to report having heart disease compared to female seniors. (See Table 10, Appendix C for all percentages and confidence intervals for this set of variables.)

Injuries.

Of the 14.6% (see Table 11, Appendix C) of seniors who reported being injured in the past 12 months, a significantly higher proportion (41.3%) had injuries that were caused by falls, as compared to the second most common response: “other” causes (22.5%). (See Table 12, Appendix C for all percentages and confidence intervals for this variable.)

Figure 5: Most common chronic health conditions among First Nations seniors, by sex and age group



Note: Respondents could choose more than one response.

Almost half (48.0%) of those injured received treatment for these injuries in hospital emergency rooms, and approximately one third (31.2%) received treatment in a doctor's office. (See Table 13, Appendix C for all percentages and confidence intervals for this variable.)

Dental Care.

Half (49.9%) of First Nations seniors had received dental care within the past year (see Figure 6). The proportion of seniors aged 70 years and older who reported having received recent dental care in the past year (38.7%) was significantly lower than all the younger age groups, for which the proportion ranged from 50.9% (for those aged 65–69 years) to 54.9% (for those aged 60–64 years). Furthermore, female seniors (53.5%) were significantly more likely to have accessed dental care within the past year than male seniors (46.0%). (See Table 14, Appendix C for all percentages and confidence intervals for this variable.)

Traditional Medicine and Healing.

About two in five (40.3%) seniors reported using traditional medicine within the past 12 months. Although most differences between age groups in traditional medicine use were not significant, as Figure 6 demonstrates, there was a slight trend for it to decline as age increased, and a significantly lower proportion of seniors who were 70+ (34.8%) did so compared to those aged 55–59 years (43.6%).

Similar to traditional medicine use, two in five seniors

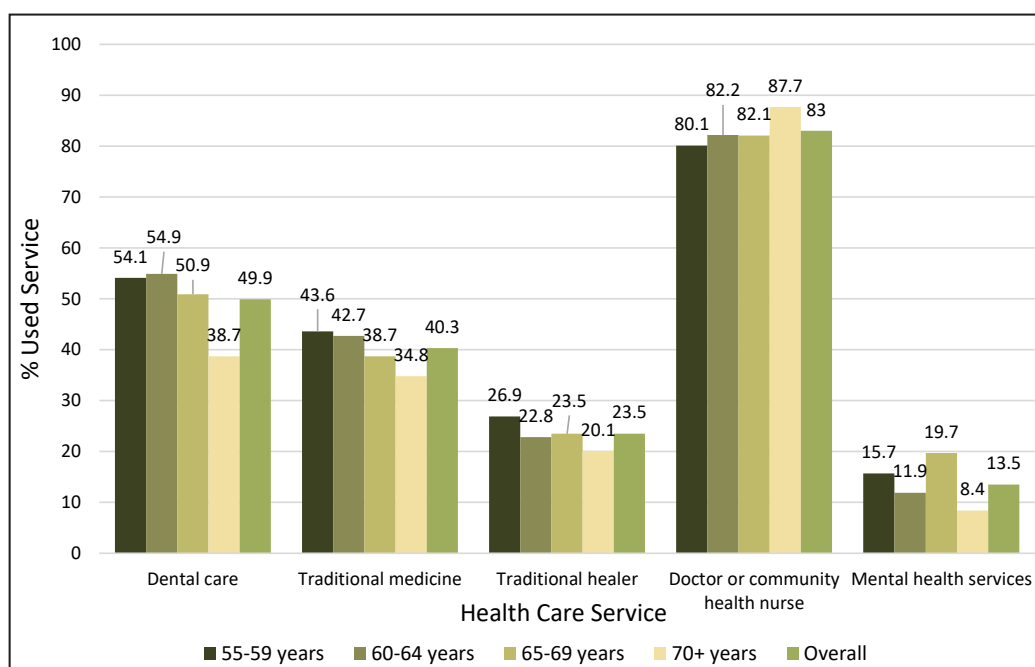
(40.4%) had consulted a Traditional Healer at least once in the past. A trend in decreased consultation with Traditional Healers in older age groups was significant overall and for female seniors: among seniors 70 years and older, 33.3% had consulted a Traditional Healer, while 44.1% of those aged 55–59 and 42.7% of those aged 60–64 had done so. There was no significant difference between age groups in proportions who had consulted a Traditional Healer in the past 12 months, nor between male and female seniors for traditional medicine use or Traditional Healer consultations. (See Table 15, Appendix C for all percentages and confidence intervals for these variables.)

Doctor, Community Health Nurse, and Mental Health Service Use.

Nearly all First Nations seniors (94.7%) have visited a doctor or community health nurse at least once in the past, and, as seen in Figure 6, a higher proportion of seniors aged 70 years and older (87.7%) had done so in the past year compared to those in the 55–59 age range (80.1%).

Approximately one-quarter (23.4%) of seniors have accessed a mental health service at least once in their lives, but there was a significant difference between sexes on this indicator: A significantly greater proportion of female seniors had accessed a mental health service (28.4%) when compared with males (17.9%), a trend that was more significant among those aged 69 and younger.

Figure 6: Health care services used in the past 12 months among First Nations seniors, by age group



The percentage of seniors who had ever accessed a mental health service was lower among seniors aged 70 years and older (15.5%) compared to the younger age groups (26.1% for 55–59, 23.5% for 60–65, and 30.3% for 65–69). More than one in ten seniors (13.5%) had accessed a mental health service in the past year (see Figure 6). Significantly lower proportions of seniors 70+ (8.4%) had done so compared to seniors in the 55–59 (15.7%) and 65–69 (19.7%) age groups. (See Table 16, Appendix C for all percentages and confidence intervals for these variables.)

Action: Health Behaviours/Lifestyle Factors.

Nutrition.

Half of First Nations seniors (50.6%) “Always” or “Almost always” eat a nutritious, balanced diet. Female seniors (54.1%) were significantly more likely to do so compared to males (46.6%). The proportion of seniors who eat a nutritious, balanced diet more often than “Sometimes” increased somewhat with age: A significantly higher proportion of seniors 70 years or older (57.0%) said they did so compared to seniors 55–59 years old (45.0%). (See Table 17, Appendix C for all percentages and confidence intervals for this variable.)

Almost eight in ten (76.8%) seniors reported eating five or more types of traditional foods (e.g., game birds, land-based animals, berries, or other wild vegetations, etc., depending on region) “Often” or “A few times” in the past 12 months. There were no significant differences between sex or age groups for this variable. (See Table 18, Appendix C for all percentages and confidence intervals for this variable.)

Food Security.

The data shows that six out of ten First Nations seniors (59.3%) are food secure. Seniors older than 65 experience more food security compared to seniors below 65: Half (51.3%) of those 60–64 years old are food secure, while 65.7% of seniors aged 65–69 are food secure. No significant differences in food security were observed between females and males. (See Table 19, Appendix C for all percentages and confidence intervals for this variable.)

Physical Activity.

One in five (19.4%) First Nations seniors were physically active over the past three months and an additional 15.0% were moderately active. In general, the proportion of younger seniors who reported being at least moderately physically active tended to be higher

than the proportion of older seniors: 59.9% of those in the 55–59 age group were inactive vs. 71.5% of those in the 70+ age group. Male seniors were significantly more likely to be physically active (25.2%) than female seniors (14.0%). (See Table 20, Appendix C for all percentages and confidence intervals for this variable.)

From a list of 26 possible physical activities listed in the survey as something they had participated in for leisure in the past three months, the most commonly reported activities by First Nations seniors were walking for exercise (54.9%); outdoor gardening and yardwork (30.1%); and berry picking and other food gathering practices (17.3%) (see Figure 7).

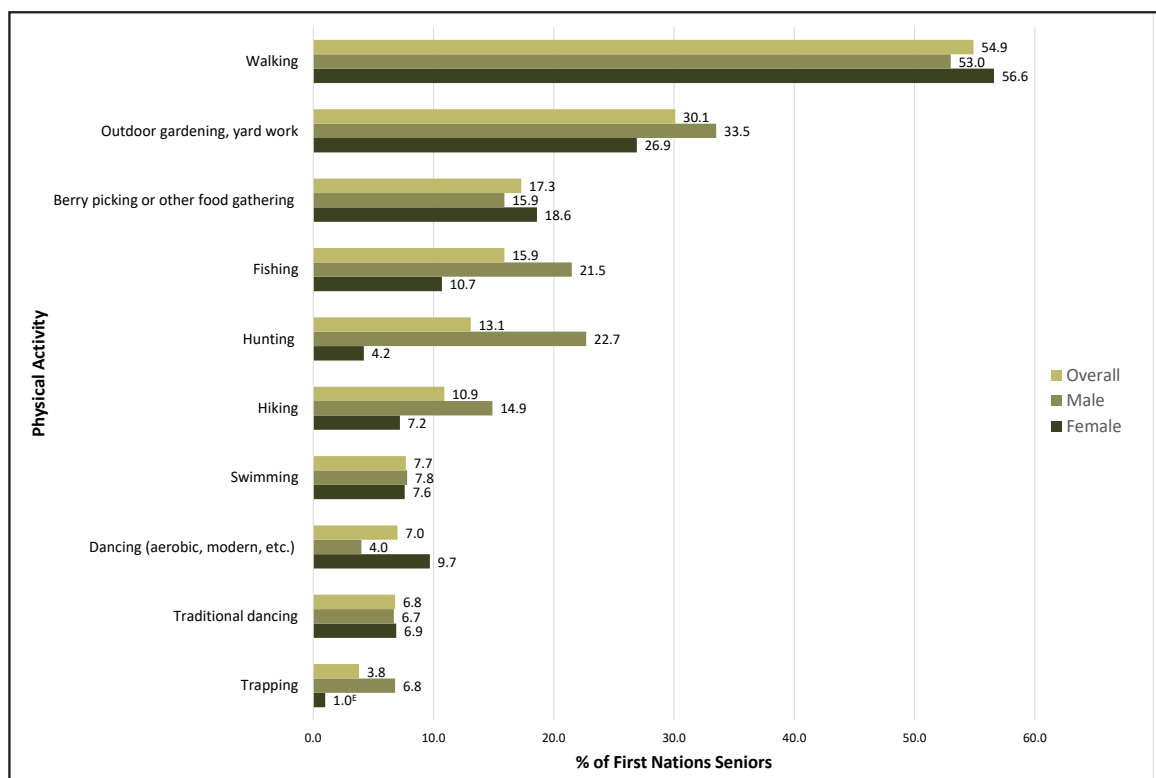
The three most common physical activities for male seniors included walking (53.0%), outdoor gardening/yardwork (33.5%), and hunting (22.7%). Similarly, walking (56.6%), outdoor gardening/yardwork (26.9%), and berry picking or other food gathering practices (18.6%) were the three most commonly reported physical activities among female seniors. The proportion of male seniors (20.8%) who reported doing “none” of the activities listed was significantly less than that of female seniors (28.5%). Overall, 24.8% of First Nations seniors said they had done “none” of the physical activities in the past three months, with a significantly higher proportion of seniors 65 years of age and older (31.3%) doing so compared to the younger age groups: 20.2% of those aged 55–59 and 20.0% of those aged 60–64.

Relative to females, a significantly higher proportion of male seniors reported engaging in a range of land-based activities including hunting (22.7%, compared to 4.2%), trapping (6.8%, compared to 1.0%^E), hiking (14.9%, compared to 7.2%), and fishing (21.5%, compared to 10.7%).

Female seniors were more likely to participate in non-traditional (i.e., aerobic, modern, etc.) dancing (9.7%) compared to their male counterparts (4.0%); however, similar proportions of male and female seniors reported participating in traditional dance (6.7% and 6.9%, respectively). (See Table 21, Appendix C for all percentages and confidence intervals for this set of variables.)

Alcohol, Smoking, and Cannabis.

Two-thirds of First Nations seniors (67.6%) reported abstaining from alcohol over the past 12 months. There was a trend for older seniors to report a greater tendency to abstain from alcohol consumption than younger seniors: 77.3% of seniors 70 years of age or older did

Figure 7: Most common physical activities among First Nations seniors, by sex

Note: Respondents could choose more than one response

^E High sampling variability, interpret with caution

not drink in the past year, vs. 59.4% of those 55–59 years old. A greater proportion of female seniors (70.7%) had abstained from consuming alcohol as compared to male seniors (64.2%). (See Table 22, Appendix C for all percentages and confidence intervals for this variable.)

Nearly two-thirds of seniors (64.0%) said they do not smoke, occasionally or daily. Across all age groups, no significant differences were found between the proportions of male and female seniors who identified as non-smokers. However, a higher proportion of older seniors identified as non-smokers compared to younger seniors, with four-fifths (79.3%) of seniors aged 70 years and older abstaining from smoking, as compared to 70.5% of those 65–69, 59.9% of those 60–64, and 51.1% of seniors 55–59 years old. (See Table 23, Appendix C for all percentages and confidence intervals for this variable.)

A minority of seniors (11.7%) reported that they had used cannabis in the past year. The proportion of older seniors aged 70 years and older (3.2%^E) who had used cannabis in the past year was significantly lower than that of younger seniors aged 55–59 (19.9%), 60–64 (13.0%), and 65–69 (8.1%^E). Lower proportions of female seniors (8.6%) had used cannabis as compared to male seniors (15.2%).

Of those seniors who had used cannabis in the past year, approximately half (52.3%) had done so for medical purposes; no significant differences between age and sex groups were found for this variable. (See Table 24, Appendix C for all percentages and confidence intervals for this variable.)

Reason: Socioeconomic Factors.

Community Remoteness.

Most First Nations seniors live in urban (43.2%) or rural (41.1%) communities, while 15.7% live in remote or special access communities. Generally speaking, the proportion of seniors living in First Nations urban areas tended to increase with age, while younger seniors seem to live in rural areas; however, while interesting, this difference was not statistically significant. (See Table 25, Appendix C for all percentages and confidence intervals for this variable.)

Marital Status.

Nearly half of seniors reported being married or having a common-law partner (48.5%). Compared to seniors aged 55–59 (24.1%) and 60–64 years old (28.8%), those aged 70 years or older were more likely to report being widowed, separated, or divorced (49.9%). Also compared to seniors in the younger groups, lower proportions

of seniors aged 70+ were partnered (40.7%) or single (9.4%). In contrast, 51.5% of those aged 55–59 years old were partnered, and 24.4% of those aged 55–59 were single. (See Table 26, Appendix C for all percentages and confidence intervals for this variable.)

Education.

Nearly half of First Nations seniors (45.9%) have a post-secondary diploma or some post-secondary training. In addition, 8.7% have a university degree or higher. Although no significant differences in education level were found among seniors in the three youngest age groups (69 and younger), in comparison lower proportions of seniors 70 years of age and older have a post-secondary diploma/certificate (10.7%) or a university degree (5.9%), and higher proportions have less than a high school education (50.5%). For example, 26.8% of seniors 50–55 years old have a post-secondary diploma/certificate, 10.2% have a university degree, and 27.5% have less than a high school education (50.5%). (See Table 27, Appendix C for all percentages and confidence intervals for this variable.)

Work and Volunteerism.

More than one-third (34.9%) of seniors indicated they are currently working a job or a business for pay.¹² The proportion of seniors who were employed decreased significantly from those 60–64 years old (47.2%) to those 65–69 years old (23.3%) and decreased again for those aged 70+, among whom 9.7% were employed. There is no significant difference between males and females in the proportions who are employed. (See Table 28, Appendix C for all percentages and confidence intervals for this variable.)

A majority of the approximately one-third of seniors who were employed¹³ reported positive work environments: More than nine in ten indicated that they were happy at work (96.6%), their personal and work lives are in balance (92.6%), and that they feel valued at work (91.1%). Three-quarters of employed seniors (75.8%) said they feel that they have opportunities to learn at work, while 56.1% found their work stressful. There was no significant difference between the sexes on these work satisfaction variables except that a significantly lower proportion of females (88.0%) felt they were valued at work compared to 94.9% of males. (See Table 29, Appendix C for all percentages and confidence intervals for this variable.)

Nearly three in five First Nations seniors (58.6%) said they volunteer or help without pay in their community. There was a trend for volunteerism among seniors to decrease with age but it was statistically significant only between those aged 55–59 (65.6%) and aged 65–69 (54.0%). Among those who volunteer, one-third (33.2%) reported doing so at least once a month. (See Table 30, Appendix C for all percentages and confidence intervals for this variable.)

Housing.

Nine out of ten seniors (89.6%) do not live in crowded households, which are defined as having more than one person per habitable room. A greater proportion of seniors aged 70 years or older (93.8%) lived in non-crowded housing compared to seniors aged 55–59 (86.8%) and 60–64 (88.2%). (See Table 31, Appendix C for all percentages and confidence intervals for this variable.)

More than one-third (37.3%) of seniors live in homes that do not require major or minor repairs and require only regular maintenance. No significant difference was found between age groups on this variable. (See Table 32, Appendix C for all percentages and confidence intervals for this variable.)

Migration.

More than half of First Nations seniors living on reserves and in Northern communities (54.3%) said they had at one time lived outside their community. Higher proportions of seniors between 55 and 59 years old (59.4%) and 60–65 years (56.4%) had lived outside their home community at some point compared to seniors aged 70 years and older (47.2%). A similar trend was found between age groups of female seniors, but no significant differences were found between males and females on this variable. (See Table 33, Appendix C for all percentages and confidence intervals for this variable.)

Needed/Received Health Care.

Approximately one-quarter (23.9%) of seniors said they did not require any health care in the past year, while two-thirds (67.7%) of seniors said they needed health care and received all the care they needed within the past year. However, nearly one in ten (8.4%) needed health care but did not receive all the care they needed in the past year.

¹² While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

¹³ Analysis of remaining employment and volunteerism variables used the FNREEES dataset.

Compared to younger seniors aged 55–59 (27.3%) and 60–64 (25.8%) years old, a lower proportion of seniors 70 years and older (16.8%) did not need health care in the past year. Similarly, a higher proportion of those 70+ (76.4%) needed health care and received all the care they needed, compared to those aged 55–59 (62.1%) and 60–64 (65.3%). There were no significant differences between age groups in proportions of seniors who needed health care and did not receive all the care they needed in the past year. (See Table 34, Appendix C for all percentages and confidence intervals for this variable.)

Primary Health Care Provider.

Six out of ten seniors (58.5%) reported having the same primary health care provider for at least a year. Overall, seniors aged 55–59 (18.2%) and 60–64 (19.2%) were more likely to report not having a primary health care provider compared to seniors aged 70 years and older (7.6%); this trend held true for males and females. No significant difference between male and female seniors was found for this variable. (See Table 35, Appendix C for all percentages and confidence intervals for this variable.)

Quality of Health Care Services in Community.

Six out of ten (59.6%) seniors rated the quality of health care services available in their community as “Excellent” or “Good”. There was a slight trend for this proportion to increase with age, but only the differences between those aged 60–64 years old (55.2%) and 70+ years old (65.2%)

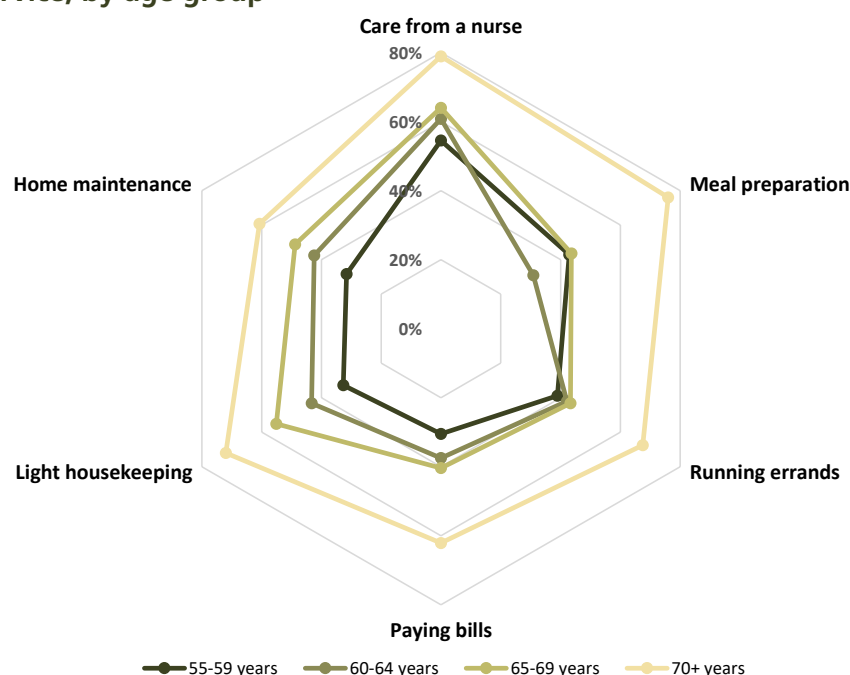
and between those aged 55–59 (52.6%) and 70+ (65.1%) were significant. No statistically significant differences were observed in this between males and females. (See Table 36, Appendix C for all percentages and confidence intervals for this variable.)

Home Care Services.

Asked whether they needed several types of formal and informal home care services due to a physical or mental condition or health problem, most First Nations seniors reported that they did not, but this proportion increased consistently with age, and most significantly at either 65–69 years or 70+ years. Higher proportions of seniors generally needed help with informal home care, such as home maintenance (29.5%), light housekeeping (23.2%), or running errands (13.5%), as compared to formal home health care such as care from a nurse (10.3%), personal care (6.7%), or long-term care (4.9%).

Of all the services that seniors reported needing, care from a nurse at home was received by the highest proportion of seniors (71.4%) in need. Palliative care was received by 45.1%^E—the lowest proportion—of seniors who needed it. Overall, nearly half or more of the seniors who needed each type of home care service received it, but this varied significantly by age group, with higher proportions of older seniors receiving the services they need compared to younger seniors in need (see Figure 8). For example, 72.0% of seniors 70 years of age or older who needed help with

Figure 8: Percentage of First Nations seniors who receive home care services, among seniors who need each service, by age group¹⁴



¹⁴ The three least commonly needed home care services—palliative care, long-term care, and personal care—are omitted from this figure.

light housekeeping received it, compared to only 32.7% of those in need aged 55–59 years. Similarly, 78.9% of seniors 70 years of age or older who needed care from a nurse received it, compared to 54.5% of those aged 55–59 years who needed similar care. (See *Table 37, Appendix C* for all percentages and confidence intervals for this variable.)

Relationships: Personal and Community Wellness.

*Self-rated Mental Health.*¹⁵

When asked to describe their mental health generally, nearly nine out of ten (87.0%) seniors self-reported “Excellent,” “Very good,” or “Good” mental health. No significant differences were found between age or sex groups for this variable. (See *Table 38, Appendix C* for all percentages and confidence intervals for this variable.)

Depression.

Fewer than three in ten (27.5%) First Nations seniors reported experiencing symptoms of depression for two weeks or more during the past year. A lower proportion of males (22.4%) experienced depression compared to females (32.1%).

Overall and among female seniors, experiences of depression appeared to decrease in older age groups. However, this difference is only statistically significant between females aged 70+ (22.3%) and females aged 55–59 years (39.8%). (See *Table 39, Appendix C* for all percentages and confidence intervals for this variable.)

Mastery.

Approximately half (49.3%) of First Nations seniors indicated that they have a high level of mastery, or feelings of control over their lives, while 44.9% have a moderate level of mastery. Only 5.8% of seniors indicated that they experience low levels of mastery. There was no significant difference between age groups on this indicator, but those aged 55–59 were the only age group with a significantly higher proportion (52.4%) experiencing high mastery as compared to moderate (41.2%). (See *Table 40, Appendix C* for all percentages and confidence intervals for this variable.)

*Wholistic Balance.*¹⁶

Wholistic balance, an indicator incorporating perceived balance in physical, mental, emotional, and spiritual

dimensions, is experienced by three out of five First Nations seniors (59.5%). In general, slightly higher proportions of older seniors and males reported feeling wholistically balanced as compared to younger seniors and females, respectively, but these differences were not statistically significant. (See *Table 41, Appendix C* for all percentages and confidence intervals for this variable.)

Community Connection and Safety.

In every age and sex category, more than eight in ten First Nations seniors reported that they feel a “Very strong” or “Somewhat strong” sense of belonging to their community. There seems to be a slight trend for this to increase with age, but there are no significant differences between sex and age group. (See *Table 42, Appendix C* for all percentages and confidence intervals for this variable.)

Almost one-quarter (23.2%) of seniors indicated they “Always” or “Almost always” take part in their local community events. There were no significant differences across sex and age groups. (See *Table 43, Appendix C* for all percentages and confidence intervals for this variable.)

More than eight in ten seniors (83.7%) reported feeling “Very safe” or “Reasonably safe” in their home community. There are no significant differences between age and sex groups except that among seniors aged 55–59, higher proportions of males (85.8%) feel safe in their community compared to 77.3% of females. (See *Table 44, Appendix C* for all percentages and confidence intervals for this variable.)

Community Wellness.

When asked to identify the main strengths of their communities from a list of 22 options (for example, housing, strong leadership, natural environment/resources, etc.), one in ten (9.9%) seniors identified sixteen or more community strengths, and an additional four in ten (42.5%) identified between six and fifteen community strengths. However, this left nearly half (47.5%) who reported 0–5 strengths in their community.

The data showed few consistent significant differences between age and sex groups except that overall, lower proportions of seniors aged 65–69 (35.5%) identified 0–5 community strengths compared to younger seniors aged 55–59 (51.1%) and older seniors 70+ (52.4%); this was also the case for males and females. Also, among seniors 65–69 years old, a higher proportion (20.5%^E)

¹⁵ While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

¹⁶ While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

identified 16 or more community strengths compared to those aged 55–59 (5.8%) and 70+ (8.1%^E); a similar pattern was found among male seniors. (See Table 45, Appendix C for all percentages and confidence intervals for this variable.)

The five most commonly identified community strengths by seniors include Elders (59.8%), community health programs (58.3%), awareness of First Nations culture (56.6%), family values/connections (53.1%), and traditional gatherings/ceremonial activities (e.g., powwow) (48.8%). At 8.4%, “low rates of alcohol and drug abuse” was identified by the lowest proportion of seniors as a community strength. Consistent with the above pattern among those aged 65–69, higher proportions in this age group tended to report each strength, compared to the other age groups. (See Table 46, Appendix C for all percentages and confidence intervals for this variable.)

General Social Support.¹⁷

Eight in ten First Nations seniors (79.2%) reported that they have four or more types (out of eight possible options) of general social support (e.g., someone to talk to, have a good time with, take them to the doctor, etc.) available to them “All” or “Most” of the time. Generally, higher proportions of female seniors said they had this level of social support as compared to males: for example, this was reported by 81.8% of females in the 55–59 age group vs. 71.3% of males in the same age group. (See Table 47, Appendix C for all percentages and confidence intervals for this variable.)

Experiences of aggression and racism appear to decrease with age among First Nations seniors. Nineteen out of twenty (95.3%) seniors reported that they “Never” or

“Rarely” experienced physical aggression towards them in the past year. The proportion of seniors aged 70 years and older (2.6%^E) who experienced physical aggression “Often” or “Sometimes” was significantly lower than that of seniors age 55–59 (7.7%).

Similarly, 87.0% of seniors rarely or never experienced verbal aggression (including threats, insults, etc.) in the past year. Lower proportions of seniors aged 70+ (7.9%) experienced such aggression “Sometimes” or “Often” compared to younger seniors aged 55–59 (19.2%).

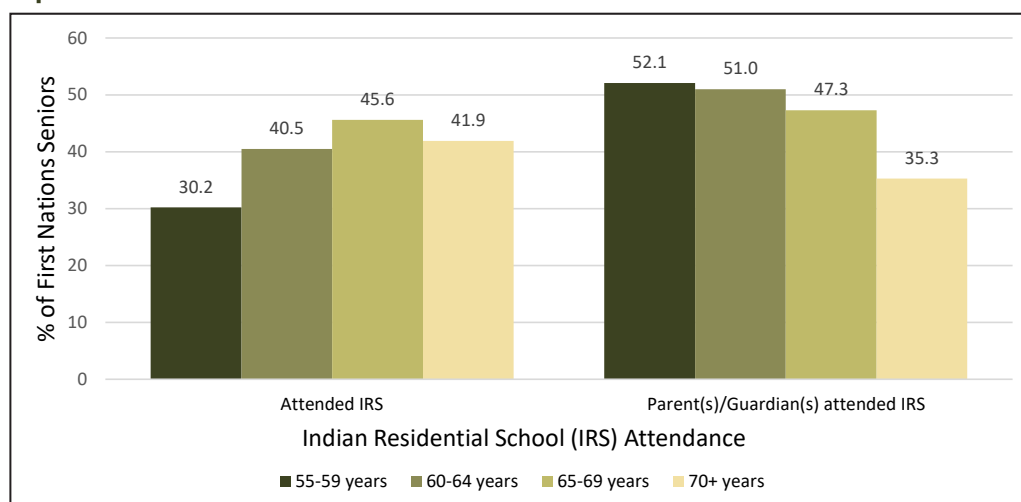
While eight in ten seniors (78.7%) reported that they had not personally experienced racism in the past year, this proportion was significantly lower among those aged 70 or older (13.8%) compared to seniors aged 55–59 (25.1%), 60–64 (23.8%), and 65–69 years old (22.0%). (See Table 48, Appendix C for all percentages and confidence intervals for this set of variables.)

Indian Residential Schools.

Approximately four in ten (38.6%) First Nations seniors have attended a Residential School, while nearly half (46.6%) have parents or guardians who attended, and nearly a third (29.7%) have grandparents who attended (see Figure 9). Higher proportions of seniors aged 60–64 (40.5%), 65–69 (45.6%), and 70+ (41.9%) had attended compared to seniors aged 55–59 (30.2%).

Lower proportions of seniors aged 70 years or older indicated that their parent(s) or guardian(s) had attended Residential School (41.9%) or that their grandparent(s) had attended (19.1%), compared to younger seniors. For example, 52.1% of those aged 55–59 years old said their parent(s) had attended, and 38.5% said their

Figure 9: Family and personal Indian Residential School attendance among First Nations seniors, by age group



¹⁷ While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

grandparent(s) had attended.

Of those who attended themselves, more than two-thirds (67.8%) reported that the Residential School adversely impacted their health and well-being; 21.6% said Residential School attendance had no impact; and 10.6% said that the experience had positively impacted their overall health and well-being. There were no significant differences in these proportions between age groups on this variable. (See Table 49, Appendix C for all percentages and confidence intervals for this set of variables.)

First Nations Languages.

Nearly one in four (23.4%) seniors reported using a First Nations language—as opposed to another language—most often in their daily life¹⁸. Seniors aged 70 years and older (30.3%) were more likely to report speaking a First Nations language in their daily life than younger seniors aged 60–64 (22.1%) and 55–59 (18.1%) years. However, English was the most frequently reported language used in daily life across all age groups (64.2%).

There was no significant difference between males and females in the proportions speaking a First Nations language, English, or multiple languages most often, but a higher proportion of female seniors (2.7%) reported speaking French most often compared to male seniors (1.9%). (See Table 50, Appendix C for all percentages and confidence intervals for this variable.)

Seniors were asked to indicate their perceived levels of importance of understanding and of speaking a First Nations language¹⁹. Nearly all seniors reported that it is “Somewhat important” or “Very important” to understand (93.4%) or speak (93.2%) a First Nations language. Responses on these variables were fairly consistent between age groups, with the exception of a higher proportion of those aged 65–69 years old (96.0%) rating understanding a First Nations language as being important vs. 90.4% of those aged 55–59 years old.

In addition to the level of importance of knowing a First Nations language, seniors were also asked to rate their level of satisfaction with their own knowledge of a First Nations language: three-quarters (76.2%) said they were somewhat or very satisfied. While there appears to be a slight trend in this satisfaction increasing with age, differences between age groups are not statistically significant.

Nearly half of all First Nations seniors said that they were exposed to a First Nations language most or all of the time at home (47.2%) and in their community (45.6%). In both realms, exposure increased in higher age groups, although the only significant difference was between the proportions of those aged 55–59 (40.2%) and those aged 70+ years (55.1%) who were exposed to a First Nations language most/all of the time at home. (See Table 51, Appendix C for all percentages and confidence intervals for this set of variables.)

Spirituality, Religion, Traditional Teaching, and Historical Knowledge.

When rating their level of agreement with the statement, “Traditional spirituality is important to me,” First Nations seniors showed no significant differences between age groups; overall, nearly three-quarters (72.6%) agreed or strongly agreed.

More than half (56.0%) of seniors agreed that organized religion was important to them; however, a significantly lower proportion of those aged 55–59 (49.3%) agreed that organized religion was important to them compared to the older age groups (58.1% of those aged 60–64, 55.6% of those aged 65–69, and 61.9% of those aged 70 and older).

Seniors were also asked to indicate their perceived levels of importance of learning about traditional teachings (e.g. beliefs, values, medicines, practices, ceremonies, stories, songs, activities) of their people. Nine in ten (89.5%) reported that these traditional teachings are “Somewhat important” or “Very important” for them to learn. However, only three-quarters of seniors (77.0%) said that they were somewhat or very satisfied with their knowledge of traditional teachings. Neither of these indicators showed trends or significant differences between age groups.

When asked to indicate their level of knowledge on a few socio-political topics relevant to First Nations, the majority of seniors reported that they knew “Some” or “A lot” about the history of their people (82.3%), the inherent rights of their people (69.0%), and the history of the Indian Residential School system (74.0%). There were also no significant differences found between age groups on these variables. (See Table 52, Appendix C for all percentages and confidence intervals for this set of variables.)

¹⁸ While this variable appears in the RHS Phase 3 and the FNREEES datasets, this bivariate analysis used the RHS Phase 3 dataset.

¹⁹ The remainder of the analysis on First Nations language indicators used the FNREEES dataset.

Wellness Outcome Indicators.²⁰

Plotting the three main wellness indicators (self-rated health, self-rated mental health, and wholistic balance) relative to age reveals three key trends, although differences between sex and age groups are statistically significant only for self-rated general health. First, the proportion of seniors with good-to-excellent general health decreases in older age groups (see Figure 10), significantly among

females (see Figure 12) but not males (see Figure 11). Second, proportions of seniors with good-to-excellent mental health were relatively constant across age categories. Third, though not statistically significant, there was a slight trend for seniors to report wholistic balance in higher proportions in older age groups. (See Table 1, Table 38, and Table 41, Appendix C for all percentages and confidence intervals for self-rated health, self-rated mental health, and wholistic balance, respectively.)

Figure 10: Wellness outcome indicators among First Nations seniors, by age group

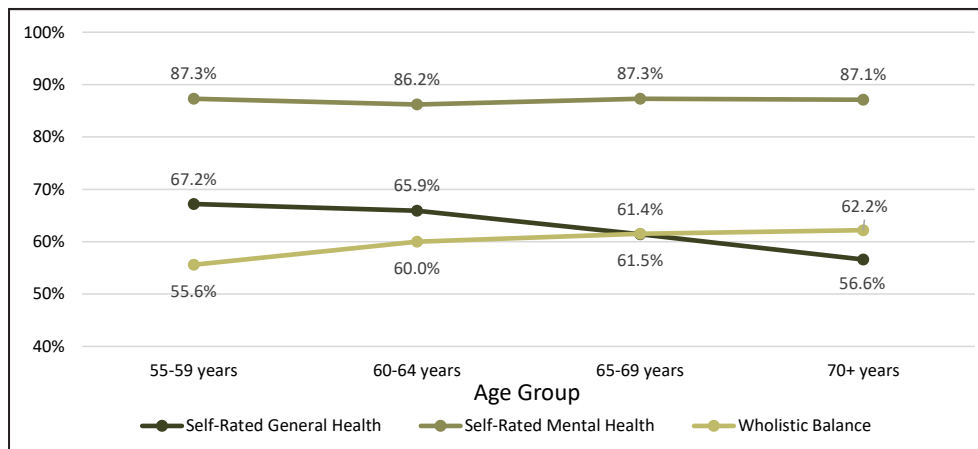


Figure 11: Wellness outcome indicators among First Nations male seniors, by age group

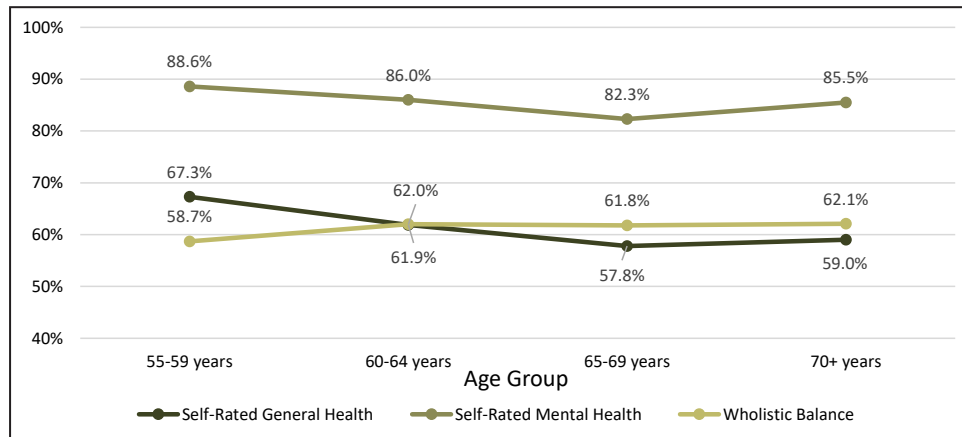
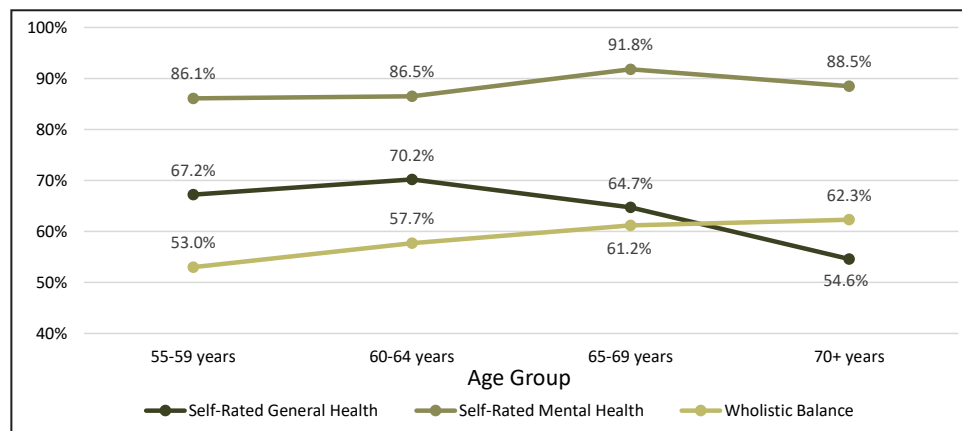


Figure 12: Wellness outcome indicators among First Nations female seniors, by age group



²⁰ While these variables appear in the RHS Phase 3 and the FNREEES datasets, these analyses used the RHS Phase 3 dataset.

Logistic Regressions

The analyses of the RHS Phase 3 and FNREEES data presented above provide a detailed description of many of the challenges and strengths that First Nations seniors living on reserves experience in their journeys towards wellness. To further contribute to this profile of wellness among First Nations seniors, the following section reports on a series of logistic regression analyses that explored associations between a number of predictor variables in the RHS Phase 3 and FNREEES datasets and self-reported health and wellness outcomes. For these analyses, separate logistic regressions were conducted to explore relationships between each independent (or predictor) variable and a variety of health and wellness outcomes, while controlling for age and sex. Regression findings for variables that were significant in the bivariate analyses, contribute to a strengths-based profile of seniors' wellness, or were emphasized as important by participants of the community engagement sessions are discussed below and presented in their respective tables by wellness outcome.

Self-rated Health.

The following factors were associated with having the highest odds ratios (ORs), (i.e., the highest odds) among First Nations seniors of having good-to-excellent general health compared to the reference (ref.) groups:

- Mastery (ref. Low mastery)
 - High mastery (OR: 3.3); Moderate mastery (OR: 2.4)
- Currently employed²¹ (OR: 2.4)
 - Among the currently employed: Balance between life and work (OR: 2.8); Feel valued at work (OR: 2.0)
- University or higher education (ref. Under high school) (OR: 2.3)
- Physically Active (ref: Inactive) (OR: 2.2)
- Food secure (ref. Moderate or Severe insecurity) (OR: 2.0)

With an OR of 3.3, seniors with high mastery, or a sense of control over the things that happen to them, have 3.3 times the odds of rating their health as good or better, compared to seniors with a low sense of mastery. Moderate mastery also has a significantly high OR of 2.4. Currently working, and experiencing the positive work satisfaction factors of work/life balance and feeling valued at work, are associated with having twice or higher odds of good self-rated health; the regression analysis controls for age and sex, so this association holds true for all the age groups among seniors.

Also among the factors with the highest odds for good self-rated health are socioeconomic factors (education, food security), and physical activity.

Several additional factors related to health behaviours and social/community connections showed more moderate yet significant positive associations with good or better self-rated health:

- Identifying 16 or more community strengths (ref. 0–5 strengths) (OR: 1.9)
- Having good or excellent health care services available in the community (ref. Fair/poor services) (OR: 1.8)
- Eats a nutritious, balanced diet (OR: 1.6)
- Feels safe in the community (OR: 1.5)
- Postsecondary diploma/certificate (ref. Under high school) (OR: 1.5)
- Strong sense of belonging to the community (OR: 1.5)
- Moderately physically active (ref. Inactive) (OR: 1.4)
- Having at least four types of general social support available all/most of the time (ref. 0–3 supports) (OR: 1.4)
- Non-smoker (OR: 1.3)

A few factors were found in the regression analysis to be negatively associated with self-rated health:

- Age is 70 years or older (ref. 55–59 years) (OR: 0.6 when controlling for sex only)
- Parent(s) or guardian(s) attended Residential School (OR: 0.6)
- Needed health care in past year... (ref. Did not need health care in past year)
 - ...And received all the care they needed (OR: 0.5)
 - ...And did not receive all the health care they needed (OR: 0.3)

This means, for example, that seniors who needed and sufficiently received health care in the past year had 0.5 times the odds of reporting good-to-excellent health, while those who did not receive all the care they needed had only 0.3 times the odds, compared to seniors who did not need any health care in the past year. (See Table 53, Appendix C for all variable and reference categories, odds ratios, and confidence intervals for this regression.)

Self-rated Mental Health.

As with the self-rated general health regression, some of the factors associated with having the highest odds among First Nations seniors of having good-to-excellent mental health were related to work, mastery, and education. For

²¹ Where a reference category is not specified here, it can be assumed that it is a dichotomous variable where the reference category is the opposite to the one listed. E.g., The reference category for the "Currently employed" OR is "Not currently employed."

example, among currently employed seniors, those who feel happy at work have nine times the odds of reporting good or better mental health.

The following are the factors with the highest odds ratios (i.e., at least 2.0) for this regression:

- Currently employed (OR: 2.4)
 - Among the currently employed: Feels happy at work (OR: 9.1); Balance between life and work (OR: 2.1)
- Mastery (ref. Low mastery)
 - High mastery (OR: 7.4); Moderate mastery (OR: 3.8)
- University or higher education (ref. Under high school) (OR: 4.4)
- Having at least four types of general social support available all/most of the time (ref. 0–3 supports) (OR: 3.0)
- Having good or excellent health care services available in the community (ref. Fair/poor services) (OR: 2.5)
- Eats a nutritious, balanced diet (OR: 2.4)
- Strong sense of belonging to the community (OR: 2.2)

Several additional factors related to physical activity, education, food security, and community safety showed moderate yet significant positive associations with good or better self-rated mental health:

- High school diploma (OR: 1.9); Postsecondary diploma/certificate (OR: 1.7) (ref. Under high school)
- Moderately physically active (OR: 1.9); Physically active (OR: 1.6) (ref. Inactive)
 - Has walked for leisure in past three months (OR: 1.5)
- Food secure (ref. Moderate or Severe insecurity) (OR: 1.8)
- Feels safe in the community (OR: 1.8)

A few factors were found in the regression analysis to be negatively associated with self-rated mental health. While odds ratios do not determine causality, they show that lower odds of having good mental health are associated with the following:

- Has ever accessed a mental health service (OR: 0.6)
- Sometimes/Often experienced verbal aggression in past year (ref. Rarely/Never) (OR: 0.5)
- Needed health care in past year and did not receive all the health care they needed (ref. Did not need health care in past year) (OR: 0.4)

See Table 54, Appendix C for all variable and reference categories, odds ratios, and confidence intervals for this regression.

Wholistic Balance.

Once more, mastery and education were among the factors with the highest odds ratios among First Nations seniors of having wholistic balance, but food security, social, and community factors were also impactful. The factors with the biggest effects and their ORs are as follows:

- Mastery (ref. Low mastery)
 - High mastery (OR: 4.2); Moderate mastery (OR: 2.2)
- Strong sense of belonging to the community (OR: 3.0)
- Having at least four types of general social support available all/most of the time (ref. 0–3 supports) (OR: 3.0)
- University or higher education (ref. Under high school) (OR: 2.2)
- Food secure (ref. Moderate or Severe insecurity) (OR: 2.1)
- Eats a nutritious, balanced diet (OR: 2.1)
- Feels valued at work (among the currently employed only; OR: 2.0)

There was variety among the additional factors that showed moderate yet significant positive associations with wholistic balance, yet many were related to either spiritual or community connection and healthy behaviours:

- Currently employed (OR: 1.8)
- Physically active (OR: 1.7); Moderately physically active (OR: 1.5) (ref. Inactive)
 - Has walked for leisure in past three months (OR: 1.4)
- Identifying 16 or more community strengths (ref. 0–5 strengths) (OR: 1.7)
- Volunteering in the community (OR: 1.7)
- Postsecondary diploma/certificate (OR: 1.5); Some postsecondary training (OR: 1.4) (ref. Under high school)
- High importance of traditional spirituality (OR: 1.6)
- Always/Almost always participates in community events (OR: 1.6)
- Feels safe in the community (OR: 1.5)
- High importance of organized religion (OR: 1.4)
- Non-smoker (OR: 1.3)
- Abstinence from drinking alcohol in past year (OR: 1.3)

Four factors were found in the regression analysis to be negatively associated with wholistic balance:

- Has ever accessed a mental health service (OR: 0.8)
- Living in a rural community (ref. Urban) (OR: 0.7)
- Sometimes/Often experienced verbal aggression in past year (ref. Rarely/Never) (OR: 0.7)
- Needed health care in past year and did not receive all the health care they needed (ref. Did not need health care in past year) (OR: 0.4)

This regression analysis is the only one that found a significant association with community remoteness: seniors living in a rural community (between 50 km and 350 km of a service centre) have 0.7 times the odds of reporting wholistic balance compared to seniors living in urban communities (within 50 km of a service centre). (See *Table 55, Appendix C* for all variable and reference categories, odds ratios, and confidence intervals for this regression.)

Associations Between Wellness Outcome Indicators.

While each wellness outcome variable (self-rated health, self-rated mental health, and wholistic balance) is distinct, it is expected that they might be associated with one another, especially considering that physical and mental balance are dimensions of the wholistic balance variable. Regression analysis found that having good-to-excellent self-rated

health and mental health both have significant positive associations with wholistic balance among First Nations seniors, when controlling for age and sex.

Seniors who reported having wholistic balance had more than twice the odds (OR: 2.4) of reporting that they have good or better health, compared to seniors who did not have wholistic balance. (See *Table 56, Appendix C* for variable and reference categories, odds ratio, and confidence intervals for this regression.)

Similarly, seniors who reported wholistic balance had nearly four times the odds (OR: 3.7) of also reporting good or better mental health, compared to those who were not wholistically balanced. (See *Table 57, Appendix C* for variable and reference categories, odds ratio, and confidence intervals for this regression.)



Qualitative Results: Subject Matter Expert and Knowledge Holder Engagement

General Comments/Feedback

Participants in the engagement session were first invited to provide general feedback, comments and questions they had about the findings shared through the presentation. This general feedback was organized into the themes described below.

Geographic Breakdown of the Data in These Findings.

Participants expressed their interest for a deeper analysis that was based on geographic location. Although there is interest in organizing the data by urban, rural, and remote/special access regions, it is not feasible owing to 1) a small sample size—and therefore a risk to confidentiality—among remote/special access populations; and 2) the surveys only capture the experiences of those who reside in a First Nation community, and do not include those who live outside communities. For example, “urban” First Nations populations are limited to urban First Nations reserve and Northern communities²² and exclude First Nations populations living in other urban centres.

Linkage with Home and Community Care Data.

Home and community care data was identified as a possible, rich source of information about First Nations needs and services. In particular, home and community care data may help to inform community needs for support services provided by formal care programming versus those which may be provided by family or informal care givers. Unfortunately, RHS data is not yet linkable to this program data, which makes it impossible for the current profile to incorporate this data. A process or path for accessing this data would need to be created for future research on aging. Based on the preliminary findings presented in the aging profile, it is likely that a clear observable trend would be that more services are accessed as a person ages.

Cultural Norms Regarding Caring for Elders.

In some areas there is a tremendous attitude of respect for Elders fostered by a cultural-community strength of reverence for Elders. Elders, though they may be frail physically, are seen as Language and Knowledge Holders, and for the most part, will be taken care of at home by others in their family or community when they are frail, versus going into long-term care.

Volunteering.

More than half (58.6%) of seniors indicated that they volunteer or help without pay in their communities. Some engagement participants were struck by the seemingly high rate of volunteerism among First Nations older adults, given the typical perception that seniors are experiencing increasing activity limitations and health conditions that may hinder their participation in their community in this way.

Education.

Engagement participants pointed out that a limitation of the RHS Phase 3 and FNREEES data on education is that the survey questions are framed in relation to formal education. It was noted that, amongst organizations providing services to seniors, there is an emphasis on participating in “life-long learning,” which is less about academic achievement and more about learning for pure enjoyment.

Self-reported Mental Health.

First Nations seniors generally rated their mental health to be quite high: 87.0% reported good, very good, or excellent mental health. Engagement participants cautioned interpretation of such a high rate, noting that this data does not distinguish or reflect the unique experiences of many First Nation seniors who live in rural, remote, or special access settings. This is particularly important for those living in far-Northern communities, who may have unique experiences of isolation, trauma, and/or Residential Schools that may affect mental health.

Physical Mobility of Seniors in Northern Communities.

It was noted that diabetes rates are high in many First Nations communities, and serious complications such as amputations are reportedly higher than the provincial averages. This introduces a significant mobility barrier, as seniors may become wheelchair dependent in communities with limited or poor accessibility infrastructure. This circumstance, coupled with the practical realities of living in Northern communities (e.g., snow, ice, unpaved roads, etc.), severely inhibits some seniors’ mobility and heavily impacts their mental and physical wellness. Beyond mobility challenges, other Northern-specific issues that may negatively impact wellness include food insecurity and unpredictable or limited access to health services and resources. Engagement participants emphasized that these issues impact the experiences of wellness in Northern versus Southern communities.

²² As classified based on distance to the nearest service centre and the accessibility to that centre. Source: <http://publications.gc.ca/collections/Collection/R22-1-2000E.pdf>

Wholistic Wellness and Individual Attitude.

Self-reported physical health and mental health are often functions of an individual's own attitude and resilience. For example, an individual, despite their respective health conditions or "burden of illness" can still report feeling well, owing to their own outlook, their supportive resources such as friends, family, housing, and other factors. In this regard, a strengths-based approach is helpful to consider for early preventative policies and services. On the other hand, there are also individuals with far less disease burden who may report poor physical and mental health. This is an important caution for the research team when preparing the final report and a reminder to avoid generalizations and to consider context beyond the data.

Future Directions for Research and Analysis.

Engagement participants expressed a particular interest in further exploration of geographic remoteness (i.e., urban, rural, remote/special access) comparative analyses and marijuana usage amongst First Nations seniors.

What should we keep in mind when interpreting the findings?

Home Care Needs.

Engagement participants cautioned against over generalizing and in interpreting the findings that indicate a majority of First Nations seniors do not need formal home health care services (e.g. nursing care, long-term care, etc.), as these could underestimate these needs in communities and overestimate resources available to meet them. They suggested, for example, that there may be a bias in the seniors who responded to the survey(s) towards overrepresentation of those who are healthy enough to not require formal health care services; in other words, seniors who have more health issues and need more services may be underrepresented in the datasets.

Health Behaviours.

Funding policy should reflect the need to look at health and wellness programming in a more wholistic fashion involving mental, emotional, spiritual, and social needs rather than focusing on discrete physical needs or outcomes. Information about health behaviours and health conditions is very helpful as it links to future specific needs such as medical equipment, devices, special diets, etc. However, it is also important to consider broader community-wide solutions to address low participation in physical activity, such as engaging with social programming and community recreation workers.

Long-term Care.

Engagement participants emphasized that long-term care facilities are rare in Northern communities. Accordingly, they noted that many seniors who require a high level of care must leave their communities. Limited access to in-community care introduces additional challenges to seniors' wellness as they risk being separated from their families and communities and placed in institutionalized care settings which are often culturally unsafe. At a minimum, participants identified the need for culturally safe assisted-living spaces in communities.

Dementia or Cognitive Impairment.

The data from both surveys was found to be not reflective of the experiences of those living with dementia. Given the method of survey administration/data collection, it is likely that this population is underrepresented in the survey sample and its data.

What are the most important things we can learn from these findings?

Spirituality.

The high proportions of First Nations seniors who feel that traditional spirituality (72.6%) and organized religion (56.0%) are important reflect the need to ensure that seniors programming respects all spiritual frameworks equally. These high rates, particularly among those who self-report that organized religion was important to them, may also hint at an underlying tension and conflict with spirituality as a consequence of colonial legacies (e.g., church-run residential and day schools).

It was noted by one engagement participant that younger generations who look to their Elders for spiritual guidance are sometimes dismayed at those who continue to embrace organized religion at the expense of traditional spirituality. Many younger people may view organized religion as an instrument of Residential Schools and a remnant of colonization. Accordingly, many people have turned away from these forms of faith in favour of traditional First Nations spirituality in its stead.

Language Revitalization.

It was gratifying for some engagement participants to see the statistics about language retention, especially considering the high rate of Residential School attendance among seniors, where the use of their original language was discouraged and for which they were most likely punished. Moreover, some of those who had attended Residential Schools may still be in the process of healing

from their experience and may therefore be reluctant to share or speak in their language. Programs can be instrumental in providing support for those who have survived Residential Schools and wish to heal, reinvigorate, and nurture their use of their First Nation language. Safe spaces and opportunities should be created to allow First Nations seniors and older adults to come together amongst themselves to speak in their language, through social and other recreational activities.

How should the findings be shared and what should be highlighted in the report?

Share with Urban First Nations Community Organizations, Leaders and Policy Makers.

Although the findings pertain to First Nations seniors living on reserves and in Northern communities, the information is instructive as well for the needs of First Nations seniors living off reserves in urban settings. Thus, it was suggested to share the report with provincial members of Parliament and legislative assemblies and city councillors to open up the dialogue between urban planners, hospital administrations, and Indigenous leaders. This will be particularly helpful in bridging the gap between First Nations communities and urban centres as First Nations seniors transition between care in urban and rural communities. Often, the care received in urban or mainstream systems is culturally unsafe, or worse, discriminatory or racist. The findings from this study should be considered important aids in furthering the understanding, from a strengths-based lens, of the wholistic wellness needs of all First Nations seniors.

Ensure that Limitations are Well Communicated.

It will be important to highlight key limitations such as the fact that this study is one “piece of the whole” and reflects only the experiences of First Nations seniors living on reserves over

the age of 54. There is a whole population of First Nations seniors who live outside of First Nation communities and/or who may be underrepresented in the data whose experiences and perspectives may not be reflected here. Additionally, participants cautioned against the findings from the study being used to generally describe the experiences of other Indigenous (i.e., Inuit or Métis) peoples in Canada. However, this study may serve to highlight the need for and potential of data linkages between interested Inuit, Métis and First Nations communities and organizations.

Consider Broad Knowledge Sharing in a Variety of Formats for Diverse Audiences.

Engagement participants made a number of specific suggestions regarding sharing and translation of the knowledge/findings from this study:

- Craft key messages that focus on the positive instead of the negative, especially upfront.
- Tie in solutions and recommendations.
- Use language accessible to communities and appropriate to varying audiences and stakeholders.
- Develop fact sheets that can be distributed to community health centres, as well as infographics and presentations for use at health forums and other venues across Canada.
- Ensure the report is shared with engagement session participants, FNIGC’s regional partners, the Canadian Indigenous Nurses Association (CINA), and the Canadian Nurses Association, as well as on the FNIGC website.
- Most importantly, ensure strong positive messages are drawn from the report to support better care for older First Nations populations.



Discussion



Health profiles of seniors frequently emphasize deficits such as relative rates of illness, chronic conditions, physical limitations, impairments, and self-reported ratings of health or mental health at the expense of understanding wellness (Hunt, McKenna, McEwan, Backett, Williams, & Papp, 1980; Ontario Ministry of Health and Long-Term Care, 2018). By focusing on deficits, we risk limiting our understanding of aging to an understanding of sickness—only one aspect of the aging experience. In contrast, this profile of wellness emphasizes that for First Nations seniors aging is a much more complex experience, informed by environmental, cultural, and community factors. A key finding of this profile is that many older First Nations adults feel that their health is well-balanced in general even if one aspect of their health suffers (e.g., physical, emotional, mental, or spiritual). For example, though the oldest age group reported higher levels of some physical health concerns like activity limitations and chronic health conditions, they still reported high levels of wholistic balance.

However, wholistic understandings of wellness do not negate important considerations of health conditions or negative factors associated with health. Physical ailments, chronic conditions, and/or other risk factors are critical considerations in a profile of seniors' health and wellness. For example, more than half of First Nations seniors reported being diagnosed with three or more chronic health conditions, and one in five reported six or more. In addition, many seniors reported experiencing multiple activity limitations, and others reported experiencing significant injuries that impacted their lives, such as falls.

A strengths-based approach to seniors' wellness provides important context for understanding reports of ailments and other health conditions within First Nations communities. For example, large proportions of First Nations older adults either survived Residential Schools or have parents who survived Residential Schools, a legacy now well known for its traumatic, long-lasting, and intergenerational impacts on individual and community health (Truth and Reconciliation Commission of Canada, 2015). Yet, despite high attendance rates, many seniors reported using First Nations languages; placing importance on traditional spirituality; having strong connections to community; having continued access to

traditional medicines; incorporating traditional foods into the diet; and participating in traditional land-based physical activities. These findings speak to the resilience of First Nations seniors and the important implications of cultural practices for policy and community programming and services. The data reported in this senior wellness profile provides further support for arguments advanced by past research conducted in partnership with First Nations, and by First Nations community members, Elders and community leaders: that personal resilience, affirmations of Indigenous culture, identity and languages, as well as community self-governance are linked to positive health and well-being (Institute of Aboriginal Peoples' Health [IAPH], 2019).

Another key to healthy aging is the mitigation of certain risk factors, such as smoking cigarettes, associated with particular chronic conditions; further, a healthy diet and an active lifestyle are also linked to wellness (Cancer Care Ontario, 2016). More than half of First Nations seniors reported being food secure, while half also reported that they eat a nutritious, healthy diet. This prevalence of food security among seniors is slightly higher than the 49.2% reported among the general First Nations population living on reserves and in Northern communities (FNIGC, 2018b); however, it suggests that a significant number of First Nations seniors still struggle to meet basic living requirements for food. A full understanding of the diets of First Nations seniors involves a consideration of both traditional and non-traditional food sources. Indeed, more than three-quarters of First Nations seniors reported that they incorporate traditional foods in their diet. These findings suggest that a continued emphasis should be placed on healthy eating that incorporates traditional foods, a recommendation also supported by findings in the First Nations Food, Nutrition and Environment Survey (Chan et al., 2019). For example, supporting First Nations communities with policies and programs that improve the accessibility of valued traditional food sources could be one strategy to decrease the reported incidence of food insecurity.

About one in five First Nations seniors reported being physically active in a typical week, with a similar proportion reporting a healthy weight based on

BMI score; sex and gender appear to be important considerations for both wellness indicators. Relative to women, men are less likely to have a BMI score in the obese range. Further, while walking, outdoor gardening and yardwork, and berry picking and other food gathering were the most common physical activities among all seniors, male seniors are more likely than females to partake in traditional land-based physical activities such as hunting, trapping, and fishing. Seniors aged 65 years and older reported participating in many physical activities less than that of seniors aged 55–64 years, but important exceptions to this include walking, berry picking or other food gathering, traditional dancing, and trapping. This too would suggest that the promotion of a physical lifestyle ought to consider a variety of traditional and outdoor activities.

Age also appears to influence the extent to which First Nations seniors are able to access necessary health-related home care services. Such services can be ‘formal’ (e.g., receiving care from a nurse) or ‘informal’ (e.g., assistance with running errands). While the majority of seniors aged 70 and above report that they receive the formal and informal health-related home care services they need, younger seniors reportedly have less access to both social and medical supports when they need them. This gap in services among younger seniors is particularly troubling, given that First Nations seniors typically experience frailty at younger ages compared to the general population (FNIGC & Walker, 2017). Greater awareness of this gap may inspire community-based policy advocacy and local program development that is focused on reaching younger seniors.

It should be noted that for seniors living in First Nation communities, long-term care program dollars to provide home care (i.e., light housekeeping) are limited and may be allocated only to seniors who do not live with family (Simon, 2010). Informal caregiving by family and community members is therefore vitally important. Although informal caregiving can be viewed as a burden by family, it can also be viewed as a community strength and as a protective factor for the health and wellness of First Nations seniors. Informal caregiving can help reduce social isolation and ensure that seniors have someone in their network who is likely to be aware of changes in health status, and who can potentially advocate for services and act as a translator (language and/or culture) with medical and other services (Beatty & Weber-Beeds, 2013; Employment and Social Development Canada, 2018).

Informal caregiving by family members is also a way in which family connection, social support and bonds of kinship are maintained and reinforced (Jervis, Boland, & Frickensher, 2010) across generations. Moreover, positive cultural attitudes toward assisting Elders and Elder care can be observed in some communities, which serves to alleviate feelings of burden and contribute to caregiving satisfaction (Jervis, Boland, & Frickensher, 2010). In many First Nations communities, there is a tremendous attitude of respect for Elders that is recognized and supported within First Nations worldviews (Anderson, 2011; Rowe et al., 2019). Indeed, expressions of respect and a strong desire to support seniors were emphasized in the qualitative component of this study. Engagement participants reported that Elders, though they may be frail physically, are seen as language and Knowledge Holders, and for the most part, will be taken care of at home when they are frail.

The respect and value placed on Elders in many First Nations communities, and the potential role of these cultural perspectives in senior wellness, are also evident in the data collected from the FNREEES and RHS Phase 3 surveys with First Nations children and youth (FNIGC, 2016; 2018b). For example, data from RHS Phase 3 showed that grandparents were the most frequently cited source of learning about First Nations culture among children (72.6%) and youth (63.6%), with Community Elders also cited by many (23.5% of children, 27.0% of youth) (FNIGC, 2018b, p. 43 & 47). Similar results were found in the FNREEES regarding the most commonly cited teachers of First Nations language and culture for children and youth (FNIGC, 2016).

The above also dovetails with the findings from other community-based research projects with First Nations seniors. For example, Thompson, Cameron, & Fuller-Thomson (2013) reported on a qualitative study with 17 First Nations grandparents where participants spoke about how grandparenting was a source of resilience in their lives that allowed them to overcome challenges they experienced in earlier life. Many of the grandparents who were interviewed spoke about how becoming a grandparent and being engaged with young children in a caregiving role strengthened and revitalized their desire to share, be engaged with, and—in a number of cases—learn more about their traditional cultural practices and Indigenous languages.

Associations with Self-rated Health and Mental Health

This seniors' wellness profile presents data that shows much overlap in the factors positively associated with self-rated health and mental health among First Nations seniors, although the strength of the effects of several factors varied between outcomes. Among the factors with the most pronounced statistical associations with self-rated health and self-rated mental health are mastery, currently working (with positive work environment factors), and higher education. These factors have in common that they are often related to greater empowerment and increased options in making and implementing choices that affect one's life. There is some resonance between these findings and work from First Nations organizations and Indigenous scholars who have noted the importance of experiences of autonomy and personal empowerment in First Nations perspectives on health and well-being (Health Canada & AFN, 2015; Muir & Bohr, 2014). For example, the First Nations Mental Wellness Continuum Framework presents a wholistic view of mental wellness where a balance between the physical, mental, emotional, and spiritual aspects of life leads to personal empowerment through experiences of purpose, hope, meaning, and belonging (Health Canada & AFN, 2015).

Physical activity and food security also showed strong associations with self-rated health, while a broader variety of factors including social support, having good health care services and a strong sense of belonging in the community, and eating a nutritious balanced diet had strong associations with self-rated mental health. However, caution should be exercised in making causal inferences: it is not clear whether these factors cause good health, are the result of good health, or are associated with additional unknown factors, for example good community governance or resources.

Many findings in this seniors' wellness profile emphasize the importance of social and personal relationships. Community and social factors such as feeling a sense of belonging and safety in the community, perceived high quality of community health care services, and having social support available were either strongly or moderately associated with good self-rated health and mental health. It is clear that such community and social connections are vital components to seniors' wellness. In fact, research with the general population has linked high levels of social support and social participation with reduced risk of mortality (Wilkins, 2003),

disability (Lund et al., 2010; Mendes de Leon et al., 2003) and depression (Glass et al., 2006). Positive social and personal relationships are identified as essential components of cultural frameworks used by many First Nations to conceptualize health and mental health (Health Canada & AFN, 2015; FNIGC, 2018a).

More than half of First Nations seniors indicated that they volunteer in their communities. The high rate of volunteerism is at odds with the typical perception that seniors are experiencing increasing limitations and health conditions that may hinder their participation in their community in this way. Nonetheless, it fits within and reinforces our understanding that community participation is an important contributor to wholistic wellness. These results on social and community belonging and high levels of community participation coincide with other findings of research with First Nations Elders that highlight their "active" community participation as well as "the necessity of the role of Elders in a strong and vibrant community" (Rowe et al., 2019, p. 11).

Wholistic Balance

Well-being, from a First Nations perspective, is wholistic and comprehensive; it cannot be reduced to a single element. This conceptualization of health and well-being is part of the Regional Health Survey's (RHS) Cultural Framework, which encompasses "the total health of the total person in the total environment" (FNIGC, 2018a, p. 8). Wholistic balance is a fluid concept of wellness encompassing four dimensions of health: mental, emotional, spiritual, and physical, which must be in balance and nurtured together in order to create wholistic well-being (First Nations Health Authority, 2019).

Stated another way, many First Nations worldviews have been represented by Knowledge Keepers through the Medicine Wheel, which has balance as its central tenet and presents the integration of mental, emotional, physical, and spiritual health as a requirement for healthy living (McCormick, 1995). This balance is created and sustained when the individual is connected to family, friends, community, Elders, ceremony, land, spirituality, and the Creator (Mulcahy, 1999).

From our analysis we found that a wide variety of factors are positively associated with perceptions of wholistic balance among First Nations seniors. One could categorize these factors across the four dimensions of health as follows:

Mental

- Mastery
- Currently working
- Having attended college / learned a trade
- Having graduated university
- Volunteering in the community

Spiritual

- Perceiving traditional spirituality as important
- Perceiving organized religion as important
- Frequent participation in community events

Emotional

- Having a strong sense of belonging to community
- Identifying 16 or more community strengths
- Having four or more types of general social support available
- Feeling valued at work (if currently working)
- Feeling safe in the community

Physical

- Eating a nutritious balanced diet
- Being food secure
- Being a non-smoker
- Being a non-drinker
- Being physically active
- Walking for exercise

In comparison to the wholistic perspective of well-being, most Western biomedical concepts of health have more of a focus on disease and infirmities. Existing health care services often focus on one or two aspects of health, such as physical health or mental health, and Indigenous knowledge is often overlooked in the design of such services (Adelson, 2005). In the biomedical model, resources and programs are only materialized to address illness with patients as passive recipients of treatment.

The data reported in this seniors' wellness profile suggests that aging well in First Nations contexts must encompass efforts to not only sustain physical wellness but also tend to mental, emotional, and spiritual wellness of First Nations seniors. Policy makers and health managers need to consider and acknowledge each of these aspects in the funding, design, and delivery of programs. For example, educational programs for personal support workers and other community health providers should take a wholistic approach to seniors' needs "not only looking at the physical aspects of your client, but the spiritual, the mental and

emotional, and how important that is in caring for your client" (Ubelacker, 2013, para 19). Most importantly, they should reflect on the critical distinctions between First Nations and mainstream conceptualizations of well-being and by extension, aging well in First Nations communities. This kind of an approach has the potential to substantially "improve quality of life, reduce the risk of chronic disease, improve health outcomes and reduce overall health care costs" (Howell et al., 2016, p. 114).

These recommendations are further supported by the finding that First Nations seniors may experience the four aspects of their health differently depending on their age. For example, older seniors reported lower levels of physical health when compared to their younger counterparts while reporting similarly high levels of mental health no matter their age. While not statistically significant, a slight trend in the findings suggested that the proportion of First Nations seniors reporting wholistic balance increases with age. Thus, First Nations seniors may experience wellness—in the form of wholistic balance—even while experiencing the physical effects of aging.

Limitations

A few limitations to the study should be taken into consideration when interpreting the results.

Interpretation of Findings

This report was developed to provide a broad, comprehensive profile of aging for First Nations seniors living in First Nations communities. Accordingly, the survey data allows for analyses to touch on many different aspects of the aging experience, yet as a cross-sectional "snapshot" in time, it cannot examine these aspects in depth or determine causality. Therefore, caution should be used when interpreting specific findings without additional context. For example, although most of the seniors who participated in the surveys reported that they do not need formal health care services (e.g., nursing care, long-term care, etc.), it is not clear whether these services existed within their communities because they were not asked this question specifically. Similarly, many First Nations seniors who require a high level of care (e.g., palliative care, hospitalization, long-term care) may have had to leave their community at some point to receive it and therefore may not have been available to participate in the original surveys.

Cultural and Regional Representativeness

This profile is based on First Nations health data collected by a First Nations organization. Accordingly, while some trends may be similar across all Indigenous groups (i.e., Inuit, Métis, and First Nations), this profile is specific to First Nations seniors living in First Nations communities.

Furthermore, because this profile is specific to First Nations who live in First Nations reserves and Northern communities, these findings are not generalizable to First Nations urban populations. In addition, due to small sample sizes in some geographic subgroups, it is not possible to analyze many indicators in ways that compare urban, rural, and remote/special access communities. It is therefore not possible, for example, to distinguish the unique experiences and challenges faced by seniors in certain geographic populations.

Participation in the Survey

In addition, the sample is limited to those First Nations seniors who were living in their communities and able to complete the RHS Phase 3 and FNREEES surveys. Many First Nations seniors who have low levels of health and wellness may be underrepresented: for example, those who are excluded from the sample due to homelessness or leaving the community to access health services, and those who decline to respond due to poor physical or mental health and do not have a proxy available to respond on their behalf.

Recommendations

First Nations populations in Canada are aging. With aging populations naturally comes increased physical challenges and chronic conditions. For First Nations older populations, these factors are made uniquely complex due to the historical and ongoing challenges of colonization. However, exploring well-being in its entirety means looking at strengths—not just deficits. A strengths-based approach to aging can be complementary to First Nations perspectives of health and wellness (Lind & Smith, 2008). The below conclusions and recommendations are based on the analyses conducted for this report and the findings from the community engagement session.

Policy Makers and Health Administrators

A strengths-based vision of aging for First Nations seniors conceptualizes wellness as involving four dimensions of the self (i.e., physical, mental, emotional, and spiritual), and this form of wellness is not necessarily diminished

by the physical effects of aging. Policy makers and health administrators should consider and incorporate this conceptualization of wellness into the funding, design and/or delivery of programs and services geared to First Nations older adults. For example, personal support workers and other community health providers may benefit from professional training that centralizes a wholistic approach to seniors' care needs. The findings of this research also suggest that, as part of this approach, health and wellness programming and policy in First Nations communities should consider ways of recognizing and supporting the vitality of cultural and community roles for seniors to support their wholistic wellness.

In addition, the unique contextual and life experiences of First Nations seniors living in reserves and Northern communities has important policy implications. For example, it is important to consider how sex, gender, age, and culture can influence the amount and type of physical activities First Nations seniors engage in. These considerations ought to be incorporated in the development of policies and programs geared to First Nations seniors in order to best meet their needs for a healthy lifestyle. As well, health managers should consider broader community-wide solutions to address First Nations seniors' low participation in physical activity and engage with community recreation workers to link these solutions with social and cultural programming.

Community health promotion and programming should also reflect on the self-reported importance of culturally informed social and recreational programming that provides both male and female seniors a variety of options for physical activity and that recognizes, supports, and takes advantage of strengths related to the unique role of Elders in family and community life within First Nations communities.

Community Programming

Programs to support informal caregivers, such as training and respite, as well as programs that build on the demonstrated strength of respect for seniors can be quite important to both building and maintaining supportive intergenerational relationships within the community, and to supporting cultural continuity.

During the community engagement session, participants emphasized the need for spiritual and religious inclusivity. It is important that programming for First Nations seniors reflect a framework that respects all forms of spirituality and religion equally. Furthermore, it was

emphasized during the engagement session that tension and/or sensitivity is often experienced among seniors who believe either traditional spirituality or religion to be important. Frontline workers should be knowledgeable of and well-equipped to navigate the sensitivities.

Given the high percentage of First Nations who either attended Residential Schools or have parents who attended Residential Schools, seniors would benefit from programming that uniquely supports Survivors and their children, particularly as it relates to supporting the revitalization of First Nations languages. Based on feedback provided during the community engagement session, these kinds of programs and activities may be best delivered informally, providing opportunities for First Nations seniors and older adults to gather in safe spaces, speak in their language, and participate in informal recreational or social activities.

Researchers

From a research perspective, it would be beneficial if the data collected by the RHS and FNREEES could be linked to other data sources associated with First Nation seniors. For example, home and community care data was identified as a possible, rich source of information about First Nations needs and services. For the purposes of this profile, these datasets could not be linked. However, future aging research would benefit from a process or path that makes this and other linkages possible.

During the community engagement session, some of those who attended expressed an interest in regional information based on geographic location (e.g., urban, rural, and remote/special access). This kind of analysis was not feasible in developing this seniors' wellness profile owing to the small sample sizes of remote/special access populations in the RHS dataset. However, regional analyses may help to highlight the unique aging experience of First Nations older adults living in non-First Nation urban settings, as well as those seniors living in remote/special access and rural communities.

Another limitation of the data noted by participants in the engagement session was that the education data was focused largely on levels of formal education. Engagement participants suggested that future research should also consider more inquiry into opportunities for informal and life-long learning within First Nations communities. Additional data in this seniors' wellness profile suggests that this could be a particularly informative avenue of

research. For example, though seniors report high levels of resilience in terms of their use of First Nations languages and their participation in cultural practices, almost one-quarter of the participants reported that they were not fully satisfied with their knowledge about traditional culture. In addition, engagement participants noted that due to personal or family experiences with the Indian Residential School system, First Nations seniors are likely at many different stages in their knowledge of culture and language. Further consideration of how opportunities for life-long learning can be captured by survey data and incorporated into community programming and policy could provide important information for understanding and supporting seniors' wellness.

Given recent legislative changes, data collection on the usage of marijuana and its health and wellness impacts was also identified as an area of interest by attendees of the community engagement session.

Knowledge Mobilization

Those who participated in the community engagement session emphasized that travelling out of communities for various health services and programs was typical for those residing within First Nations communities. Accordingly, although the findings presented in this profile pertain specifically to First Nations seniors living in their communities, this profile should be shared widely with urban health care providers, service and programming organizations, health policy makers and administrators, First Nations organizations and leadership.

Conclusions

Information in this analysis about the kinds of health behaviours and health conditions experienced by First Nations seniors can help inform future specific health needs in First Nations communities, such as medical equipment, devices, special diets, etc. However, a key message from this seniors' wellness profile is that community health promotion programming should embrace a wider lens and not focus on just physical health needs but also consider mental, emotional, and spiritual health through a more wholistic approach to program delivery. Funding policy should reflect this need to look at health and wellness programming in a more wholistic fashion, involving the total picture of mental, emotional, spiritual, and social needs rather than just focusing on discrete physical needs or outcomes.

Previous research has found that First Nations seniors experience an earlier onset of physical frailty compared to non-First Nations populations (FNIGC & Walker, 2017). However, coming from a strengths-based perspective, we have observed that increased age is positively associated with wholistic wellness. A strengths-based vision of aging for First Nations seniors consists of achieving wellness and balance across all four areas of the self (physical, mental, emotional, and spiritual), and this form of wellness is not necessarily diminished by the physical effects of aging.

Overall, this report's findings support the argument that policies and programs that enable greater opportunities for First Nations seniors to achieve education, life-long learning and livelihoods; to participate in physical activities and valued community roles; to consistently access sufficient nutrition and quality health care services; and to enjoy strong social and community connections—that are meaningful as defined by each First Nations community—are key factors in maintaining physical, mental, emotional, and spiritual health into old age.



References



- Adelson, N. (2005). The embodiment of inequity: Health disparities in Aboriginal Canada. *Canadian Journal of Public Health*, 96, S45–S61.
- Beatty, B. B., & Berdahl, L. (2011). Health care and Aboriginal seniors in urban Canada: Helping a neglected class. *The International Indigenous Policy Journal*, 2(1), 1-16.
- Beatty, B., & Weber-Beeds, A. (2013). Mitho-pimatisiwin for the elderly: The strength of a shared caregiving approach. In D. Newhouse, K. FitzMaurice, T. McGuire-Adams, & D. Jetté (Eds.), *Well-Being in the Urban Aboriginal Community* (pp. 113-129). Toronto: Thompson Books.
- Bergman, H., Ferrucci, L., Guralnik, J., Hogan, D. B., Hummel, S., Karunanathan, S., & Wolfson, C. (2007). Frailty: An emerging research and clinical paradigm – Issues and controversies. *Journal of Gerontology, Series A*, 62 (7), 731-737.
- Bureau of Labor Statistics. (n.d.) Pearlman Mastery Scale IRT Item Parameter Estimates, Scores and Standard Errors with Custom Weighted Z-Scores and Percentile Ranks. National Longitudinal Surveys. <https://www.nlsinfo.org/sites/nlsinfo.org/files/attachments/141120/Pearlman%20Documentation%20with%20IRT.pdf>
- Cancer Care Ontario. Path to Prevention – Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis. Toronto: Queen's Printer for Ontario; 2016. https://www.ccohealth.ca/sites/CCOHealth/files/assets/FNIMPathtoPrevention_0.pdf
- Chan, L., Batal, M., Sadikm, T., Tikhonov, C., Schwartz, H., Fediuk, K., Ing, A., Marushka, L., Lindhorst, K. Barwin, L., Berti, P., Singh, K., & Receveur, O. (2019). *FNFNES Final Report for Eight Assembly of First Nations Regions: Draft Comprehensive Technical Report*. Assembly of First Nations, University of Ottawa, Université de Montréal. http://www.fnfnes.ca/docs/FNFNES_draft_technical_report_Nov_2_2019.pdf
- Chapin, R., & Opal Cox, E. (2002). Changing the paradigm. *Journal of Gerontological Social Work*, 36(3–4), 165–179. https://doi.org/10.1300/J083v36n03_13
- Employment and Social Development Canada. (2018). *Social isolation of seniors: A focus on Indigenous seniors in Canada*. Ottawa: Government of Canada.
- First Nations Health Authority. (2019). *First Nations Perspective on Health and Wellness*. <http://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/first-nations-perspective-on-wellness>
- First Nations Information Governance Centre. (2012). *First Nations Regional Health Survey (RHS) 2008/10: National report on adults, youth and children living in First Nations communities*. (Ottawa: 2012). https://fnigc.ca/wp-content/uploads/2020/09/ccd66b67e9debb2c92f4a54703e1d050_First-Nations-Regional-Health-Survey-RHS-2008-10-National-Report.pdf
- First Nations Information Governance Centre (2016). *Our Data, Our Stories, Our Future: The National Report of the First Nations Regional Early Childhood, Education and Employment Survey*. (Ottawa: 2016) https://fnigc.ca/wp-content/uploads/2020/09/fnigc_fnreeds_national_report_2016_en_final.pdf
- First Nations Information Governance Centre. (2018a). *National Report of the First Nations Regional Health Survey, Phase 3: Volume 1*. (Ottawa: 2018). https://fnigc.ca/wp-content/uploads/2020/09/713c8fd606a8eeb021debc927332938d_FNIGC-RHS-Phase-III-Report1-FINAL-VERSION-Dec.2018.pdf
- First Nations Information Governance Centre. (2018b). *National Report of the First Nations Regional Health Survey, Phase 3: Volume 2*. (Ottawa: 2018). https://fnigc.ca/wp-content/uploads/2020/09/53b9881f96fc02e9352f7cc8b0914d7a_FNIGC-RHS-Phase-3-Volume-Two_EN_FINAL_Screen.pdf

- First Nations Information Governance Centre & Walker, J. D. (2017). Aging and Frailty in First Nations Communities. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement*, 1–12. <https://doi.org/10.1017/S0714980817000319>
- Glass, T., Mendes de Leon, C., Bassuk, S., & Berkman, L. (2006). Social engagement and depressive symptoms in late life. *Journal of Aging and Health*, 18(4), 604–28.
- Government of Canada. (2018). Canada's First Poverty Reduction Strategy. <https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/reports/strategy.html>
- Greenwood, M., Reading, C., Lindsay, N. M., & de Leeuw, S. de (Eds.). (2015). *Determinants of Indigenous peoples' health in Canada: Beyond the social*. Toronto: Canadian Scholars' Press.
- Halseth, R. (2018). *Overcoming barriers to culturally safe and appropriate care services and supports for Indigenous peoples in Canada*. Prince George: National Collaborating Centre for Aboriginal Health.
- Halseth, R. (2019). *The prevalence of Type 2 diabetes among First Nations and considerations for prevention*. National Collaborating Centre for Aboriginal Health. <https://www.nccah-ccnsa.ca/docs/health/RPT-Diabetes-First-Nations-Halseth-EN.pdf>
- Health Canada. (1998). *Principles of the National Framework on Aging: A policy guide*. <http://publications.gc.ca/collections/Collection/H88-3-21-1998E.pdf>
- Health Canada & Assembly of First Nations [AFN]. (2015). *First Nations Mental Wellness Continuum Framework*. http://nnapf.com/wp-content/uploads/2015/01/24-14-1273-FN-Mental-Wellness-Framework-EN05_low.pdf
- Hovey, R., Delormier, T., & McComber, A. M. (2014). Social-relational understandings of health and well-being from an Indigenous perspective. *International Journal of Indigenous Health*, 10(1), 35–54.
- Howell T., Auger M., Gomes, T., Brown, F.T., & Young Leon, A.L. (2016). Sharing our wisdom: a holistic Aboriginal health initiative. *International Journal of Indigenous Health*, 11, 111–132.
- Hunt S.M., McKenna S.P., McEwan J., Backett E. M., Williams J., & Papp, E. (1980). A quantitative approach to perceived health status: a validation study. *Journal of Epidemiology and Community Health*, 34, 281–286.
- Indian and Northern Affairs Canada. (2000). *Band classification manual*. <http://publications.gc.ca/collections/Collection/R22-1-2000E.pdf>
- Institute of Aboriginal Peoples' Health (IAPH). *Pathways to Health Equity for Aboriginal Peoples. Overview*. Ottawa: Canadian Institutes of Health Research (2019). <http://www.cihir-irsc.gc.ca/e/47003.html>
- Kelly-Scott, K. (2016). *Aboriginal peoples: Fact sheet for Ontario*. Ottawa, Ontario: Statistics Canada.
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222. <http://ioa126.medsch.wisc.edu/findings/pdfs/56.pdf>
- Kolahdooz, F., Nader, F., Kyoung, J., & Sharma, S. (2015). Understanding the social determinants of health among Indigenous Canadians: Priorities for health promotion policies and actions. *Global Health Action*, 8, 1–16.
- Lind, C., & Smith, D. (2008). Analyzing the state of community health nursing: advancing from deficit to strengths-based practice using appreciative inquiry. *Advances in Nursing Science*, 31(1), 28–41. <https://doi.org/10.1097/01.ANS.0000311527.35446.4c>
- Lund, R., Nilsson, C., & Avlund, K. (2010). Can the higher risk of disability onset among older people who live alone be alleviated by strong social relations? A longitudinal study of non-disabled men and women. *Age and Ageing*, 39(3), 319–26.
- MacDonald, J. P., Ward, V., & Halseth, R. (2018). *Alzheimer's Disease and Related Dementias in Indigenous populations in Canada: Prevalence and Risk Factors*. National Collaborating Centre for Aboriginal Health. <https://www.ccnsa-nccah.ca/docs/emerging/RPT-Alzheimer-Dementia-MacDonald-Ward-Halseth-EN.pdf>
- McCormick, R. (1995). The facilitation of healing for the First Nations people of British Columbia. *Canadian Journal of Native Education*, 2, 249–319.

- Morency, J.D., Caron-Malenfant, E., Coulombe, S., & Langlois, S. (2015). *Projections of the Aboriginal Population and Households in Canada, 2011 to 2036*. Statistics Canada. <https://www150.statcan.gc.ca/n1/en/pub/91-552-x/91-552-x2015001-eng.pdf?st=d7NxVQTT>
- Muir, N. M., & Bohr, Y. (2014). Contemporary practice of traditional Aboriginal child rearing: A review. *First People Child & Family Review*, 9(1), 66-79.
- Mulcahy, G. (1999). The role of Aboriginal identity in a holistic approach to healing. In S. N. Madu, P. K. Baguma, & A. Pritz (Eds.), *Cross-cultural dialogue on psychotherapy in Africa*, (pp. 55-68). Pietersburg, South Africa: University of the North (for World Council for Psychotherapy, African Chapter).
- Obeng Gyimah, S., White, J., & Maxim, P. (2004). Income and First Nations elderly: Policies for a better future. In J. P. White, P. Maxim, & D. Beavon (Eds.), *Aboriginal policy research - Setting the agenda for change* (Vol. 1, pp. 71-83). Toronto: Thompson Books.
- O'Donnell, V., Wendt, M., & National Association of Friendship Centres. (2017). *Aboriginal peoples survey: Aboriginal seniors in population centres*. Ottawa: Statistics Canada.
- Ontario Ministry of Health and Long-Term Care. (2018). *Population Health Assessment and Surveillance Protocol*. http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/protocols_guidelines/Population_Health_Assessment_Surveillance_2018_en.pdf
- Pace, J.E., & Grenier, A. (2017). Expanding the Circle of Knowledge: Reconceptualizing Successful Aging Among North American Older Indigenous Peoples. *The Journals of Gerontology: Series B*, 72(2), 248–258. <https://doi.org/10.1093/geronb/gbw128>
- Public Health Agency of Canada. (2016). *Health Status of Canadians 2016*. Ottawa: Public Health Agency of Canada. <https://www.canada.ca/content/dam/hc-sc/healthy-canadians/migration/publications/departement-ministere/state-public-health-status-2016-etat-sante-publique-statut/alt/pdf-eng.pdf>
- Reading, J. (2009). *The crisis of chronic disease among Aboriginal peoples: A challenge for public health, population health and social policy*. Victoria, B.C: Centre for Aboriginal Health Research, University of Victoria.
- Reading, C. & Wien, F. (2009). *Health inequalities and social determinants of Aboriginal Peoples' Health*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
- Rosenberg, M., Wilson, K., Abonyi, S., Wiebe, A., Beach, K., & Lovelace, R. (2009). *Older Aboriginal Peoples in Canada – Demographics, health status and access to health care, Social and Economic Dimensions of an Aging Population Research Papers*. McMaster University. <https://socialsciences.mcmaster.ca/sedap/p/sedap249.pdf>
- Ryser, L., & Halseth, G. (2012). Resolving mobility constraints impeding rural seniors' access to regionalized services. *Journal of Aging and Social Policy*, 24(3), 328-344.
- Simon, L. (2010). *Living conditions of the elders of the First Nations in Quebec: Final report*. First Nations of Quebec and Labrador Health and Social Services Commission.
- Statistics Canada (2016). *Selected demographic, sociocultural, education and labour characteristics, sex and income status in 2010 for the population in Private Households of Canada, Provinces, Census Metropolitan Areas and Census Agglomerations, 2011 National Household Survey*, Statistics Canada Catalogue no. 99-014-X2011043. <https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/dt-td/Rp-eng.cfm>
- Statistics Canada. (2017a, October 25). *The Daily — Aboriginal peoples in Canada: Key results from the 2016 Census*. <https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm>
- Statistics Canada. (2017b). *The housing conditions of Aboriginal people in Canada: Census of population, 2016*. http://publications.gc.ca/collections/collection_2018/statcan/98-200-x/98-200-x2016021-eng.pdf
- Statistics Canada. (2017c). *The Aboriginal languages of First Nations people, Métis and Inuit: Census of population, 2016*. http://publications.gc.ca/collections/collection_2018/statcan/98-200-x/98-200-x2016022-eng.pdf

- Statistics Canada. (2017d). *Focus on Geography Series, 2016 Census*. Statistics Canada Catalogue no. 98-404-X2016001. Ottawa, Ontario. Data products, 2016 Census. <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-CAN-eng.cfm?Lang=Eng&GK=CAN&GC=01&TOPIC=9>
- Strandberg, T.E., & Pitkala, K.H. (2007). Frailty in elderly people. *The Lancet*, 369(9570), 1328-1329.
- The Truth and Reconciliation Commission of Canada. (2015). *Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada*. http://publications.gc.ca/collections/collection_2015/trc/IR4-7-2015-eng.pdf
- Thompson, G. E., Cameron, R. E., & Fuller-Thomson, E. (2013). Walking the red road: The role of First Nations grandparents in promoting cultural well-being. *International Journal of Aging and Human Development*, 76, 55-78.
- Turcotte, M., & Schellenberg, G. (2006). *A portrait of seniors in Canada*. Statistics Canada. <https://www150.statcan.gc.ca/n1/en/pub/89-519-x/89-519-x2006001-eng.pdf?st=oRl-B08j>
- Ubelacker, S. (2013, November 28). Aboriginal seniors face more challenges staying healthy, accessing care: Report. *The Globe and Mail*. <https://www.theglobeandmail.com/news/national/aboriginal-seniors-face-more-challenges-staying-healthy-accessing-care-report/article15648102/>
- Wilkins, K. (2003). Social Support and mortality in seniors. *Health Reports*, 13(3), 21-34.
- Wilson, K., Rosenberg, M. W., & Abonyi, S. (2011). Aboriginal peoples, health and healing approaches: The effects of age and place on health. *Social Science & Medicine*, 72(3), 355-364.
- Wingert, S. (2013). Well-being in First Nations communities: A comparison of objective and subjective dimensions. In D. Newhouse, K. FitzMaurice, T. McGuire-Adams, & D. Jetté (Eds.), *Aboriginal Well-Being: Canada's Continuing Challenge* (pp. 209-230). Toronto: Thompson Books



Appendices



Appendix A: Variable Information

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
Vision: Physical Health Factors		
Health change (RHS Phase 3)	<p><u>Question:</u> Compared to one year ago, how would you say your health is now? Is it...?</p> <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Much better now; Somewhat better now; About the same - Somewhat worse now; Much worse now 	Five response options were regrouped into two categories for analysis.
Self-rated oral health (RHS Phase 3)	<p><u>Question:</u> In general, would you say the health of your teeth and mouth is...?</p> <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Excellent; Very good; Good - Fair; Poor 	Five response options were regrouped into two categories for analysis.
BMI (RHS Phase 3)	<p><u>Question:</u> Based on self-reported height & weight</p> <p><u>Analysis categories:</u></p> <ul style="list-style-type: none"> - Underweight (BMI <18.5) - Normal weight (BMI = 18.5-24.9) - Overweight (BMI = 25.0-29.9) - Obese (BMI ≥30.0) 	<p>BMI was calculated from height & weight: $BMI = \text{kg (weight)} / \text{m}^2 \text{ (height)}$</p> <p>BMI score was categorized into 4 groups for analysis.</p>
Activity limitations (RHS Phase 3)	<p><u>Question:</u> Do you have difficulties with any of the following activities due to a long-term physical condition, mental condition, or health problem?¹</p> <p><u>Regrouped response options for each limitation:</u></p> <ul style="list-style-type: none"> - No - Sometimes; Often; Always <p><u>Analysis categories:</u></p> <ul style="list-style-type: none"> - None - 1-2 activity limitations - 3+ activity limitations 	<p>For each of 14 limitations, four response options were dichotomized indicating whether an activity limitation was present or not. Each limitation was analyzed independently to determine its prevalence.</p> <p>Then the total number of activity limitations were counted for each case. Counts were averaged and also categorized into three groups for analysis.</p> <p>Cases were excluded if number of missing values >3</p>
Chronic health conditions (RHS Phase 3 & FNREEES)	<p><u>Question:</u> Have you been told by a health care professional that you have any of the following health conditions?² We are interested in "long-term conditions" which are expected to last or have already lasted 6 months or more and that have been diagnosed by a health professional.</p> <p><u>Response options:</u> Y/N</p>	<p>Original responses for each of 35 conditions were analyzed to determine most common chronic health conditions.</p> <p>"Yes" responses were counted to determine total number of conditions for each case. Counts were</p>

¹ See RHS Phase 3 questionnaire p. 8 for full list of activity limitations: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

² See RHS Phase 3 questionnaire p. 5-6 for full list of chronic health conditions: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	<u>Analysis categories:</u> - 0 - 1-2 - 3-5 - 6+	averaged and also categorized into four groups for analysis. Cases were excluded from count analyses if number of missing values >7
Injury cause (RHS Phase 3)	<u>Question:</u> What caused the injury? ³ [Injured in past year] <u>Response options:</u> - Motor vehicle accident - Fall - Accidentally struck or crushed by object(s) - Overexertion or strenuous movement - Other	Only 5 most common causes kept in analysis due to low cell counts.
Injury treatment location (RHS Phase 3)	<u>Question:</u> Where did you get medical treatment for your injury? ⁴ [Injured in past year] (<i>Mark all that apply</i>) <u>Response options:</u> - Doctor's office - Hospital emergency room - Walk-in clinic - Community Health Centre/Nursing Station	Only 4 most common treatment locations kept in analysis due to low cell counts.
Most recent dental care (RHS Phase 3)	<u>Question:</u> Approximately when was the last time you had any dental care? <u>Regrouped response options:</u> - "More than 1 year ago" (More than five years ago; Between two and five years ago; Between one and two years ago) - "Within last 12 months" (Less than six months ago; Between six months and one year ago) - Never	Six response options were regrouped into three categories for analysis.
Usage of traditional medicine (RHS Phase 3)	<u>Question:</u> In the past 12 months, did you use traditional medicine? <i>Note: Traditional medicine can include herbal remedies, spiritual therapies, assistance from healers, or other practices indigenous to your culture.</i> <u>Response options:</u> Y/N	N/A
Consulted traditional healer (RHS Phase 3)	<u>Question:</u> When did you last consult a traditional healer? <u>Regrouped response options:</u> - Within the past 12 months; 1-2 years ago; Over 2 years ago - Never	Ungrouped response options were analyzed to determine proportion who had consulted a healer in the past 12 months. Four response options were dichotomized into two categories,

³ See RHS Phase 3 questionnaire p. 10 for full list of injury causes: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

⁴ See RHS Phase 3 questionnaire p. 10-11 for full list of injury treatment locations: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
		indicating whether a healer had ever been consulted or not, for analysis.
Other health care usage (RHS Phase 3)	<p><u>Question:</u> When did you last...?</p> <ul style="list-style-type: none"> -Visit a doctor or community health nurse -Access a mental health service (e.g., counseling, psychological testing) <p><u>Regrouped response options for each type of health care:</u></p> <ul style="list-style-type: none"> - Within the past 12 months; 1-2 years ago; Over 2 years ago - Never 	Ungrouped response options were analyzed to determine proportions who had used each health care service in the past 12 months. Four response options were dichotomized into two categories, indicating whether the health care service had been used or not, for analysis.
Action: Health Behaviours/Lifestyle Factors		
Eats a nutritious, balanced diet (RHS Phase 3)	<p><u>Question:</u> In the past 12 months, how often did you eat nutritious balanced meals?</p> <p><i>Note: Balanced meals contain a variety of food groups, for example a selection of protein, grains, vegetables and fruits, and dairy products.</i></p> <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Always; Almost always - Sometimes; Rarely; Never 	Five response options were regrouped into two categories for analysis.
Traditional Foods (RHS Phase 3)	<p><u>Question:</u> In the past 12 months, how often have you eaten the following traditional foods?⁵</p> <p><i>Please note that some of these foods may not be considered traditional for all individuals or regions.</i></p> <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> -Not Applicable (Not a local traditional food); Not at all -A few times; Often <p><u>Analysis categories:</u></p> <ul style="list-style-type: none"> - 5+ traditional foods eaten - <= 5 traditional foods eaten 	<p>For each of 13 traditional foods, four response options were dichotomized indicating whether a food had been eaten or not.</p> <p>Grouped responses were analyzed to determine proportions of respondents who ate each food. Traditional foods eaten were counted and cases were categorized into two groups based on whether 5+ foods had been eaten or not. Cases were excluded from count analysis if number of missing values >2</p>
Food security (RHS Phase 3)	<p><u>Question:</u> Food Security Index derived from 6 food security questions⁶</p> <p><u>Analysis categories:</u></p> <ul style="list-style-type: none"> - Food Secure (0) - Food Insecure, Moderate (1-4); Food Insecure, Severe (5-6) 	Affirmative answers to each of 6 food security questions were summed to produce a score ranging from 0 to 6. This score was assigned to one of three categories: Food secure, Food Insecure (Moderate) or Food Insecure (Severe). These were then regrouped into two categories for analysis.

⁵ See RHS Phase 3 questionnaire p. 16 for full list of traditional foods: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

⁶ See RHS Phase 3 questionnaire p. 16-17 for full list of food security questions: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
		Cases were excluded if responses for any of the six questions were missing.
Physical activities & Activity levels (RHS Phase 3)	<p><u>Question:</u> Have you done any of the following activities in the past 3 months?⁷ (<i>Mark all that apply</i>) <u>Response options:</u> Y/N</p> <p><u>Question:</u> In the past 3 months, how many times did you participate in the activity?</p> <p><u>Question:</u> How many minutes do you generally spend doing each activity in the average session?</p> <p><u>Analysis categories:</u></p> <ul style="list-style-type: none"> - Inactive - Moderately Active - Active 	<p>Original Y/N responses for each of 26 activities were analyzed to determine and present most common physical activities by sex and age groups.</p> <p>Responses for each physical activity, # of times participated (for each), and average minutes per session (for each) were used to calculate daily energy expenditure values.</p> <p>Values were then categorized into three activity level groups.</p>
Alcohol use in past year (RHS Phase 3)	<p><u>Question:</u> During the past 12 months, have you had a drink of beer, wine, liquor or any other alcoholic beverage?</p> <p><u>Response options:</u> Y/N</p>	N/A
Smoking behaviour (RHS Phase 3)	<p><u>Question:</u> At the present time, do you smoke cigarettes?</p> <p><u>Response options:</u></p> <ul style="list-style-type: none"> -Yes, daily -Yes, occasionally -No <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> -Yes, daily; Yes, occasionally -No 	Three response options were dichotomized to indicate whether an individual currently smokes or not.
Cannabis use in past year (RHS Phase 3)	<p><u>Question:</u> Have you had [cannabis (marijuana, pot, grass, hash, etc.)] in the past 12 months? <i>Please select the answer that best describes your usage.</i></p> <p><u>Regrouped response options for analysis:</u></p> <ul style="list-style-type: none"> - No (Never) - Yes (Once or twice; Monthly; Weekly; Daily or almost daily) <p><u>Question:</u> [If yes to above] In the past 12 months, have you used Cannabis (marijuana, pot, grass, hash, etc.) for medical purposes? <u>Response options:</u> Y/N</p>	<p>Five response options for the cannabis use question were dichotomized indicating whether cannabis was used in the past year.</p> <p>The medical use question was asked only of those who indicated that they had used cannabis more than “Never” in the past 12 months.</p>

⁷ Respondents were instructed to consider “physical activities NOT related to school or work; that is, leisure time activities.” See RHS Phase 3 questionnaire p. 18 for full list of response options: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
Reason: Socioeconomic Factors		
Community remoteness (RHS Phase 3 & FNREEES)	<u>Question:</u> Based on respondent community. <u>Regrouped analysis categories:</u> <ul style="list-style-type: none"> - Urban - Rural - Remote; Special Access 	Geographic remoteness category ⁸ was derived from community by FNIGC. Four Remoteness categories were regrouped into three categories for analysis.
Marital status (RHS Phase 3 & FNREEES)	<u>Question:</u> What is your marital status? Are you...? <u>Regrouped response options:</u> <ul style="list-style-type: none"> - Married; Living common-law - Widowed; Separated; Divorced - Single/Never married 	Six response options were regrouped into three categories for analysis.
Highest education (RHS Phase 3)	<u>Question:</u> What is the highest grade that you have completed for elementary and secondary school (junior high, high school)? ⁹ <u>Question:</u> Other than elementary and secondary grades (junior high/high school), what other education have you completed? <i>Mark all that apply.</i> <u>Regrouped analysis categories:</u> <ul style="list-style-type: none"> - Under High School - High School Only - Some Post Secondary Training - Post-secondary Diploma/Certificate - University and Up 	Two survey questions, about elementary/secondary and post-secondary education levels completed, were combined, and responses regrouped into 5 categories for analysis.
Current employment status (RHS Phase 3 & FNREEES)	<u>Question:</u> Are you currently working at a job or business for pay (wages, salary, self-employed)? <u>Response options:</u> Y/N	N/A
Work satisfaction (FNREEES)	<u>Question:</u> Do you strongly agree, agree, disagree, or strongly disagree with the following statements? [Currently employed only] <ul style="list-style-type: none"> - Overall, I am happy at work - I feel valued at work - My work is stressful - My current job offers various opportunities to learn new job-related skills 	For each of 5 statements, four response options were dichotomized into two categories, indicating agreement or disagreement, for analysis.

⁸ Geographic remoteness classification of communities is based on its distance to the nearest service centre and the accessibility to that centre. Source: <http://publications.gc.ca/collections/Collection/R22-1-2000E.pdf>

⁹ Each of these education questions has a corresponding question for equivalent education for QC residents. See RHS Phase 3 questionnaire p. 32-33 for full list of education questions and response options: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	<p>- I am satisfied with the balance between my job and home life (i.e., work-life balance)</p> <p><u>Regrouped response options:</u></p> <p>- Strongly disagree; Disagree</p> <p>- Agree; Strongly Agree</p>	
Volunteer or help without pay in the community (FNREEES)	<p><u>Question:</u> Do you volunteer or help without pay in the community?</p> <p><u>Response options:</u> Y/N</p>	N/A
Volunteer frequency (FNREEES)	<p><u>Question:</u> How often do you volunteer or help without pay in the community? [Yes to volunteering in community]</p> <p><u>Regrouped response options:</u></p> <p>- 1-3 times in the past 12 months; 4-10 times in the past 12 months</p> <p>- 1-3 times a month; At least once per week</p>	Four response options were regrouped into two categories for analysis.
Crowded Housing (RHS Phase 3)	<p><u>Question:</u> How many children or youth under the age of 18 live in your household the majority of the time? <i>If none, please enter "0".</i></p> <p><u>Question:</u> Including yourself, how many adults 18 years and over currently live in your household the majority of the time?</p> <p><u>Question:</u> How many rooms are there in your home? <i>Include kitchen, bedrooms, living rooms and finished basement rooms. Do not count bathrooms, halls, laundry rooms and attached sheds.</i></p> <p><u>Analysis categories:</u></p> <p>- Not crowded: One or less person per room</p> <p>- Crowded: More than one person per room</p>	For each case, responses for the # of household occupants questions were combined to calculate total occupants. This number was used with the # of rooms in household question to calculate # of people per room, which was then used to categorize households as crowded or not.
Dwelling needs repairs (RHS Phase 3)	<p><u>Question:</u> Is your dwelling in need of repairs? <i>Major repairs include: defective plumbing or electrical wiring, structural repairs to walls, floors, ceiling, etc. Minor repairs include: missing or loose floor tiles, bricks, shingles, defective steps, railings, siding, etc.</i></p> <p><u>Regrouped response options:</u></p> <p>-Yes, major repairs; Yes, minor repairs</p> <p>-No, only regular maintenance is required (painting, furnace cleaning)</p>	Three response options were regrouped into two categories for analysis.
Migration (RHS Phase 3)	<p><u>Question:</u> Have you lived outside of your First Nation community?</p> <p><u>Response options:</u> Y/N</p>	N/A
Needed/ received health care (RHS Phase 3)	<p><u>Question:</u> During the past 12 months, did you require any health care (e.g., from a doctor, nurse, or other health professional)?</p> <p><u>Response options:</u></p> <p>-Yes, and I received all the health care I needed</p> <p>-Yes, but I did not receive all the health care I needed</p>	N/A

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	-No health care required	
Primary health care provider (RHS Phase 3)	<u>Question:</u> Over the past 12 months, how often has your primary health care provider (family physician/RN/nurse practitioner) changed? <u>Response options:</u> - Two times or more - Once - Stayed the same - I don't have a primary health care provider	N/A
Quality of health care services available in community (RHS Phase 3)	<u>Question:</u> Overall, how would you rate the quality of the health care services that are available in your community? <u>Regrouped response options:</u> - Excellent; Good - Fair; Poor	Four response options were regrouped into two categories for analysis.
Need home care service (RHS Phase 3)	<u>Question:</u> Do you believe you currently need any of the following services at home because of a physical or mental condition or health problem? ¹⁰ <u>Response options:</u> Y/N	N/A
Received home care service (RHS Phase 3)	<u>Question:</u> Do you currently receive the following services? [<i>if 'yes' to need service above</i>] <u>Response options:</u> Y/N	N/A
Relationships: Personal & Community Wellness		
Depression (FNREEES)	<u>Question:</u> During the past 12 months, was there ever a time when you felt sad, blue, or depressed for two weeks or more in a row? <u>Response options:</u> Y/N	N/A
Mastery (RHS Phase 3)	<u>Question:</u> Based on level of agreement with each of 7 statements (a slightly modified Pearlin Mastery Scale) dealing with feelings of control over one's life. ¹¹ <u>Response options for each statement:</u> - Strongly Agree - Agree - Neither Agree or Disagree - Disagree - Strongly Disagree	Responses for each of 7 statements were coded and summed to produce a score ranging from 0 to 28, which was categorized into low, moderate, or high mastery. Cases missing responses for any of the 7 statements were excluded from analysis.

¹⁰ See RHS Phase 3 questionnaire p. 11 for full list of home health care services: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

¹¹ Due to the Mastery scale's wording modifications in the RHS questionnaire, the scale's analyses should be interpreted with caution, as its reliability and internal consistency may be more limited than the original scale. See Bureau of Labor Statistics (n.d.) for original scale, and RHS Phase 3 questionnaire p. 26 for full list of mastery questions: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	<u>Analysis categories:</u> - Low mastery (0-14) - Moderate mastery (15-20) - High mastery (21-28)	
Community belonging (RHS Phase 3)	<u>Question:</u> How would you describe your sense of belonging to your local community? Would you say it is ...? <u>Regrouped response options:</u> - Very strong; Somewhat strong - Somewhat weak; Very weak	Four response options were regrouped into two categories for analysis.
Community cultural event participation	<u>Question:</u> Do you take part in your local community's cultural events? <u>Regrouped response options:</u> -Always; Almost always -Sometimes; Rarely; Never	Four response options were regrouped into two categories for analysis.
Community safety (RHS Phase 3)	<u>Question:</u> In general, how safe do you feel in your community? <u>Regrouped response options:</u> - Very safe; Reasonably safe - Somewhat unsafe; Very unsafe	Four response options were regrouped into two categories for analysis.
Community strengths (RHS Phase 3)	<u>Question:</u> What are the main strengths of your community? ¹² (Mark all that apply) <u>Analysis categories:</u> - 0-5 strengths - 6-15 strengths - 16+ strengths	Original responses for each of 22 strengths were analyzed to determine the most commonly identified community strengths. Identified strengths were counted to determine total number for each case. Counts were categorized into three groups for analysis. Cases were excluded from count analysis if number of missing values >5.
General social support (RHS Phase 3 & FNREEES)	<u>Question:</u> People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need them? ¹³ Mark one response for each item. <u>Regrouped response options:</u> - All of the time; Most of the time - Some of the time; Almost none of the time; None of the time <u>Analysis categories:</u> - 0-3	For each of eight types of support, five response options were dichotomized into two categories indicating whether a support type was available most/all of the time or not. Then the total number of support types were counted for each case. These counts, ranging from 0 to 8 were categorized into three groups.

¹² See RHS Phase 3 questionnaire p. 31 for full list of community strengths: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

¹³ See RHS Phase 3 questionnaire p. 29 for full list of support types: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	- 4+	Cases were excluded if number of missing values >2
Experiences of physical aggression (RHS Phase 3)	<u>Question:</u> Have you experienced any physical aggression towards you in the past 12 months? <i>This includes hitting, kicking, crowding, etc.</i> <u>Regrouped response options:</u> - Yes, often; Yes, sometimes - Yes, rarely; No, never	Four response options were regrouped into two categories for analysis.
Experiences of verbal aggression (RHS Phase 3)	<u>Question:</u> Have you experienced any verbal aggression towards you in the past 12 months? <i>Verbal aggression includes threats, insults, name calling, etc.</i> <u>Regrouped response options:</u> - Yes, often; Yes, sometimes - Yes, rarely; No, never	Four response options were regrouped into two categories for analysis.
Experiences of racism (RHS Phase 3)	<u>Question:</u> In the past 12 months, have you personally experienced any instances of racism? <u>Response options:</u> Y/N	N/A
Residential school attendance (RHS Phase 3)	<u>Question:</u> Did you attend a residential school? <u>Response options:</u> Y/N	N/A
Residential school impacts (RHS Phase 3)	<u>Question:</u> Do you believe that your overall health and well-being have been affected by your attendance at residential school? <u>Response options:</u> - Yes, negatively impacted - Yes, positively impacted - No impact	N/A
Family residential school attendance (RHS Phase 3)	<u>Question:</u> Were any of your family members ever a student at residential school? - Mother or female guardian; Father or male guardian - At least one grandparent <u>Response options:</u> Y/N	Residential school attendance by each of three categories ¹⁴ of family members was included in analysis. These were regrouped into two categories for analysis.
Language (RHS Phase 3 & FNREEES)	<u>Question:</u> Which language do you use most often in your daily life? <i>We are asking about the main language you use to talk with your friends, family, coworkers, etc.</i> <u>Response options:</u> - English - French - First Nations language	N/A

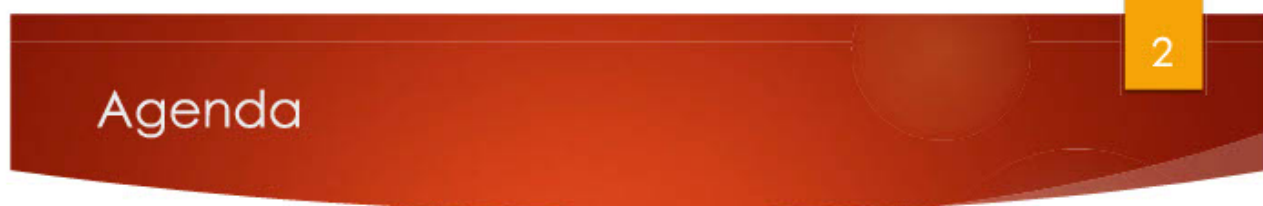
¹⁴ See RHS Phase 3 questionnaire p. 31 for full list of family member categories: https://fnigc.ca/wp-content/uploads/2020/09/rhs_adult_phase_3_final.pdf

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	<ul style="list-style-type: none"> - More than one of the above - Other 	
First Nations language abilities (FNREEES)	<p><u>Question:</u> Please rate how important each of the following are to you: Understanding a First Nations language? Speaking a First Nations language? <u>Regrouped response options for each language skill:</u></p> <ul style="list-style-type: none"> - Very important; Somewhat important - A little important; Not important 	For each language statement, four response options were regrouped into two categories for analysis.
Satisfaction with knowledge of First Nations language (FNREEES)	<p><u>Question:</u> How satisfied are you with your knowledge of your First Nations language? <u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Very satisfied; Somewhat satisfied - A little satisfied; Not at all satisfied 	Four response options were regrouped into two categories for analysis.
Frequency of exposure to First Nations language at home (FNREEES)	<p><u>Question:</u> How often are you exposed (i.e. listening or engaging in conversations) to a First Nations language at home? <u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - All of the time; Most of the time - Some of the time; None of the time 	Four response options were regrouped into two categories for analysis.
Frequency of exposure to First Nations language in community (FNREEES)	<p><u>Question:</u> Not including school/work, how often are you exposed (i.e. listening or engaging in conversations) to a First Nations language in your community? <u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - All of the time; Most of the time - Some of the time; None of the time 	Four response options were regrouped into two categories for analysis.
Importance of traditional spirituality (RHS Phase 3)	<p><u>Question:</u> [Please indicate level of agreement with the following statement]: Traditional spirituality is important to me. <u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Strongly agree; Agree - Neither agree nor disagree; Disagree; Strongly disagree 	Five response options were regrouped into two categories for analysis.
Importance of organized religion (RHS Phase 3)	<p><u>Question:</u> [Please indicate level of agreement with the following statement]: Organized religion is important to me (e.g., Christianity, Buddhism, Islam). <u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Strongly agree; Agree - Neither agree nor disagree; Disagree; Strongly disagree 	Five response options were regrouped into two categories for analysis.
Importance of traditional teachings (FNREEES)	<p><u>Question:</u> How important is it to you that you know and learn about the traditional teaching of your people (e.g. beliefs, values, medicines, practices, ceremonies, stories, songs, activities)? <u>Regrouped response options:</u></p>	Four response options were regrouped into two categories for analysis.

Variable (Survey/s)	Question and Response Options	Analysis Process & Notes
	<ul style="list-style-type: none"> - Very important; Somewhat important - A little important; Not important 	
Satisfaction with knowledge of traditional teachings (FNREEES)	<p><u>Question:</u> How satisfied are you with your knowledge of traditional teachings (e.g. beliefs, values, medicines, practices, ceremonies, stories, songs, activities)?</p> <p><u>Regrouped response options:</u></p> <ul style="list-style-type: none"> - Very satisfied; Somewhat satisfied - A little satisfied; Not at all satisfied 	Four response options were regrouped into two categories for analysis.
First Nations History/ Inherent Rights; IRS History Knowledge (FNREEES)	<p><u>Question:</u> How much do you know about...</p> <ul style="list-style-type: none"> - ...the history of your people? - ... the inherent rights of your people (e.g. territory rights, treaty rights, etc.)? - ... the history of Indian Residential Schooling? <p><u>Regrouped response options for each knowledge area:</u></p> <ul style="list-style-type: none"> - Nothing; A little - Some; A lot 	For each of three areas of knowledge, four response options were regrouped into two categories for analysis.



Appendix B: Engagement Session Presentation Slides



- ▶ Introductions – 5 minutes
- ▶ Informed consent – 10 minutes
- ▶ Project overview, objectives – 5 minutes
- ▶ Seniors wellness profile – key findings – 40 minutes
- ▶ Discussion and interpretation of results – 40 minutes
- ▶ Guidance for report development – 15 minutes
- ▶ Acknowledgements and next steps – 5 minutes

3

Our team

- ▶ Jennifer Walker, Canada Research Chair in Indigenous Health
- ▶ Yantao Zhao, Data Analyst
- ▶ Kassandra Loewen, Research Assistant
- ▶ Mariette Sutherland, Engagement Facilitator and Researcher
- ▶ Meghan Valvasori, Project Coordinator
- ▶ FNIGC
 - ▶ Alana Roscoe
 - ▶ Maria Santos
 - ▶ Amy Nahwegahbow

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Project overview and objectives

- ▶ A **partnership** between FNIGC and Dr. Jennifer Walker (Canada Research Chair in Indigenous Health)
- ▶ Purpose is to **better understand factors related to aging well within First Nations communities.**
- ▶ Involved developing a **profile of healthy aging for First Nations older adults living on reserve** using data from the FNIGC's Regional Health Survey (RHS) and First Nations Early Childhood, Education and Employment Survey (FNREEES).
- ▶ The profile used a **strengths-based analysis** of social and health factors that are associated with wellness.
- ▶ Results will be used to **inform policy, advocacy and program activities** in First Nations communities and organizations.

Slides 5–19, omitted here for space, present selected findings that can be found in the Quantitative Results section.

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Points for discussion

- ▶ We created a **snapshot of the wellbeing of First Nations seniors** aged 55+ using social, cultural and health-related determinants.
- ▶ Such descriptions often emphasize relative rates of illness, chronic conditions, physical limitations, impairments, and self-reported ratings of health or mental health.
- ▶ **Too much emphasis on deficits may neglect a bigger picture of aging and wellbeing** that considers community context and balance in physical, emotional, mental and spiritual aspects of the self.

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Discussion: Resilience factors

- ▶ **Important health behaviours and protective factors appear to be present despite high levels of residential school attendance.**
 - ▶ These include: language, traditional spirituality, connection to community
- ▶ **We feel these are evidence of resilience on the part of First Nations seniors.**

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Discussion: Gender differences

- ▶ **There appear to be gendered influences on certain wellness categories.**
 - ▶ For example, male seniors more frequently report being physically active and participating in food harvesting practices.
 - ▶ Male seniors also less frequently report being obese or having activity limitations.
- ▶ It is important to consider gender- and age-related influences on health so that policies and programs can best meet the needs of their priority populations.

Slides 24–30, omitted here for space, present selected findings that can be found in the *Quantitative Results* section.

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Discussion: Age differences

- ▶ **There appear to be age-related influences on access to services.**
 - ▶ Most seniors aged 70 and above receive the formal and informal health-related services they need; however, younger seniors, especially those in the youngest age category, do not appear to have as easy access to such social and medical supports when needed.
- ▶ Because First Nations seniors have an earlier onset of frailty compared to non- First Nations populations, **public policies and programs may not adequately meet the needs of younger First Nations seniors** (First Nations Information Governance Centre & Walker, 2017).

Slides 32–38, omitted here for space, present the engagement session’s overarching questions, which can be found in the *Methods* section.

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Points for discussion

- ▶ It seems that First Nations seniors experience wellness – in the form of wholistic balance – even while experiencing the physical effects of aging.
- ▶ Previous research has found that First Nations seniors experience an earlier onset of physical frailty compared to non-First Nations populations (FNIGC & Walker, 2017).
- ▶ However, coming from a strengths-based perspective, we have observed that increased age is positively associated with wellness.
- ▶ **We suspect that a strengths-based vision of aging for First Nations seniors consists of wellness across all four areas of the self (physical, mental, emotional, and spiritual), and this form of wellness is not necessarily diminished by the physical effects of aging.**

Appendix C: Data Tables

Bivariate Analyses

Vision: Physical Health Factors

Table 1: Self-rated general health among First Nations seniors, by sex and age group¹

Self-rated health	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Excellent/ Very good/ Good	Male	67.3 [62.2, 72.0]	61.9 [54.7, 68.7]	57.8 [49.4, 65.8]	59.0 [51.5, 66.0]	62.1 [58.8, 65.4]
	Female	67.2 [62.3, 71.7]	70.2 [65.5, 74.5]	64.7 [55.1, 73.3]	54.6 [48.0, 61.1]	64.1 [61.1, 67.0]
	Overall	67.2 [63.9, 70.4]	65.9 [61.3, 70.3]	61.4 [55.0, 67.5]	56.6 [51.6, 61.4]	63.2 [60.9, 65.4]

Table 2: Self-rated health in comparison to one year ago among First Nations seniors, by sex and age group

Self-rated health change	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Much better/Somewhat better/ About the same	Male	87.3 [83.1, 90.6]	89.6 [86.1, 92.2]	81.6 [74.2, 87.2]	72.6 [66.1, 78.2]	83.5 [80.7, 85.9]
	Female	78.9 [74.8, 82.4]	87.8 [84.6, 90.4]	80.4 [72.2, 86.7]	73.8 [67.5, 79.2]	79.9 [77.4, 82.2]
	Overall	82.8 [79.9, 85.4]	88.7 [86.5, 90.6]	81.0 [75.7, 85.3]	73.2 [68.4, 77.6]	81.6 [79.7, 83.4]

Table 3: Self-rated oral health among First Nations seniors, by sex and age group

Self-rated oral health	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Excellent/ Very good/ Good	Male	59.2 [53.7, 64.4]	58.1 [51.2, 64.7]	67.6 [59.9, 74.4]	52.2 [45.0, 59.3]	58.5 [55.0, 62.0]
	Female	62.5 [57.6, 67.1]	62.9 [58.1, 67.4]	70.6 [62.4, 77.7]	65.3 [59.1, 71.0]	64.8 [61.7, 67.6]
	Overall	60.9 [57.3, 64.4]	60.4 [56.1, 64.5]	69.2 [63.4, 74.5]	59.5 [54.4, 64.4]	61.8 [59.3, 64.2]

¹ Analysis used RHS Phase 3 dataset.

Table 4: Body Mass Index categories among First Nations seniors, by sex and age group

BMI Classification	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Underweight	Male	F	F	F	F	0.8 ^{E,2} [0.5, 1.4]
Normal Weight		F ³	F	F	F	19.9 [17.4, 22.7]
Overweight		41.2 [35.9, 46.7]	41.0 [34.7, 47.5]	33.0 [26.5, 40.1]	51.2 [45.3, 57.1]	42.1 [39.0, 45.2]
Obese		35.9 [31.1, 40.9]	42.6 [35.9, 49.5]	44.4 [36.5, 52.7]	26.8 [22.0, 32.3]	37.2 [34.0, 40.6]
Underweight	Female	F	F	F	F	1.9 ^E [1.3, 2.8]
Normal Weight		F	F	F	F	18.4 [15.9, 21.1]
Overweight		32.8 [28.0, 38.0]	39.6 [34.1, 45.3]	29.3 [22.2, 37.7]	37.3 [31.4, 43.6]	35.1 [32.4, 38.0]
Obese		44.7 [39.4, 50.1]	42.7 [37.1, 48.4]	55.2 [44.2, 65.6]	39.7 [34.5, 45.2]	44.6 [41.2, 48.1]
Underweight	Overall	1.7 ^E [1.0, 2.8]	F	F	1.6 ^E [0.9, 2.8]	1.4 [1.0, 1.9]
Normal Weight		21.0 [16.5, 26.3]	F	F	20.9 [17.7, 24.6]	19.1 [17.1, 21.3]
Overweight		36.7 [33.0, 40.6]	40.3 [35.9, 44.8]	31.1 [25.9, 36.7]	43.5 [39.2, 47.9]	38.5 [36.3, 40.6]
Obese		40.6 [36.7, 44.6]	42.6 [38.1, 47.3]	50.0 [42.8, 57.2]	34.0 [30.3, 37.9]	41.1 [38.4, 43.8]

Table 5: Average number of activity limitations among First Nations seniors, by sex and age group

Age group	Sex	Ave. # of activity limitations (max. 14)	St. Error	95% Confidence Interval	
				Lower	Upper
55-59	Male	2.3	0.2	1.8	2.7
	Female	2.6	0.1	2.3	2.9
	Overall	2.4	0.1	2.2	2.7
60-64	Male	2.5	0.2	2.1	2.8
	Female	3.0	0.2	2.6	3.4
	Overall	2.7	0.1	2.5	3.0
65-69	Male	2.7	0.2	2.4	3.1
	Female	4.3	0.3	3.6	4.9
	Overall	3.6	0.2	3.1	4.0
70+	Male	4.5	0.3	3.9	5.1
	Female	5.0	0.2	4.5	5.4
	Overall	4.8	0.2	4.4	5.1
Male (all)		3.0	0.1	2.7	3.2
Female (all)		3.6	0.1	3.4	3.8
Overall		3.3	0.1	3.1	3.5

² Note: Throughout these tables, E signifies high sampling variability, interpret with caution. F signifies suppression due to small cell size, extreme sampling variability, or avoidance of residual disclosure where noted.

³ Note: Some numbers in this table have been suppressed to avoid residual disclosure (i.e., deduction of other suppressed estimates based on available information).

Table 6: Number of activity limitations among First Nations seniors, by sex and age group

Number of activity limitations (max. 14)	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
None	Male	38.1 [33.4,43.0]	32.1 [25.8,39.2]	28.6 [21.5,37.1]	20.3 [16.2,25.1]	30.5 [27.5,33.7]
1-2		29.5 [24.8,34.7]	27.3 [22.1,33.2]	31.2 [25.4,37.7]	21.2 [16.2,27.2]	27.2 [24.6,29.9]
3+		32.4 [27.0,38.3]	40.6 [34.2,47.3]	40.1 [33.1,47.6]	58.5 [52.0,64.8]	42.3 [39.0,45.8]
None	Female	35.4 [31.1,39.9]	30.4 [25.5,35.7]	18.7 [13.8,24.8]	13.9 [10.7,17.8]	25.4 [23.0,28.0]
1-2		28.0 [23.7,32.6]	25.5 [20.7,30.9]	20.4 [15.0,27.0]	19.6 [14.9,25.3]	23.8 [21.3,26.5]
3+		36.7 [32.4,41.2]	44.2 [38.8,49.7]	61.0 [51.7,69.5]	66.5 [60.7,71.9]	50.8 [47.6,54.0]
None	Overall	36.6 [33.4,40.0]	31.3 [26.9,36.1]	23.3 [18.7,28.7]	16.8 [14.2,19.6]	27.9 [25.8,30.0]
1-2		28.7 [25.5,32.2]	26.4 [22.9,30.3]	25.4 [21.1,30.3]	20.3 [16.7,24.4]	25.4 [23.6,27.2]
3+		34.7 [31.1,38.4]	42.3 [37.9,46.8]	51.2 [44.6,57.8]	62.9 [58.8,66.9]	46.8 [44.5,49.0]

Table 7: Activity limitations among First Nations seniors

Activity limitation	Overall % [95% CI]
Seeing/reading newsprint (with glasses or contacts if normally used)	40.4 [38.0, 42.9]
Climbing a flight of stairs without resting	36.8 [34.6, 39.0]
Bending down and picking up an object from the floor	34.5 [32.2, 36.9]
Lifting or carrying 10 lbs	34.3 [32.2, 36.5]
Remembering	30.2 [27.9, 32.7]
Walking for 5 minutes without resting	29.4 [27.2, 31.6]
Hearing normal conversation (with hearing aid if normally used)	27.3 [25.1, 29.5]
Reaching in any direction, for example, above your head	26.0 [23.9, 28.2]
Concentrating	19.9 [18.0, 21.9]
Using your fingers to grasp small objects, such as a pencil or scissors	17.3 [15.4, 19.3]
Eating, bathing, dressing, using toilet	11.9 [10.3, 13.6]
Having your speech understood by those who speak the same language	11.9 [10.6, 13.4]
Learning	9.5 [8.0, 11.4]
Other	2.8 ^f [1.9, 4.2]

Table 8: Average number of chronic health conditions among First Nations seniors, by sex and age group⁴

Age group	Sex	Ave. # of health conditions (max. 35)	St. Error	95% Confidence Interval	
				Lower	Upper
55-59	Male	2.4	0.1	2.1	2.6
	Female	3.1	0.2	2.8	3.4
	Overall	2.7	0.1	2.5	2.9
60-64	Male	3.1	0.2	2.8	3.5
	Female	3.2	0.1	2.9	3.5
	Overall	3.2	0.1	3.0	3.4
65-69	Male	3.7	0.2	3.3	4.1
	Female	4.1	0.2	3.8	4.5
	Overall	3.9	0.1	3.7	4.2
70+	Male	4.3	0.2	3.9	4.8
	Female	4.6	0.2	4.3	5.0
	Overall	4.5	0.1	4.2	4.8
Male (all)		3.3	0.1	3.1	3.5
Female (all)		3.7	0.1	3.5	3.9
Overall		3.5	0.1	3.4	3.6

Table 9: Number of chronic health conditions among First Nations seniors, by sex and age group

Number of health conditions	Sex	55-59 years %	60-64 years %	65-69 years %	70+ years %	Overall %
		[95% CI]	[95% CI]	[95% CI]	[95% CI]	[95% CI]
0	Male	30.4 [25.7, 35.6]	15.9 [12.4, 20.1]	12.8 ^E [9.1, 17.7]	9.7 [7.1, 13.0]	18.3 [16.2, 20.6]
1-2		29.3 [25.4, 33.6]	32.6 [26.6, 39.2]	25.8 [19.5, 33.2]	25.5 [20.0, 31.9]	28.8 [26.0, 31.6]
3-5		28.6 [23.9, 33.8]	33.5 [27.1, 40.5]	39.4 [31.6, 47.8]	32.7 [27, 39.1]	32.8 [29.8, 36.0]
6+		11.6 [8.7, 15.5]	18.0 [13.2, 24.1]	22.0 [16.4, 28.8]	32.1 [25.7, 39.4]	20.1 [17.4, 23.1]
0	Female	18.6 [14.7, 23.2]	14.7 [11.1, 19.3]	9.7 ^E [6.3, 14.6]	9.6 [7.0, 13.0]	13.7 [11.6, 16.0]
1-2		30.3 [26.0, 35.1]	30.6 [25.9, 35.8]	19.8 [14.9, 25.9]	20.6 [16.7, 25.2]	26.0 [23.5, 28.6]
3-5		35.1 [30.7, 39.8]	38.0 [33.1, 43.1]	47.8 [36.9, 58.9]	38.9 [33.3, 44.7]	39.0 [35.7, 42.4]
6+		16.0 [12.8, 19.8]	16.7 [13.5, 20.5]	22.8 [17.4, 29.2]	31.0 [25.4, 37.1]	21.4 [19.0, 23.9]
0	Overall	24.2 [21.0, 27.6]	15.3 [12.7, 18.3]	11.2 [8.4, 14.7]	9.6 [7.6, 12.1]	15.9 [14.4, 17.5]
1-2		29.9 [26.9, 33.0]	31.6 [27.5, 36.1]	22.6 [18.5, 27.4]	22.8 [19.4, 26.5]	27.3 [25.4, 29.3]
3-5		32.0 [28.9, 35.3]	35.7 [31.6, 39.9]	43.8 [36.4, 51.5]	36.1 [32.1, 40.4]	36.1 [33.6, 38.6]
6+		13.9 [11.8, 16.5]	17.4 [14.4, 20.9]	22.4 [18.4, 26.9]	31.5 [27.3, 36.0]	20.8 [19.0, 22.7]

⁴ Analysis used RHS Phase 3 dataset.

Table 10: Chronic health conditions⁵ among First Nations seniors, by sex

Health condition	Sex	Overall % [95% CI]
High Blood Pressure	Male	41.7 [38.2, 45.3]
	Female	43.6 [40.4, 46.9]
	Overall	42.7 [40.3, 45.2]
Arthritis (excluding fibromyalgia)	Male	33.9 [30.7, 37.3]
	Female	49.2 [46.0, 52.4]
	Overall	41.9 [39.5, 44.4]
Diabetes	Male	36.5 [33.2, 39.9]
	Female	34.2 [31.3, 37.3]
	Overall	35.3 [33.1, 37.6]
High Cholesterol	Male	28.7 [25.5, 32.0]
	Female	24.5 [21.2, 28.2]
	Overall	26.5 [24.2, 29.0]
Allergies	Male	16.3 [14.1, 18.8]
	Female	33.5 [30.6, 36.6]
	Overall	25.3 [23.5, 27.3]
Chronic back pain (excluding arthritis)	Male	21.1 [18.6, 23.8]
	Female	18.1 [16.2, 20.1]
	Overall	19.5 [17.8, 21.3]
Hearing impairment	Male	21.5 [19.0, 24.2]
	Female	17.0 [14.9, 19.3]
	Overall	19.1 [17.5, 20.9]
Cataracts	Male	16.4 [14.1, 19.0]
	Female	15.6 [13.4, 18.2]
	Overall	16.0 [14.3, 17.9]
Heart disease	Male	17.8 [15.4, 20.6]
	Female	10.1 [8.6, 11.7]
	Overall	13.8 [12.3, 15.4]
Stomach and intestinal problems	Male	10.8 [8.5, 13.5]
	Female	14.9 [12.9, 17.3]
	Overall	13.0 [11.5, 14.6]

⁵ Due to high variability and low cell counts for the least common health conditions, only the 28 most commonly reported health conditions are shown here.

Health condition	Sex	Overall % [95% CI]
Asthma	Male	8.8 [7.2, 10.6]
	Female	12.4 [11.0, 14.0]
	Overall	10.7 [9.5, 12.0]
Thyroid problems	Male	3.8 [2.7, 5.4]
	Female	15.0 [12.1, 18.5]
	Overall	9.7 [7.9, 11.8]
Blindness or serious vision problems (can't be corrected with glasses)	Male	8.3 [6.4, 10.6]
	Female	7.2 [5.9, 8.6]
	Overall	7.7 [6.5, 9.0]
Osteoporosis	Male	3.1 [2.1, 4.5]
	Female	11.3 [9.8, 12.9]
	Overall	7.4 [6.5, 8.4]
Dermatitis/atopic eczema	Male	6.4 [4.9, 8.4]
	Female	7.5 [6.2, 9.1]
	Overall	7.0 [6.0, 8.2]
Kidney Problem	Male	7.1 [5.3, 9.4]
	Female	6.4 [5.3, 7.7]
	Overall	6.7 [5.7, 8.0]
Emphysema, Chronic bronchitis, or Chronic Obstructive Pulmonary Disease (COPD)	Male	5.7 [4.5, 7.0]
	Female	7.5 [5.9, 9.4]
	Overall	6.6 [5.6, 7.8]
Mood disorder such as depression, bipolar disorder, mania or dysthymia	Male	5.4 [4.1, 7.1]
	Female	7.4 [6.0, 9.1]
	Overall	6.4 [5.5, 7.5]
Anxiety disorder such as a phobia, obsessive-compulsive disorder or a panic disorder}	Male	4.2 [3.2, 5.4]
	Female	8.2 [6.9, 9.8]
	Overall	6.3 [5.4, 7.3]
Cancer	Male	6.2 [4.7, 8.1]
	Female	5.6 [4.6, 6.9]
	Overall	5.9 [5.0, 7.0]

Health condition	Sex	Overall % [95% CI]
Other	Male	3.8 [3.1, 4.7]
	Female	6.1 [4.6, 8.0]
	Overall	5.0 [4.1, 6.1]
Effects of Stroke (brain hemorrhage)	Male	5.8 [4.5, 7.5]
	Female	3.3 [2.2, 4.9]
	Overall	4.5 [3.6, 5.6]
Anemia (chronic)	Male	2.2 [1.4, 3.3]
	Female	5.8 [4.5, 7.5]
	Overall	4.1 [3.3, 5.1]
Glaucoma	Male	2.9 [1.7, 4.7]
	Female	3.4 [2.6, 4.6]
	Overall	3.2 [2.4, 4.2]
Liver disease (excluding Hepatitis)	Male	2.1 [1.2, 3.8]
	Female	2.2 [1.5, 3.1]
	Overall	2.2 [1.6, 3.0]
Tuberculosis (TB)	Male	2.2 [1.6, 3.1]
	Female	2.1 [1.6, 2.9]
	Overall	2.2 [1.7, 2.7]
Learning disorder	Male	2.1 [1.4, 3.1]
	Female	1.2 [0.8, 1.9]
	Overall	1.6 [1.2, 2.2]
Speech or language difficulties	Male	1.9 [1.3, 2.8]
	Female	1.2 [0.9, 1.8]
	Overall	1.6 [1.2, 2.0]

Table 11: Percentage of First Nations seniors injured in the past year, by age group

Age Group	Injured in past year %	95% Confidence Interval	
		Lower	Upper
55-59	15.6	12.8	18.8
60-64	15.5	12.7	18.8
65-69	11.2	8.7	14.4
70+	14.8	11.4	19.0
Overall	14.6	13.2	16.2

Table 12: Injury causes among First Nations seniors who were injured in the past year⁶

Cause of injury	Overall % [95% CI]
Fall	41.3 [35.5, 47.4]
Other (Specify)	22.5 [17.8, 28.1]
Accidentally Struck or Crushed by Object(s)	7.0 ^E [4.6, 10.5]
Motor Vehicle Accident	6.8 ^E [3.9, 11.5]
Overexertion or strenuous movement	5.3 ^E [3.7, 7.7]

Table 13: Location(s) of injury treatment among First Nations seniors who were injured in the past year, by age group

Care resources consulted post-injury	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Doctor's office	33.7 [24.8,44.0]	23.5 [16.9,31.5]	37.2 [27.0,48.7]	33.3 [23.5,44.8]	31.2 [26.8,36.0]
Physiotherapist or massage therapist's office	F	2.4 ^E [1.3,4.5]	11.1 ^E [5.9,19.8]	F	6.2 ^E [4.0,9.6]
Hospital emergency room	51.1 [40.7,61.4]	38.1 [29.9,47.1]	49.1 [36.2,62.1]	54.3 [44.5,63.7]	48.0 [43.0,53.0]
Community Health Centre/Nursing station	7.2 ^E [4.2,12.2]	8.8 ^E [5.1,14.6]	12.0 ^E [6.5,21.1]	10.7 ^E [6.6,16.8]	9.2 [7.1,11.8]

Note: Respondents could choose more than one response

⁶ Due to low cell counts in the least common injury causes, only the 5 most commonly reported injury causes are shown.

Table 14: Last time dental care was received among First Nations seniors, by sex and age group

Last time receiving dental care	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Never	Male	F	F	1.9 [1.1, 3.4]	F	F
More than 1 year ago		F ⁷	F	50.9 [42.1, 59.7]	F	F
Within last 12 months		48.9 [43.7, 54.2]	48.9 [42.2, 55.8]	47.2 [38.4, 56.1]	38.0 [31.4, 45.1]	46.0 [42.7, 49.4]
Never	Female	F	F	F	1.2 ^E [0.6, 2.2]	1.1 ^E [0.7, 1.7]
More than 1 year ago		F	F	F	59.5 [53.4, 65.3]	45.4 [42.2, 48.8]
Within last 12 months		58.6 [53.9, 63.2]	61.5 [56.3, 66.5]	54.3 [43.2, 65.0]	39.3 [33.5, 45.5]	53.5 [50.2, 56.7]
Never	Overall	F	F	1.6 ^E [1.0, 2.6]	F	1.6 ^E [1.0, 2.6]
More than 1 year ago		F	F	47.4 [40.0, 55.0]	F	48.5 [45.9, 51.0]
Within last 12 months		54.1 [50.4, 57.8]	54.9 [50.6, 59.2]	50.9 [43.3, 58.6]	38.7 [34.1, 43.6]	49.9 [47.3, 52.5]

Table 15: Traditional medicine and healing use among First Nations seniors, by sex and age group

Traditional medicine or healing	Sex	55-59 years% [95% CI]	60-64 years% [95% CI]	65-69 years% [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Used traditional medicine in the past 12 months	Male	42.7 [36.9, 48.6]	43.6 [37.2, 50.2]	38.4 [31.3, 45.9]	34.9 [28.7, 41.7]	40.4 [36.9, 43.9]
	Female	44.4 [39.2, 49.7]	41.7 [36.1, 47.5]	39.0 [30.0, 48.9]	34.7 [29.7, 40.2]	40.2 [36.8, 43.7]
	Overall	43.6 [39.6, 47.7]	42.7 [38.1, 47.4]	38.7 [32.8, 45.0]	34.8 [30.6, 39.3]	40.3 [37.7, 42.9]
Has consulted a traditional healer (Ever)	Male	41.0 [35.1, 47.1]	42.3 [35.6, 49.4]	37.0 [29.8, 44.8]	34.6 [27.9, 42.0]	39.2 [35.7, 42.8]
	Female	46.8 [41.3, 52.4]	43.0 [37.3, 48.9]	45.1 [34.7, 55.9]	32.3 [27.2, 37.8]	41.6 [38.1, 45.2]
	Overall	44.1 [39.6, 48.7]	42.7 [38.2, 47.3]	41.3 [34.9, 48.0]	33.3 [29.2, 37.7]	40.4 [37.8, 43.1]
Has consulted a traditional healer in the past 12 months	Overall	26.9 [22.6, 31.8]	22.8 [19.5, 26.5]	23.5 [18.5, 29.3]	20.1 [16.4, 24.4]	23.5 [20.9, 26.2]

⁷ Note: Some numbers in this table have been suppressed to avoid residual disclosure (i.e., deduction of other suppressed estimates based on available information).

Table 16: Doctor, community health nurse, and mental health service use among First Nations seniors, by sex and age group

Variable	Sex	55-59 years% [95% CI]	60-64 years% [95% CI]	65-69 years% [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Has consulted a doctor or community health nurse (Ever)	Male	92.6 [89.7, 94.7]	95.0 [93.0, 96.4]	95.7 [93.1, 97.3]	94.4 [91.8, 96.2]	94.2 [93.1, 95.2]
	Female	95.5 [93.4, 96.9]	95.0 [92.6, 96.6]	95.8 [93.8, 97.2]	94.2 [90.9, 96.3]	95.0 [93.9, 96.0]
	Overall	94.1 [92.5, 95.4]	95.0 [93.5, 96.1]	95.7 [94.2, 96.9]	94.3 [92.2, 95.8]	94.7 [93.8, 95.4]
Has consulted a doctor or community health nurse in past 12 months	Overall	80.1 [77.1,82.8]	82.2 [78.9,85.2]	82.1 [72.1,89.0]	87.7 [85.2,89.8]	83.0 [80.8,84.9]
Has accessed mental health services (Ever)	Male	20.7 [17.0, 25.1]	17.0 [13.1, 21.8]	16.3 ^E [10.9, 23.8]	16.4 ^E [11.1, 23.5]	17.9 [15.4, 20.6]
	Female	30.9 [26.5, 35.8]	30.4 [26.0, 35.1]	42.7 [30.6, 55.8]	14.9 [11.7, 18.8]	28.4 [25.2, 31.9]
	Overall	26.1 [23.0, 29.6]	23.5 [20.5, 26.9]	30.3 [22.2, 39.8]	15.5 [12.5, 19.1]	23.4 [21.2, 25.8]
Has accessed mental health services in past 12 months	Overall	15.7 [13.3, 18.5]	11.9 [9.4,15.0]	19.7 [12.0,30.6]	8.4 [6.5,10.7]	13.5 [11.5,15.7]

Action: Health Behaviours/Lifestyle Factors**Table 17: Frequency of eating a nutritious, balanced diet in the past year among First Nations seniors, by sex and age group**

Frequency of nutritious balanced diet	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Always/Almost always	Male	42.6 [37.4, 47.9]	48.5 [41.9, 55.1]	44.3 [36.5, 52.4]	50.9 [44.1, 57.7]	46.6 [43.0, 50.2]
	Female	47.1 [42.2, 52.0]	48.8 [44.0, 53.7]	62.2 [52.3, 71.2]	61.8 [55.8, 67.4]	54.1 [50.8, 57.4]
	Overall	45.0 [41.5, 48.6]	48.6 [44.4, 52.9]	53.7 [46.5, 60.8]	57.0 [52.0, 61.8]	50.6 [47.8, 53.4]

Table 18: Traditional food consumption in the past year among First Nations seniors, by sex and age group

Ate 5 + traditional foods	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Yes	Male	75.2 [69.9,79.8]	83.7 [79.1,87.5]	77.8 [69.2,84.5]	77.7 [70.4,83.6]	78.7 [75.4,81.7]
	Female	71.4 [65.3,76.8]	76.6 [71.6,81.0]	81.7 [75.8,86.4]	73.8 [68.1,78.7]	75.1 [72.0,78.0]
	Overall	73.2 [69.2,76.8]	80.4 [76.8,83.5]	79.9 [74.8,84.1]	75.5 [71.0,79.6]	76.8 [74.4,79.1]

Table 19: Proportion of First Nations seniors living in food-secure households, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	52.7 [47.5, 57.9]	52.9 [46.1, 59.5]	65.8 [57.8, 72.9]	66.5 [60.2, 72.2]	58.2 [55.0, 61.5]
Female	54.8 [49.8, 59.8]	49.6 [44.4, 54.8]	65.7 [55.7, 74.4]	72.1 [67.2, 76.5]	60.2 [57.0, 63.2]
Overall	53.8 [50.2, 57.5]	51.3 [47.1, 55.5]	65.7 [59.3, 71.6]	69.6 [65.7, 73.2]	59.3 [56.9, 61.6]

Table 20: Physical activity levels among First Nations seniors, by sex and age group

Physical activity level	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Inactive	Male	51.5 [46.3, 56.5]	59.0 [52.4, 65.3]	58.8 [51.3, 65.9]	63.3 [56.1, 70.0]	57.8 [54.5, 61.0]
Moderately Active		15.8 [13.0, 19.2]	16.3 [12.3, 21.3]	16.6 [12.0, 22.5]	19.9 [14.4, 26.7]	17.1 [14.8, 19.6]
Active		32.7 [27.8, 38.1]	24.7 [19.6, 30.7]	24.6 [19.0, 31.2]	16.8 [12.8, 21.9]	25.2 [22.5, 28.1]
Inactive	Female	67.3 [62.7, 71.7]	70.6 [65.6, 75.1]	77.1 [69.8, 83.0]	78.3 [73.1, 82.6]	72.8 [70.1, 75.3]
Moderately Active		14.8 [11.8, 18.5]	12.9 [9.6, 17.1]	10.6 ^E [7.3, 15.2]	13.2 [9.4, 18.1]	13.2 [11.4, 15.2]
Active		17.8 [14.2, 22.2]	16.5 [13.1, 20.6]	12.3 ^E [8.4, 17.7]	8.6 [6.3, 11.7]	14.0 [12.3, 16.0]
Inactive	Overall	59.9 [56.4, 63.3]	64.6 [60.3, 68.6]	68.5 [62.6, 73.8]	71.5 [67.5, 75.2]	65.6 [63.5, 67.7]
Moderately Active		15.3 [13.1, 17.8]	14.7 [11.9, 18.0]	13.4 [10.4, 17.2]	16.2 [13.0, 20.0]	15.0 [13.5, 16.7]
Active		24.8 [21.7, 28.3]	20.8 [17.4, 24.7]	18.1 [14.4, 22.6]	12.3 [9.9, 15.1]	19.4 [17.7, 21.1]

Table 21: Participation in physical activities in the past 3 months among First Nations seniors, by sex and age group

Physical activity	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65+ years% [95% CI]	Overall % [95% CI]
Berry picking or other food gathering	Male	17.2 [13.3, 22.1]	16.9 [12.4, 22.7]	14.2 [11.3, 17.6]	15.9 [13.6, 18.5]
	Female	17.2 [14.1, 20.7]	24.7 [20.8, 29.0]	16.2 ^E [10.7, 23.9]	18.6 [15.6, 22.0]
	Overall	17.2 [14.7, 20.0]	20.6 [17.4, 24.3]	15.3 ^E [11.7, 19.7]	17.3 [15.3, 19.5]
Dancing (aerobic, modern, etc.)	Male	3.3 ^E [1.9, 5.9]	5.3 ^E [3.1, 8.9]	3.6 ^E [2.5, 5.4]	4.0 [3.0, 5.4]
	Female	13.6 [10.8, 17.1]	9.9 [7.1, 13.6]	6.8 ^E [4.4, 10.6]	9.7 [8.0, 11.8]
	Overall	8.8 [7.0, 10.9]	7.5 [5.6, 9.9]	5.4 ^E [3.8, 7.6]	7.0 [5.9, 8.2]
Fishing	Male	29.1 [23.6, 35.3]	20.7 [16.6, 25.5]	16.4 [13.4, 19.9]	21.5 [19.1, 24.1]
	Female	8.2 [6.2, 10.7]	17.8 [14.4, 21.7]	F	10.7 [7.9, 14.4]
	Overall	18.0 [15.1, 21.4]	19.3 [16.5, 22.5]	12.2 [8.7, 16.8]	15.9 [13.9, 18.1]
Outdoor gardening, yard work	Male	35.5 [30.2, 41.2]	36.6 [30.5, 43.2]	29.8 [25.1, 34.9]	33.5 [30.5, 36.7]
	Female	32.2 [27.8, 37.0]	32.6 [27.5, 38.0]	20.0 [16.5, 23.9]	26.9 [24.3, 29.7]
	Overall	33.8 [30.5, 37.2]	34.7 [30.5, 39.1]	24.5 [21.6, 27.5]	30.1 [28.1, 32.1]
Hiking	Male	17.1 [13.4, 21.5]	18.8 [14.0, 24.7]	10.4 [7.8, 13.8]	14.9 [12.6, 17.5]
	Female	11.8 [8.6, 16.0]	9.6 ^E [6.5, 14.0]	2.6 ^E [1.7, 3.8]	7.2 [5.8, 9.0]
	Overall	14.3 [11.9, 17.1]	14.4 [11.3, 18.1]	6.2 [4.8, 7.9]	10.9 [9.5, 12.4]
Hunting	Male	31.0 [26.0, 36.6]	21.9 [17.1, 27.5]	17.1 [14.0, 20.8]	22.7 [20, 25.6]
	Female	4.5 [3.3, 6.0]	7.0 ^E [4.9, 10.0]	2.5 ^E [1.7, 3.8]	4.2 [3.5, 5.2]
	Overall	16.9 [14.3, 19.9]	14.8 [12.0, 18.1]	9.2 [7.6, 11.1]	13.1 [11.7, 14.6]
Swimming	Male	7.5 ^E [4.3, 12.8]	11.1 ^E [7.4, 16.4]	5.6 ^E [3.2, 9.7]	7.8 [5.9, 10.3]
	Female	12.6 [9.2, 16.8]	8.7 ^E [5.9, 12.6]	3.5 ^E [2.4, 5.0]	7.6 [6.1, 9.5]
	Overall	10.2 [7.7, 13.4]	10.0 [7.6, 13.0]	4.5 ^E [3.1, 6.4]	7.7 [6.4, 9.2]
Traditional dancing	Male	5.5 ^E [3.5, 8.5]	8.6 ^E [5.4, 13.3]	6.2 ^E [4.5, 8.6]	6.7 [5.2, 8.5]
	Female	10.3 [7.8, 13.6]	8.1 ^E [5.6, 11.5]	3.9 [2.8, 5.3]	6.9 [5.7, 8.3]
	Overall	8.0 [6.4, 10.1]	8.3 [6.2, 11.2]	5.0 [3.9, 6.3]	6.8 [5.8, 7.9]
Trapping	Male	8.4 [6.4, 11.0]	5.5 ^E [3.8, 7.9]	6.6 [5.0, 8.8]	6.8 [5.7, 8.2]
	Female	F	F	F	1.0 ^E [0.7, 1.6]
	Overall	4.2 [3.3, 5.5]	4.0 ^E [2.9, 5.6]	3.4 [2.6, 4.4]	3.8 [3.2, 4.5]
Walking	Male	50.5 [45.1, 55.9]	57 [49.8, 63.9]	52.1 [47.1, 56.9]	53.0 [49.6, 56.4]
	Female	63.4 [58.5, 68.1]	60.3 [54.3, 65.9]	49.8 [44.2, 55.3]	56.6 [53.3, 59.9]
	Overall	57.4 [53.7, 60.9]	58.5 [53.6, 63.3]	50.8 [47.1, 54.5]	54.9 [52.6, 57.2]
None	Male	17.0 [13.4, 21.2]	16.2 [12.2, 21.2]	27.1 [22.5, 32.2]	20.8 [18.3, 23.6]
	Female	23.0 [19.0, 27.6]	24.1 [19.3, 29.7]	34.8 [29.9, 40.1]	28.5 [25.6, 31.6]
	Overall	20.2 [17.4, 23.3]	20.0 [16.5, 24.0]	31.3 [27.6, 35.2]	24.8 [22.7, 27.1]

Note: Respondents could choose more than one response

Table 22: Abstinence from alcohol in the past year among First Nations seniors, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	56.3 [51.0, 61.5]	64.9 [58.9, 70.5]	67.9 [60.3, 74.6]	70.6 [64.3, 76.1]	64.2 [61.3, 67.0]
Female	62.0 [57.3, 66.5]	64.9 [59.0, 70.4]	75.2 [68.1, 81.2]	82.8 [77.7, 86.9]	70.7 [68.0, 73.3]
Overall	59.4 [55.9, 62.7]	64.9 [60.9, 68.7]	71.8 [66.3, 76.7]	77.3 [73.6, 80.7]	67.6 [65.7, 69.4]

Table 23: Proportion of First Nations seniors who are non-smokers, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	51.6 [45.4, 57.8]	62.3 [56.0, 68.2]	71.4 [63.9, 77.8]	77.1 [70.9, 82.2]	64.2 [60.8, 67.4]
Female	50.7 [45.4, 55.9]	57.2 [51.7, 62.5]	69.7 [60.8, 77.4]	81.1 [77.0, 84.5]	63.8 [60.8, 66.7]
Overall	51.1 [46.7, 55.5]	59.9 [55.6, 64.1]	70.5 [64.8, 75.6]	79.3 [75.8, 82.4]	64.0 [61.5, 66.4]

Table 24: Cannabis and medical cannabis use among First Nations seniors, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Used cannabis in the past 12 months					
Male	24.2 [19.9, 29.0]	16.3 [12.2, 21.4]	12.2 ^E [7.1, 20.2]	4.8 ^E [3.1, 7.4]	15.2 [13.1, 17.5]
Female	16.1 [12.0, 21.3]	9.3 [6.9, 12.6]	4.2 ^E [2.3, 7.4]	2.0 ^E [1.1, 3.6]	8.6 [6.9, 10.5]
Overall	19.9 [17.1, 23.0]	13.0 [10.4, 16.1]	8.1 ^E [5.2, 12.4]	3.2 ^E [2.2, 4.6]	11.7 [10.3, 13.3]
Used cannabis for medical purposes (among seniors who used cannabis in the past 12 months only)					
Male	50.1 [39.6, 60.6]	52.4 [37.1, 67.2]	47.1 ^E [22.0, 73.8]	F	52.9 [44.5, 61.2]
Female	58.7 [43.1, 72.7]	48.5 [34.2, 63.0]	38.9 ^E [18.4, 64.3]	F	51.2 [40.4, 61.9]
Overall	53.9 [45.1, 62.4]	51.1 [39.7, 62.4]	44.9 ^E [25.1, 66.4]	57.1 [40.0, 72.7]	52.3 [45.0, 59.4]

Reason: Socioeconomic Factors

Table 25: Community remoteness among First Nations seniors, by age group

Community Remoteness	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Urban	38.9 [33.6, 44.5]	39.4 [34.3, 44.7]	46.6 [39.5, 53.9]	49.9 [44.2, 55.7]	43.2 [39.1, 47.3]
Rural	47.2 [41.4, 53.1]	40.7 [35.6, 45.9]	37.2 [31.2, 43.5]	36.8 [31.5, 42.5]	41.1 [36.9, 45.4]
Remote / Special Access	13.9 [11.1, 17.3]	19.9 [16.2, 24.3]	16.2 ^e [9.5, 26.3]	13.2 [10.3, 16.9]	15.7 [13.5, 18.3]

Table 26: Marital status among First Nations seniors, by age group

Marital status	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Married / Common law partners	51.5 [47.9, 55.1]	53.2 [48.7, 57.7]	47.8 [41.1, 54.6]	40.7 [36.8, 44.7]	48.5 [46.2, 50.9]
Widowed / Separated / Divorced	24.1 [21.0, 27.6]	28.8 [25.3, 32.6]	39.0 [31.6, 46.9]	49.9 [45.9, 53.9]	34.6 [32.3, 36.9]
Single	24.4 [21.3, 27.8]	17.9 [14.6, 21.9]	13.2 [9.6, 18.0]	9.4 [7.1, 12.2]	16.9 [15.3, 18.7]

Table 27: Highest education among First Nations seniors, by age group

Highest education	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Under high school	27.5 [24.7, 30.5]	30.7 [27.0, 34.7]	32.0 [26.5, 38.0]	50.5 [46.5, 54.6]	35.1 [32.8, 37.4]
High school only	10.1 [8.2, 12.3]	10.4 [8.2, 13.1]	9.6 [7.1, 12.9]	11.3 [8.5, 14.9]	10.4 [9.2, 11.8]
Some post-secondary training	25.4 [22.5, 28.5]	27.1 [23.1, 31.6]	24.9 [20.3, 30.1]	21.5 [17.5, 26.3]	24.8 [22.7, 27.0]
Post-secondary Diploma/Certificate	26.8 [23.6, 30.2]	23.4 [20.0, 27.2]	23.0 [15.4, 33.0]	10.7 [8.6, 13.2]	21.1 [18.9, 23.4]
University and higher	10.2 [8.4, 12.5]	8.3 [6.6, 10.5]	10.5 [8.0, 13.7]	5.9 [4.3, 8.1]	8.7 [7.7, 9.8]

Table 28: Proportion of First Nations seniors who are currently employed, by sex and age group⁸

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	49.0 [43.9, 54.2]	43.6 [37.4, 50.1]	27.1 [20.8, 34.4]	10.5 ^E [6.9, 15.8]	34.4 [31.2, 37.7]
Female	54.6 [50.1, 59.0]	51.1 [45.8, 56.3]	20.0 [14.7, 26.7]	9.0 ^E [6.2, 13.0]	35.3 [32.6, 38.1]
Overall	52.0 [48.5, 55.5]	47.2 [42.7, 51.7]	23.3 [19.0, 28.3]	9.7 [7.1, 13.1]	34.9 [32.7, 37.1]

Table 29: Work satisfaction among employed First Nations seniors, by sex

Work satisfaction item	Male [95% CI]	Female [95% CI]	Overall [95% CI]
Happy at work	96.0 [92.5, 97.9]	97.1 [95.6, 98.1]	96.6 [95.0, 97.7]
Feel valued at work	94.9 [92.1, 96.8]	88.0 [82.7, 91.9]	91.1 [87.9, 93.6]
Stressful at work	56.9 [50.0, 63.5]	55.4 [49.4, 61.3]	56.1 [51.5, 60.6]
Offers opportunities to learn at work	78.8 [72.4, 84.1]	73.2 [67.4, 78.4]	75.8 [71.8, 79.4]
Balance between life and work	92.1 [87.9, 94.9]	93.0 [89.8, 95.2]	92.6 [90.2, 94.4]

Table 30: Volunteerism among First Nations seniors, by age group

Volunteering	Frequency of volunteering in past year	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Volunteers or helps without pay in the community		65.6 [60.1, 70.7]	57.5 [52.4, 62.3]	54.0 [47.9, 59.9]	55.3 [48.4, 62.0]	58.6 [55.2, 61.9]
Among volunteers	1-10 times in past year	72.6 [67.3, 77.3]	63.9 [55.5, 71.5]	60.8 [54.0, 67.3]	66.4 [56.8, 74.8]	66.8 [62.5, 70.9]
	Once per month or more	27.4 [22.7, 32.7]	36.1 [28.5, 44.5]	39.2 [32.7, 46.0]	33.6 [25.2, 43.2]	33.2 [29.1, 37.5]

⁸ Analysis used RHS Phase 3 dataset.

Table 31: Household crowding among First Nations seniors, by age group

Household crowding	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Not Crowded	86.8 [83.9, 89.3]	88.2 [85.3, 90.5]	90.5 [86.8, 93.3]	93.8 [92.2, 95.2]	89.6 [88.1, 91.0]
Crowded	13.2 [10.7, 16.1]	11.8 [9.5, 14.7]	9.5 ^E [6.7, 13.2]	6.2 [4.8, 7.8]	10.4 [9.0, 11.9]

Table 32: Dwelling repairs needed among First Nations seniors, by age group

Home repair	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
No, only regular maintenance is required	34.7 [31.3, 38.1]	34.3 [29.9, 39.0]	43.6 [36.4, 51.1]	39.5 [35.0, 44.1]	37.3 [34.8, 39.9]
Yes, major or minor repairs	65.3 [61.9, 68.7]	65.7 [61.0, 70.1]	56.4 [48.9, 63.6]	60.5 [55.9, 65.0]	62.7 [60.1, 65.2]

Table 33: Lifetime migration among First Nations seniors, by sex and age group

Migration	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Has lived outside home community	Male	56.7 [51.9, 61.4]	57.1 [50.5, 63.4]	54.8 [46.4, 63.0]	51.2 [44.9, 57.5]	55.2 [52.3, 58.1]
	Female	61.8 [57.1, 66.2]	55.7 [50.5, 60.8]	50.8 [40.1, 61.4]	44.0 [38.3, 49.9]	53.5 [50.5, 56.6]
	Overall	59.4 [56.0, 62.8]	56.4 [52.0, 60.8]	52.7 [45.4, 59.9]	47.2 [42.7, 51.7]	54.3 [52.1, 56.5]

Table 34: Needed/received health care in the past year among First Nations seniors, by age group

Needed/ Received health care in past 12 months	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
No health care required	27.3 [24.4, 30.3]	25.8 [22.2, 29.7]	25.8 [18.5, 34.8]	16.8 [13.8, 20.3]	23.9 [21.7, 26.3]
Yes, and I received all the health care I needed	62.1 [58.8, 65.3]	65.3 [60.9, 69.3]	68.2 [59.8, 75.5]	76.4 [72.2, 80.2]	67.7 [65.2, 70.0]
Yes, but I did not receive all the health care I needed	10.7 [8.5, 13.3]	9.0 [6.8, 11.7]	6.0 ^E [4.2, 8.5]	6.8 [5.2, 8.8]	8.4 [7.4, 9.6]

Table 35: Presence and changes of primary health care provider (PHCP) among First Nations seniors, by sex and age group

PHCP change in past year	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Two times or more	Male	14.5 ^E [10.2, 20.0]	11.1 ^E [7.9, 15.5]	13.2 ^E [8.9, 19.0]	16.1 ^E [11.0, 22.9]	13.7 [11.4, 16.3]
Once		10.0 [7.6, 13.1]	14.5 ^E [9.4, 21.7]	9.3 ^E [6.3, 13.7]	14.3 ^E [10.2, 19.8]	12.2 [10.0, 14.9]
Stayed the same		53.2 [47.5, 58.7]	51.9 [44.9, 58.8]	68.3 [61.5, 74.4]	61.0 [53.9, 67.7]	57.3 [54.0, 60.5]
No PHCP		22.3 [17.9, 27.5]	22.5 [17.5, 28.5]	9.1 ^E [6.2, 13.3]	8.6 ^E [5.7, 12.8]	16.8 [14.7, 19.2]
Two times or more	Female	13.8 [10.8, 17.5]	22.1 [17.8, 27.0]	F ⁹	14.4 [10.9, 18.9]	15.6 [13.5, 18.0]
Once		10.2 ^E [7.2, 14.3]	9.5 [7.0, 12.8]	12.3 ^E [8.3, 17.7]	12.4 ^E [8.4, 17.9]	11.0 [9.2, 13.2]
Stayed the same		61.4 [55.9, 66.6]	52.9 [47.6, 58.1]	54.7 [43.1, 65.8]	66.3 [59.7, 72.4]	59.6 [55.9, 63.2]
No PHCP		14.6 [11.4, 18.5]	15.5 [11.4, 20.7]	F	6.8 ^E [4.4, 10.6]	13.8 [10.8, 17.5]
Two times or more	Overall	14.1 [11.3, 17.4]	16.3 [13.4, 19.7]	12.4 [9.4, 16.3]	15.2 [11.9, 19.1]	14.7 [12.9, 16.7]
Once		10.2 [8.1, 12.6]	12.1 [9.0, 16.2]	10.9 [8.0, 14.6]	13.2 [10.1, 17.1]	11.6 [10.1, 13.3]
Stayed the same		57.6 [53.3, 61.7]	52.4 [47.6, 57.1]	61.1 [53.4, 68.3]	64.0 [58.8, 68.9]	58.5 [55.9, 61.0]
No PHCP		18.2 [15.3, 21.3]	19.2 [15.6, 23.5]	15.5 ^E [8.5, 26.6]	7.6 [5.5, 10.4]	15.2 [13.2, 17.5]

Table 36: Perception of community health care service quality among First Nations seniors, by sex and age group

Quality of community health care services	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Good/Excellent	Male	62.9 [56.1, 69.3]	52.9 [46.1, 59.7]	64.6 [56.0, 72.3]	65.3 [58.4, 71.6]	60.8 [57.0, 64.5]
	Female	52.6 [47.2, 57.9]	57.9 [51.9, 63.6]	60.2 [46.7, 72.3]	65.1 [59.4, 70.3]	58.5 [54.8, 62.2]
	Overall	57.3 [52.7, 61.9]	55.2 [50.4, 60.0]	62.2 [53.7, 70.0]	65.2 [60.7, 69.4]	59.6 [56.8, 62.4]

⁹ Note: Some numbers in this table have been suppressed to avoid residual disclosure (i.e., deduction of other suppressed estimates based on available information).

Table 37: Home care services needed/received among First Nations seniors, by age group

Home care needed/received	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Informal care service needed					
Light housekeeping	12.7 [10.5,15.3]	14.0 [11.2,17.4]	22.4 [17.7,28.1]	45.7 [40.9,50.5]	23.2 [21.3,25.3]
<i>If needed, service received</i>	32.7 [23.9,42.9]	43.3 [33.1,54.1]	55.1 [42.5,67.1]	72.0 [65.6,77.6]	58.1 [53.3,62.7]
Home maintenance	16.7 [14.2,19.6]	20.2 [16.8,24.2]	33.3 [26.1,41.3]	51.6 [47.0,56.2]	29.5 [27.3,31.8]
<i>If needed, service received</i>	31.6 [24.2,40.1]	42.4 [33.1,52.3]	48.8 ^E [32.1,65.7]	60.7 [53.1,67.8]	50.1 [44.9,55.2]
Paying bills	5.1 [3.7,7.1]	5.8 [4.3,7.7]	7.5 ^E [4.9,11.3]	19.7 [16.1,23.9]	9.4 [8.1,11.0]
<i>If needed, service received</i>	30.5 ^E [19.2,44.7]	37.5 ^E [24.5,52.6]	40.4 ^E [24.2,59.0]	62.1 [51.3,71.8]	49.7 [42.6,56.8]
Meal preparation	3.6 [2.7,4.7]	5.0 ^E [3.5,7.1]	12.4 ^E [7.9,18.9]	20.2 [16.4,24.7]	9.7 [8.2,11.5]
<i>If needed, service received</i>	42.9 ^E [29.0,58.0]	30.9 ^E [18.3,47.3]	43.6 ^E [24.9,64.4]	76.0 [68.6,82.2]	59.1 [50.1,67.5]
Running errands	6.0 [4.5,7.9]	8.1 [6.2,10.5]	13.9 [10.1,18.9]	27.6 [23.4,32.4]	13.5 [12.0,15.1]
<i>If needed, service received</i>	38.9 [27.4,51.9]	42.1 [30.3,54.9]	43.3 ^E [28.8,59.1]	67.5 [58.4,75.5]	55.4 [48.5,62.0]
Formal health care service needed					
Personal care	3.6 ^E [2.5,5.3]	2.0 ^E [1.2,3.5]	5.2 ^E [3.2,8.2]	16.1 [12.3,20.8]	6.7 [5.5,8.1]
<i>If needed, service received</i>	22.2 ^E [11.5,38.5]	F	50.2 ^E [29.4,70.9]	61.4 [46.8,74.3]	50.9 [41.5,60.3]
Care from a nurse	4.3 [3.3,5.6]	3.8 [2.7,5.2]	10.3 ^E [6.7,15.3]	24.2 [20.5,28.4]	10.3 [8.9,11.8]
<i>If needed, service received</i>	54.5 [40.7,67.7]	60.8 [45.8,74.0]	64.0 ^E [39.8,82.6]	78.9 [71.7,84.6]	71.4 [64.7,77.3]
Palliative care	1.0 ^E [0.6,1.8]	F	F	2.2 ^E [1.3,3.6]	1.3 ^E [0.9,1.8]
<i>If needed, service received</i>	52.3 ^E [26.1,77.2]	F	F	56.3 ^E [32.8,77.4]	45.1 ^E [28.9,62.4]
Long-term care	2.0 ^E [1.3,3.1]	F	5.7 ^E [3.0,10.5]	9.8 [7.1,13.2]	4.9 [3.8,6.3]
<i>If needed, service received</i>	31.9 ^E [15.2,55]	F	F	55.5 [39.5,70.5]	46.3 [34.5,58.5]

Relationships: Personal and Community Wellness

Table 38: Self-rated mental health among First Nations seniors, by sex and age group¹⁰

Self-rated mental health	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Excellent/ Very good/ Good	Male	88.6 [84.8, 91.5]	86.0 [80.1, 90.4]	82.3 [72.7, 89.0]	85.5 [79.8, 89.8]	86.0 [83.2, 88.5]
	Female	86.1 [81.3, 89.8]	86.5 [82.6, 89.6]	91.8 [88.1, 94.4]	88.5 [85.1, 91.2]	87.8 [85.8, 89.6]
	Overall	87.3 [84.2, 89.8]	86.2 [82.9, 89.0]	87.3 [82.3, 91.0]	87.1 [84.2, 89.6]	87.0 [85.3, 88.5]

Table 39: Proportion of First Nations seniors who experienced depression symptoms for two weeks or more in the past year, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	25.3 [19.4, 32.3]	22.0 [16.0, 29.6]	18.8 ^E [12.5, 27.3]	21.7 ^E [13.6, 32.8]	22.4 [18.9, 26.4]
Female	39.8 [31.7, 48.4]	33.7 [27.7, 40.2]	33.5 [26.3, 41.5]	22.3 [16.8, 29.1]	32.1 [28.3, 36.2]
Overall	32.2 [26.6, 38.3]	28.1 [23.7, 32.9]	26.6 [20.8, 33.4]	22.1 [17.1, 28.1]	27.5 [24.6, 30.6]

Table 40: Feelings of mastery among First Nations seniors, by age group

Mastery level	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Low	6.4 [4.7, 8.6]	5.0 ^E [3.1, 8.2]	4.1 ^E [2.8, 6.0]	6.9 ^E [4.2, 11.3]	5.8 [4.4, 7.5]
Moderate	41.2 [37.7, 44.9]	49.0 [43.9, 54.0]	44.0 [36.9, 51.4]	45.8 [41.0, 50.8]	44.9 [42.2, 47.7]
High	52.4 [48.5, 56.2]	46.0 [41.2, 50.9]	51.9 [44.8, 58.9]	47.2 [42.4, 52.1]	49.3 [46.8, 51.9]

Table 41: Proportion of First Nations seniors who experience wholistic balance, by sex and age group¹¹

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	58.7 [53.8, 63.4]	62.0 [55.4, 68.2]	61.8 [54.1, 69.1]	62.1 [55.1, 68.6]	61.0 [57.9, 64.0]
Female	53.0 [48.0, 57.9]	57.7 [52.2, 63.1]	61.2 [51.5, 70.0]	62.3 [56.7, 67.6]	58.1 [55.0, 61.1]
Overall	55.6 [52.0, 59.1]	60.0 [55.4, 64.3]	61.5 [55.1, 67.5]	62.2 [57.3, 66.8]	59.5 [57.3, 61.6]

¹⁰ Analysis used RHS Phase 3 dataset.

¹¹ Analysis used RHS Phase 3 dataset.

Table 42: Very or somewhat strong sense of community belonging among First Nations seniors, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	83.9 [79.7, 87.4]	85.6 [79.1, 90.4]	87.6 [82.1, 91.6]	86.3 [79.5, 91.0]	85.6 [82.6, 88.2]
Female	83.2 [79.3, 86.5]	85.6 [80.9, 89.2]	84.2 [78.7, 88.6]	89.0 [84.6, 92.2]	85.6 [83.7, 87.2]
Overall	83.5 [80.8, 85.9]	85.6 [81.3, 89.1]	85.9 [82.0, 89.0]	87.8 [84.0, 90.8]	85.6 [83.7, 87.3]

Table 43: Proportion of First Nations seniors who always or almost always take part in community cultural events, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	24.1 [18.3, 31.1]	19.6 [15.4, 24.8]	27.2 [20.2, 35.5]	22.0 [16.9, 28.0]	22.8 [19.7, 26.2]
Female	25.8 [21.5, 30.6]	23.3 [19.2, 27.9]	20.2 [15.5, 26.0]	23.5 [18.9, 28.9]	23.6 [21.2, 26.2]
Overall	25.0 [21.0, 29.6]	21.4 [18.2, 24.9]	23.5 [19.2, 28.5]	22.8 [19.1, 27.0]	23.2 [21.0, 25.7]

Table 44: Proportion of First Nations seniors who feel safe in their community, by sex and age group

Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	85.8 [81.4, 89.4]	80.4 [73.7, 85.7]	83.5 [74.7, 89.6]	89.4 [83.4, 93.4]	84.7 [81.7, 87.3]
Female	77.3 [72.8, 81.3]	83.8 [79.9, 87.1]	86.3 [81.1, 90.3]	86.0 [80.7, 90.1]	82.8 [80.5, 85.0]
Overall	81.3 [78.2, 84.1]	82.0 [78.0, 85.4]	85.0 [80.0, 88.9]	87.5 [83.7, 90.6]	83.7 [81.9, 85.4]

Table 45: Number of community strengths identified by First Nations seniors, by sex and age group

# of Community strengths	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
0-5	Male	50.9 [45.5, 56.2]	49.1 [41.4, 57.0]	36.4 [28.8, 44.7]	54.0 [46.3, 61.6]	48.7 [44.9, 52.5]
6-15		41.3 [36.0, 46.7]	44.3 [36.7, 52.2]	43.2 [34.5, 52.3]	40.9 [33.7, 48.5]	42.4 [38.6, 46.2]
16+		7.9 [5.5, 11.1]	6.5 [4.2, 10.1]	20.4 [12.0, 32.6]	5.1 [3.2, 7.9]	8.9 [6.9, 11.4]
0-5	Female	51.3 [45.8, 56.8]	44.0 [38.3, 50.0]	34.7 [25.8, 44.9]	51.0 [44.8, 57.3]	46.6 [42.9, 50.3]
6-15		44.7 [39.2, 50.2]	43.0 [36.9, 49.3]	F ¹²	38.3 [32.6, 44.4]	42.6 [39.0, 46.2]
16+		4.0 [2.4, 6.5]	13.0 [9.5, 17.6]	F	10.6 [6.1, 17.8]	10.8 [7.6, 15.2]
0-5	Overall	51.1 [46.9, 55.3]	46.7 [41.4, 52.0]	35.5 [29.0, 42.6]	52.4 [47.5, 57.3]	47.6 [44.7, 50.6]
6-15		43.1 [39.1, 47.2]	43.7 [38.3, 49.2]	44.0 [36.8, 51.5]	39.5 [34.6, 44.6]	42.5 [39.7, 45.3]
16+		5.8 [4.3, 7.7]	9.7 [7.4, 12.5]	20.5 ^E [12.1, 32.5]	8.1 ^E [5.4, 12.1]	9.9 [7.8, 12.5]

¹² Note: Some numbers in this table have been suppressed to avoid residual disclosure (i.e., deduction of other suppressed estimates based on available information).

Table 46: Proportion of First Nations seniors identifying community strengths, by age group

Community strength	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Elders	54.1 [50.1,58.0]	61.3 [55.9,66.4]	67.8 [61.1,73.8]	59.8 [53.5,65.8]	59.8 [56.8,62.7]
Community health programs	57.1 [52.4,61.8]	58.7 [53.5,63.6]	62.4 [55.8,68.6]	56.7 [52.0,61.3]	58.3 [55.5,61.2]
Awareness of First Nations culture	53.8 [49.3,58.2]	58.5 [53.8,63.0]	63.9 [57.2,70.1]	53.3 [47.7,58.7]	56.6 [53.5,59.7]
Family values/connections	47.9 [44.0,51.9]	57.0 [52.1,61.7]	57.6 [50.5,64.5]	52.1 [46.7,57.5]	53.1 [50.4,55.8]
Traditional gatherings/ceremonial activities (e.g., powwow)	46.9 [42.8,51.1]	47.7 [42.5,52.9]	51.6 [43.6,59.6]	50.3 [45.0,55.5]	48.8 [45.8,51.8]
Education and training opportunities	41.6 [37.8,45.4]	46.9 [41.8,52.0]	57.3 [49.9,64.3]	40.5 [35.5,45.7]	45.4 [42.5,48.4]
Use of First Nation language	38.6 [35.1,42.1]	40.9 [36.0,45.9]	53.7 [45.7,61.5]	36.6 [31.7,41.8]	41.2 [38.5,44.0]
Social connections (community working together, sense of belonging)	35.2 [31.3,39.3]	40.8 [36.2,45.6]	48.2 [40.2,56.3]	37.1 [32.1,42.5]	39.4 [36.5,42.4]
Spirituality	36.3 [32.4,40.4]	38.7 [34.5,43.1]	51.8 [44.0,59.5]	33.3 [28.2,38.8]	38.8 [35.9,41.8]
Health (physical or mental)	28.5 [25.1,32.3]	33.9 [29.5,38.6]	44.8 [36.7,53.1]	33.1 [28.6,37.9]	33.9 [31.0,36.9]
Policing	25.7 [22.2,29.5]	27.3 [23.0,32.1]	41.3 [32.8,50.4]	23.8 [19.8,28.5]	28.3 [25.3,31.5]
Good leisure/recreation facilities	25.5 [22.5,28.8]	27.5 [23.6,31.8]	37.0 [28.7,46.1]	23.5 [19.0,28.8]	27.5 [24.8,30.4]
Natural environment/resources	22.7 [19.6,26.2]	26.7 [22.6,31.2]	36.5 [28.1,45.9]	22.5 [18.3,27.5]	26.1 [23.5,28.9]
Low rates of suicide	22.2 [18.9,26.0]	25.4 [21.1,30.3]	32.6 [23.7,43.0]	22.5 [18.4,27.2]	24.9 [22.0,28.1]
Housing	24.1 [20.5,28.1]	24.1 [19.9,28.8]	27.4 [21.6,34.0]	22.2 [18.3,26.6]	24.1 [21.8,26.7]
Good employment opportunities	21.6 [18.5,25.2]	24.5 [20.6,28.9]	33.1 [24.5,43.0]	19.2 [15.9,23.0]	23.7 [21.1,26.6]
Strong leadership	20.0 [17.2,23.2]	22.2 [18.8,26.1]	35.4 [27.1,44.8]	21.5 [17.9,25.7]	23.6 [21.1,26.4]
Control over decisions	15.3 [13.0,17.9]	23.3 [18.9,28.4]	30.3 [21.9,40.3]	19.1 [15.4,23.4]	21.0 [18.5,23.7]
Low rates of crime	16.8 [14.0,20.1]	16.5 [13.7,19.8]	22.1 [16.1,29.6]	16.5 [13.2,20.6]	17.5 [15.7,19.6]
Strong economy	11.4 [9.2,13.9]	15.0 [12.2,18.2]	25.2 [£] [16.9,35.8]	10.4 [8.1,13.3]	14.4 [12.2,17.0]
Low rates of alcohol and drug abuse	8.2 [6.4,10.4]	9.2 [7.2,11.8]	11.9 [£] [7.9,17.4]	5.6 [4.3,7.3]	8.4 [7.1,10.0]

Note: Respondents could choose more than one response

Table 47: Number of types of general social support available to First Nations seniors, by sex and age group¹³

# of types of general social support available		55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Male	0-3	28.7 [24.0, 33.9]	23.2 [18.2, 29.0]	20.2 [13.7, 28.8]	19.7 [14.5, 26.2]	23.5 [20.7, 26.6]
	4+	71.3 [66.1, 76.0]	76.8 [71.0, 81.8]	79.8 [71.2, 86.3]	80.3 [73.8, 85.5]	76.5 [73.4, 79.3]
Female	0-3	18.2 [14.8, 22.3]	21.8 [17.5, 26.7]	18.7 [12.5, 27.1]	15.5 [11.9, 19.9]	18.4 [16.1, 21.0]
	4+	81.8 [77.7, 85.2]	78.2 [73.3, 82.5]	81.3 [72.9, 87.5]	84.5 [80.1, 88.1]	81.6 [79.0, 83.9]
Overall	0-3	23.1 [20.2, 26.2]	22.5 [19.1, 26.3]	19.4 [14.6, 25.1]	17.3 [14.1, 21.1]	20.8 [18.9, 22.8]
	4+	76.9 [73.8, 79.8]	77.5 [73.7, 80.9]	80.6 [74.9, 85.4]	82.7 [78.9, 85.9]	79.2 [77.2, 81.1]

Table 48: Experiences of aggression and racism among First Nations seniors, by age group

Experienced in past year	Categories	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Physical aggression	Rarely/ Never	92.3 [89.9, 94.1]	95.5 [94.0, 96.6]	97.0 [95.3, 98.1]	97.4 [95.8, 98.4]	95.3 [94.4, 96.0]
	Often/ Sometimes	7.7 [5.9, 10.1]	4.5 [3.4, 6.0]	3.0 ^E [1.9, 4.7]	2.6 ^E [1.6, 4.2]	4.7 [4.0, 5.6]
Verbal aggression	Rarely/ Never	80.8 [77.5, 83.7]	88.2 [85.6, 90.4]	88.1 [83.3, 91.7]	92.1 [89.6, 94.1]	87.0 [85.3, 88.5]
	Often/ Sometimes	19.2 [16.3, 22.5]	11.8 [9.6, 14.4]	11.9 ^E [8.3, 16.7]	7.9 [5.9, 10.4]	13.0 [11.5, 14.7]
Racism	No	74.9 [70.3, 79.1]	76.2 [72.3, 79.7]	78.0 [71.8, 83.2]	86.2 [81.9, 89.7]	78.7 [76.0, 81.2]
	Yes	25.1 [20.9, 29.7]	23.8 [20.3, 27.7]	22.0 [16.8, 28.2]	13.8 [10.3, 18.1]	21.3 [18.8, 24.0]

Table 49: Indian Residential School experiences among First Nations seniors, by age group

Residential School experience	Impact	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Attended Residential School		30.2 [26.4, 34.3]	40.5 [36.1, 45.2]	45.6 [38.0, 53.4]	41.9 [37.3, 46.7]	38.6 [35.7, 41.5]
Parents or guardians attended Residential School		52.1 [47.4, 56.7]	51.0 [46.7, 55.3]	47.3 [39.7, 54.9]	35.3 [30.6, 40.4]	46.6 [43.7, 49.6]
Grandparents attended Residential School		38.5 [34.0, 43.2]	30.1 [25.6, 34.9]	29.8 [23.6, 36.8]	19.4 [15.7, 23.7]	29.7 [27.2, 32.4]
Impact on overall health and wellbeing [Among those who attended]	No impact	22.1 [17.3, 27.9]	19.4 [14.4, 25.5]	22.4 ^E [15.9, 30.6]	23.0 [18.1, 28.8]	21.6 [18.8, 24.8]
	Negatively impacted	65.9 [59.4, 71.8]	71.0 [64.6, 76.6]	68.8 [58.9, 77.2]	65.4 [59.4, 70.9]	67.8 [64.2, 71.2]
	Positively impacted	12.0 [8.6, 16.5]	9.7 ^E [6.7, 13.7]	8.8 ^E [5.4, 14.0]	11.6 [8.4, 15.9]	10.6 [8.8, 12.7]

¹³ Analysis used RHS Phase 3 dataset.

Table 50: Language(s) spoken most often in daily life among First Nations seniors, by sex and age group¹⁴

Language most frequently spoken	Sex	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
English	Male	68.1 [63.0, 72.7]	63.3 [56.3, 69.7]	58.6 [50.6, 66.2]	58.8 [52.2, 65.0]	62.8 [59.4, 66.2]
French		F ¹⁵	F	F	F	1.9 [1.7, 2.1]
First Nations language		20.4 [16.8, 24.6]	20.8 [17.0, 25.3]	28.1 [22.1, 34.9]	31.7 [25.6, 38.4]	24.5 [22.0, 27.3]
More than one of the above		9.1 ^E [6.0, 13.4]	14.4 ^E [9.0, 22.2]	10.3 ^E [5.6, 18.3]	5.0 ^E [3.2, 7.9]	9.9 [7.6, 12.7]
Other (Specify)		F	F	F	F	0.9 ^E [0.5, 1.5]
English	Female	72.9 [68.7, 76.8]	64.3 [59.2, 69.0]	68.1 [59.2, 75.8]	56.5 [50.4, 62.4]	65.5 [62.5, 68.4]
French		F	F	F	F	2.7 [2.4, 3.0]
First Nations language		16.0 [13.2, 19.2]	23.5 [19.7, 27.7]	21.1 [15.3, 28.3]	29.2 [24.0, 35.0]	22.3 [20.0, 24.7]
More than one of the above		8.1 [6.0, 10.9]	9.2 ^E [6.2, 13.4]	4.9 ^E [3.0, 7.8]	8.8 [6.5, 11.8]	8.0 [6.6, 9.7]
Other (Specify)		F	F	F	F	1.5 [0.8, 2.5]
English	Overall	70.7 [67.6, 73.5]	63.7 [59, 68.2]	63.6 [57.1, 69.6]	57.5 [52.7, 62.2]	64.2 [61.5, 66.9]
French		2.1 [1.6, 2.8]	F	F	2.7 [2.1, 3.5]	2.3 [2.2, 2.5]
First Nations language		18.1 [15.8, 20.5]	22.1 [19.1, 25.4]	24.4 [19.9, 29.6]	30.3 [25.9, 35.1]	23.4 [21.3, 25.5]
More than one of the above		8.6 [6.7, 10.9]	11.9 ^E [8.3, 16.7]	7.5 ^E [4.7, 11.7]	7.1 [5.5, 9.2]	8.9 [7.4, 10.6]
Other (Specify)		0.6 ^E [0.3, 1.2]	F	F	2.3 ^E [1.3, 4.3]	1.2 ^E [0.8, 1.8]

Table 51: Connection and exposure to First Nations language among First Nations seniors, by age group

First Nations Language variable	Response Categories	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Importance of understanding	Somewhat/ Very important	90.4 [87.3, 92.8]	94.7 [92.6, 96.2]	96.0 [93.8, 97.4]	93.5 [90.2, 95.7]	93.4 [91.9, 94.6]
Importance of speaking	Somewhat/ Very important	91.3 [88.3, 93.5]	94.3 [92.2, 95.8]	94.6 [92.2, 96.3]	93.5 [90.6, 95.6]	93.2 [91.8, 94.5]
Satisfied with knowledge	Somewhat/ Very satisfied	71.1 [64.6, 76.8]	75.3 [69.2, 80.4]	79.2 [74.4, 83.4]	80.1 [70.2, 87.3]	76.2 [71.7, 80.2]
Frequency of exposure at home	Most/ All of the time	40.2 [34.9, 45.7]	45.2 [39.2, 51.4]	49.2 [42.8, 55.7]	55.1 [47.7, 62.2]	47.2 [43.1, 51.3]
Frequency of exposure in community	Most/ All of the time	40.3 [35.0, 45.8]	45.5 [38.9, 52.2]	44.7 [38.6, 51.1]	52.1 [44.7, 59.4]	45.6 [41.5, 49.7]

¹⁴ Analysis used RHS Phase 3 dataset.¹⁵ Note: Some numbers in this table have been suppressed to avoid residual disclosure (i.e., deduction of other suppressed estimates based on available information).

Table 52: Spirituality, religion, traditional teaching, and historical knowledge among First Nations seniors, by age

Culture & history variable	Categories	55-59 years % [95% CI]	60-64 years % [95% CI]	65-69 years % [95% CI]	70+ years % [95% CI]	Overall % [95% CI]
Traditional spirituality is important	Agree/ Strongly agree	72.9 [69.5, 75.9]	74.8 [70.0, 79.1]	75.8 [70.4, 80.5]	67.7 [62.7, 72.2]	72.6 [70.2, 74.8]
Organized religion is important	Agree/ Strongly agree	49.3 [45.8, 52.9]	58.1 [53.2, 62.8]	55.6 [48.5, 62.4]	61.9 [57.5, 66.1]	56.0 [53.4, 58.5]
Importance of traditional teaching	Somewhat/ Very important	88.7 [85.6, 91.1]	90.6 [87.7, 92.9]	89.7 [86.0, 92.5]	89.1 [85.9, 91.7]	89.5 [87.8, 91.0]
Satisfactory of knowledge of traditional teaching	Somewhat/ Very satisfied	74.8 [70.2, 78.9]	75.6 [70.1, 80.4]	79.9 [74.9, 84.1]	78.6 [69.5, 85.5]	77.0 [73.0, 80.5]
Know about the history of your people	Some/ A lot	80.9 [77.3, 84.0]	81.3 [76.8, 85.1]	81.7 [77.5, 85.4]	85.0 [81.3, 88.0]	82.3 [80.1, 84.2]
Know about inherent rights of your people	Some/ A lot	70.8 [66.1, 75.1]	71.3 [66.5, 75.7]	71.8 [66.9, 76.1]	62.8 [54.9, 70.1]	69.0 [66.0, 71.8]
Know about history of IRS	Some/ A lot	73.8 [69.3, 77.7]	76.2 [71.0, 80.7]	76.2 [71.0, 80.8]	70.4 [63.7, 76.4]	74.0 [71.0, 76.7]

Logistic Regressions

Table 53: Factors associated with excellent/very good/good self-rated health among First Nations seniors¹⁶

Variable	Categories	Adjusted OR	[95%CI]
Sex	Male	ref	
	Female	1.1	[0.9,1.3]
Age	55-59	ref	
	60-64	0.9	[0.7,1.2]
	65-69	0.8	[0.6,1.1]
	70+	0.6	[0.5,0.8]
Currently Employed	No	ref	
	Yes	2.4	[1.9,3.1]

¹⁶ Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

Variable	Categories	Adjusted OR	[95%CI]
Highest Education	Under high school	Ref	
	High school only	1.4	[1.0,2.0]
	Some postsecondary training	1.2	[0.9,1.5]
	Postsecondary diploma/certificate	1.5	[1.1,1.9]
	University and up	2.3	[1.7,3.2]
Remoteness	Urban	ref	
	Rural	0.9	[0.7,1.0]
	Remote or Special Access	1.0	[0.7,1.3]
Food Security	Moderate or Severe Insecurity	ref	
	Secure	2.0	[1.7,2.5]
Eats a nutritious, balanced diet	No	ref	
	Yes	1.6	[1.3,2.0]
Sense of belonging to local community	Somewhat weak/ Very weak	ref	
	Very strong/ Somewhat strong	1.4	[1.1,1.8]
Feels safe in local community	Somewhat unsafe/ Very unsafe	ref	
	Very safe/ Reasonably safe	1.5	[1.1,1.9]
Current non-smoking status	Smoker	ref	
	Non-smoker	1.3	[1.1,1.6]
Physical activity level	Inactive	ref	
	Moderately Active	1.4	[1.1,1.8]
	Active	2.2	[1.7,2.7]
Has walked for leisure in the past 3 months	No	ref	
	Yes	1.2	[1.0,1.4]
Number of community strengths	0-5	ref	
	6-15	1.0	[0.8,1.2]
	16+	1.9	[1.2,3.1]
Number of types of general support available	0-3	ref	
	4+	1.4	[1.1,1.8]

Variable	Categories	Adjusted OR	[95%CI]
Mastery	Low mastery	ref	
	Moderate mastery	2.4	[1.5,3.7]
	High mastery	3.3	[2.1,5.1]
Quality of health care services available in community	Fair/ Poor	ref	
	Excellent/ Good	1.8	[1.4,2.2]
Parents or guardians attended residential school	No	ref	
	Yes	0.6	[0.5,0.7]
Required health care services in past year	No	ref	
	Yes, and I received all the health care I needed	0.5	[0.4,0.6]
	Yes, but I did not receive all the health care I needed	0.3	[0.2,0.4]
Balance between life and work	Strongly disagree/ Disagree	ref	
	Strongly agree/ Agree	2.8	[1.5,5.2]
Feel valued at work	Strongly disagree/ Disagree	ref	
	Strongly agree/ Agree	2.0	[1.1,3.9]

Table 54: Factors associated with excellent/very good/good self-rated mental health among First Nations seniors¹⁷

Variable	Categories	Adjusted OR	[95%CI]
Sex	Male	ref	
	Female	1.2	[0.9,1.5]
Age	55-59	ref	
	60-64	0.9	[0.6,1.3]
	65-69	1.0	[0.6,1.6]
	70+	1.0	[0.7,1.4]
Currently employed	No	ref	
	Yes	2.4	[1.6,3.6]

¹⁷ Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

Variable	Categories	Adjusted OR	[95%CI]
Highest education	Under high school	ref	
	High school only	1.9	[1.2,3.0]
	Some postsecondary training	1.5	[1.0,2.2]
	Postsecondary diploma/certificate	1.7	[1.1,2.5]
	University and up	4.4	[2.5,7.7]
Remoteness	Urban	ref	
	Rural	0.8	[0.6,1.1]
	Remote or Special Access	0.6	[0.4,1.0]
Food Security	Moderate or Severe Insecurity	ref	
	Secure	1.8	[1.4,2.4]
Eats a nutritious, balanced diet	No	ref	
	Yes	2.4	[1.8,3.1]
Sense of belonging to local community	Somewhat weak/ Very weak	ref	
	Very strong/ Somewhat strong	2.2	[1.5,3.1]
Feels safe in local community	Somewhat unsafe/ Very unsafe	ref	
	Very safe/ Reasonably safe	1.8	[1.3,2.5]
Experienced verbal aggression in past year	Yes, rarely/ No, never	ref	
	Yes, often/ Sometimes	0.5	[0.4,0.8]
Abstinence from drinking in past year	No	ref	
	Yes	1.1	[0.8,1.4]
Physical activity level	Inactive	ref	
	Moderately Active	1.9	[1.3,2.7]
	Active	1.6	[1.1,2.3]
Has walked for leisure in the past 3 months	No	ref	
	Yes	1.5	[1.2,2.0]
Number of types of general social support available	0-3	ref	
	4+	3.0	[2.2,4.0]
Quality of health care services available in community	Fair/ Poor	ref	
	Excellent/ Good	2.5	[1.9,3.3]

Variable	Categories	Adjusted OR	[95%CI]
Required health care services in past year	No	ref	
	Yes, and I received all the health care I needed	0.8	[0.6,1.1]
	Yes, but I did not receive all the health care I needed	0.4	[0.3,0.6]
Mastery	Low	ref	
	Moderate	3.8	[2.5,6.0]
	High	7.4	[4.5,12.2]
Has ever accessed mental health service	No	ref	
	Yes	0.6	[0.5,0.8]
Feels happy at work	Disagree	ref	
	Agree	9.1	[3.9,21.2]
Balance between life and work	Disagree	ref	
	Agree	2.1	[1.1,4.3]

Table 55: Factors associated with wholistic balance among First Nations seniors¹⁸

Variable	Categories	Adjusted OR	[95%CI]
Sex	Male	ref	
	Female	0.9	[0.7,1.0]
Age groups	55-59	ref	
	60-64	1.2	[0.9,1.5]
	65-69	1.3	[0.9,1.7]
	70+	1.3	[1.0,1.7]
Currently employed	No	ref	
	Yes	1.8	[1.4,2.2]
Highest education	Under high school	ref	
	High school only	1.4	[1.0,1.9]
	Some postsecondary training	1.4	[1.1,1.8]
	Postsecondary diploma/certificate	1.6	[1.2,2.2]
	University and up	2.2	[1.6,3.1]

¹⁸ Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

Variable	Categories	Adjusted OR	[95%CI]
Remoteness	Urban	ref	
	Rural	0.7	[0.6,0.9]
	Remote or Special Access	0.8	[0.6,1.1]
Food Security	Moderate or Severe Insecurity	ref	
	Secure	2.1	[1.8,2.5]
Eats a nutritious, balanced diet	No	ref	
	Yes	2.1	[1.8,2.6]
Importance of traditional spirituality	Strongly disagree/ Disagree/ Neither agree or disagree	ref	
	Strongly agree/ Agree	1.6	[1.3,2.0]
Importance of religion	Strongly disagree/ Disagree/ Neither agree or disagree	ref	
	Strongly agree/ Agree	1.4	[1.2,1.7]
Sense of belonging to local community	Somewhat weak/ Very weak	ref	
	Very strong/ Somewhat strong	3.0	[2.3,3.9]
Feels safe in local community	Somewhat unsafe/ Very unsafe	ref	
	Very safe/ Reasonably safe	1.5	[1.1,1.9]
Community cultural event participation	Sometimes/ Rarely/ Never	ref	
	Always/ Almost always	1.6	[1.3,1.9]
Current nonsmoking status	Smoker	ref	
	Nonsmoker	1.3	[1.1,1.6]
Abstinence from drinking in past year	No	ref	
	Yes	1.3	[1.1,1.7]
Physical activity level	Inactive	ref	
	Moderately Active	1.5	[1.1,1.9]
	Active	1.7	[1.4,2.2]
Has walked for leisure in the past 3 months	No	ref	
	Yes	1.4	[1.1,1.6]
Number of community strengths	0-5	ref	
	6-15	0.9	[0.7,1.1]
	16+	1.7	[1.1,2.6]
Number of types of general social support available	0-3	ref	
	4+	3.0	[2.3,3.8]

Variable	Categories	Adjusted OR	[95%CI]
Mastery scale	Low mastery	ref	
	Moderate mastery	2.2	[1.3,3.6]
	High mastery	4.2	[2.6,6.7]
Quality of health care services available in community	Fair/ Poor	ref	
	Excellent/ Good	1.2	[1.0,1.5]
Has ever accessed mental health service	No	ref	
	Yes	0.8	[0.6,0.9]
Experienced any verbal aggression in past year	Yes, rarely/ No, never	ref	
	Yes, often/ Sometimes	0.7	[0.5,0.9]
Required health care services in past year	No	ref	
	Yes, and I received all the health care I needed	0.8	[0.6,1.0]
	Yes, but I did not receive all the health care I needed	0.4	[0.3,0.6]
Feel valued at work	Strongly disagree/ Disagree	ref	
	Strongly agree/ Agree	2.0	[1.1,3.7]
Volunteer or help without pay in the community	No	ref	
	Yes	1.7	[1.3,2.2]

Table 56: Association between wholistic balance and excellent/very good/good self-rated general health among First Nations seniors¹⁹

Variable	Categories	Adjusted OR	[95%CI]
Wholistic balance	Not balanced	ref	
	Balanced	2.4	[1.9, 2.9]

Table 57: Association between wholistic balance and excellent/very good/good self-rated mental health among First Nations seniors²⁰

Variable	Categories	Adjusted OR	[95%CI]
Wholistic balance	Not balanced	ref	
	Balanced	3.7	[2.7, 4.9]

¹⁹ Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

²⁰ Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

Appendix D: About the Researcher

Dr. Jennifer Walker is a health services researcher and epidemiologist. She has Indigenous (Haudenosaunee) family roots and is a member of the Six Nations of the Grand River. She has a PhD in Community Health Sciences (Epidemiology specialization) from the University of Calgary. Her work focuses on Indigenous use of Indigenous health and health services data across the life course, with a focus on older adults. She collaborates closely with Indigenous organizations and communities to address health information needs.

Jennifer holds a Canada Research Chair in Indigenous Health at Laurentian University in the School of Rural and Northern Health. She is a Core Scientist and Indigenous Health Lead at the Institute for Clinical Evaluative Sciences. She also holds appointments at the Centre for Rural and Northern Health Research, the Northern Ontario School of Medicine, and the Dalla Lana School of Public Health.





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