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# *Nursing Practice in Rural and Remote Canada II*

## *Indigenous Nurses in Rural & Remote Canada: Results from a National Survey*

**http://www.unbc.ca/rural-nursing**

# Indigenous Nurses in Rural and Remote Canada:

# Results from a National Survey

The Nature of Nursing Practice in Rural and Remote Canada II

Website: http://www.unbc.ca/rural-nursing

**2019**

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**ADDITIONAL COPIES**

Copies of this report may be obtained from the study website http://www.unbc.ca/rural-nursing or from:

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**Further information about the full study, publications, and presentations are available from:**

Nursing Practice in Rural and Remote Canada II
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http://www.unbc.ca/rural-nursing

We extend our deepest gratitude to the Indigenous Nurses
who participated in this study.

# Contents


Suggested Citation Format ..... iii

ACKNOWLEDGMENTS AND FUNDING SOURCES ..... iv

EXECUTIVE SUMMARY ..... vii

BACKGROUND ..... 1

Selecting and Contacting Participants ..... 1

Response Rate ..... 1

Introduction and Overview of Report ..... 2

DEMOGRAPHIC CHARACTERISTICS ..... 2

Region of Residence ..... 2

Age and Gender ..... 3

Marital Status and Dependent Children or Relatives ..... 3

General and Mental Health ..... 3

Size of Childhood and Primary Work Community ..... 3

Education ..... 4

Number of Years Licensed to Practice and Number of Years Employed ..... 4

WORK SETTINGS ..... 5

Nursing Employment Status ..... 5

Work Setting and Main Area of Nursing Practice ..... 5

Rural versus Remote Practice and Distance from Major Centres ..... 6

Work Hours ..... 7

Requirement to be On Call ..... 7

Work Environment ..... 7

Practice Resources and Demands ..... 7

Violence and Abuse in the Workplace ..... 8

Perceptions of Primary Health Care Engagement ..... 9

Working with Other Nurses ..... 11

Interprofessional Practice ..... 11

NURSING PRACTICE ..... 12

Scope of Practice ..... 12

Perceptions of Nursing Practice ..... 17
Competence and Confidence ..... 17
Rural/Remote Nursing Patient Population ..... 17
Nursing Knowledge: Information Access and Education Sources ..... 18
SATISFACTION ..... 19
Work Satisfaction ..... 19
Community Satisfaction ..... 19
Work Engagement and Burnout ..... 19
RECRUITMENT AND RETENTION ..... 19
Recruitment ..... 19
Retention ..... 20
Plans in the Next 12 Months ..... 21
Plans in the Next 5 Years ..... 22
WHAT WE HAVE LEARNED ABOUT RURAL/REMOTE INDIGENOUS NURSES ..... 22
Strengths & Limitations ..... 23
POLICY IMPLICATIONS ..... 24
Workforce Planning ..... 24
Recruitment ..... 24
Retention ..... 24
REFERENCES ..... 25
Appendix A: Scope of Practice: Rural BC and Canada RNs and LPNs ..... 26

# EXECUTIVE SUMMARY

This report is the result of a cross-sectional survey of rural, northern, and remote nurses (RNs, NPs, RPNs, LPNs) in Canada (MacLeod et al., 2017). The aim of this report is to examine the nature of practice for nurses of Indigenous (i.e., First Nations, Inuit, or Métis) status who work in rural, remote and northern settings in Canada. Of the 3,822 regulated nurses in the stratified systematic sample, 245 nurses identified themselves as having Indigenous ancestry. In this report, they are referred to as Indigenous nurses or rural Indigenous nurses.

Some descriptive comparisons are included in this report to arrive at a more comprehensive understanding of the similarities and differences between Indigenous and non-Indigenous nurses and between nurse types. Indigenous nurses' written responses to open-ended survey questions are included to illustrate the work and community life of Indigenous nurses in rural, remote, and northern practice settings.

## DEMOGRAPHIC CHARACTERISTICS

- The Canada-wide survey of rural, remote, and northern nurses included 245 self-declared Indigenous nurses (6 NPs, 116 RNs, 107 LPNs, 16 RPNs)
- The highest proportion of Indigenous nurses resided in Manitoba and Saskatchewan and the lowest proportion lived in Québec
- The majority of Indigenous nurses were female, married or living with a partner and had dependent children or relatives living with them
- The majority of Indigenous nurses held a diploma in nursing as their highest nursing credential, with a majority of RNs holding a bachelor's degree or higher
- The majority of Indigenous nurses reported that their primary work community has a population of 1,000-9,999

## WORK SETTINGS

- More than half of Indigenous nurses reported working full-time
- Indigenous nurses most frequently worked as staff nurses
- Almost a third of Indigenous nurses were required to be on-call
- Indigenous nurses most often reported working in a hospital setting

## NURSING PRACTICE

- Indigenous nurses work in a diversity of roles with a broad scope of practice
- The large majority of Indigenous nurses reported working within their licensed scope of practice
- The vast majority of Indigenous nurses felt they had the necessary knowledge and skills to do their work

- A higher proportion of Indigenous nurses used online/electronic sources to update their knowledge rather than in-person education sources

### SATISFACTION AND WORK ENGAGEMENT

- The large majority of Indigenous nurses were satisfied with their current nursing practice, their primary work community and their home community
- The majority of Indigenous nurses are highly engaged in their work settings, enthusiastic about their job, and proud of the care they provide

### RECRUITMENT AND RETENTION

- The majority of Indigenous nurses came to their primary work community, and stayed in their primary work community for four reasons: interest in the practice setting, location of the community, family or friends, and the income generated from their employment
- Indigenous and non-Indigenous nurses differed in their plans over the next 12 months and 5 years. Notably, a smaller proportion of Indigenous nurses reported plans to retire and a greater proportion reported plans to relocate to another province or territory in Canada

### POLICY IMPLICATIONS

The implications build on key principles and calls to action of the Truth and Reconciliation Commission of Canada (2015) and echo Nowgesic's (2018) call for partnering.

#### Workforce Planning

- There is pressing need to address the paucity of information about Indigenous nurses in Canada, especially in rural and remote areas

#### Recruitment

- Rural Indigenous students with an interest in nursing need to be supported to access relevant education as close to their communities as possible
- In collaboration with Indigenous communities and organizations, educational institutions need to develop policies and processes to admit Indigenous students, enhance student supports, and tailor programs and courses in relational ways
- More responsive, rural and remote nursing basic and continuing education programs are needed. Of special concern are initiatives that assist nurses to obtain advanced education relevant to working in rural, remote, and Indigenous communities.

#### Retention

- Greater opportunities are needed for Indigenous nurses to enroll and be well-supported in advanced education and graduate degree programs, including programs that can be accessed at a distance

- Partnered initiatives between health services in sparsely populated areas, Indigenous health services, and educational institutions have the potential to assist Indigenous RNs to become managers, health service leaders and nurse educators
- A strength to build on is that the majority of rural Indigenous nurses are highly engaged and have high community satisfaction, which contributes to the potential of continuity of care and culturally safe care in their communities
- Greater understanding is needed of the everyday experiences of Indigenous nurses as they navigate both living and working in small rural and remote communities, especially their home communities
- As many Indigenous nurses are younger, less experienced, and working alone in smaller communities, extended orientation and formal mentorships with rural experienced nurses are warranted
- Formal supports, including organizational strategies that go beyond peer support, are required to address workload pressures, overtime, and the threat of burnout.
- Healthcare organizations, in collaboration with Indigenous nurses, need to jointly develop health and wellness approaches that address anti-Indigenous racism in the workplace
- Supports are particularly needed for the high proportion of Indigenous nurses who have both experienced and witnessed violence.

# *INDIGENOUS NURSES IN RURAL AND REMOTE CANADA: RESULTS FROM A NATIONAL SURVEY*

## BACKGROUND

In Canada, there is a need to more fully understand the rural and remote nursing workforce in order to inform health human resource planning, better support nurses, and improve health services in rural, remote, and northern communities.

The multi-method national study, *Nursing Practice in Rural and Remote Canada II* (*RRNII*) (MacLeod et al., 2017), addressed this need by investigating the nature of nursing practice in rural and remote Canada and factors that can enhance access to nursing services. The *RRNII* study results provide insights into the work lives and practice experiences of registered nurses (RNs), nurse practitioners (NPs), licensed/registered practical nurses (LPNs), and registered psychiatric nurses (RPNs) in rural and remote communities in all Canadian provinces and territories. The study is intended to inform policy and practice decisions regarding nursing service capacity (nursing personnel and activities) and access to care for those living in rural and remote communities in Canada (http://www.unbc.ca/rural-nursing).

This survey partially replicates and considerably extends a national, cross-sectional survey of rural/remote RNs and NPs undertaken in 2001-2004, the *Nature of Nursing Practice in Rural and Remote Canada (RRNI)* (MacLeod et al., 2004). The present *RRNII* survey places greater emphasis on primary health care (PHC) and includes all regulated nurses – NPs, RNs, and LPNs – who practice in all provinces and territories, and RPNs, who practice in the four western provinces as well as the territories.

### Selecting and Contacting Participants

A mail survey was distributed primarily through the nursing associations/regulatory bodies in each province and territory between April 2014 and September 2015. The questionnaire was sent to a target sample of nurses (i.e., RNs, LPNs, RPNs) who resided in the rural and remote areas (less than 10,000 core population) of each Canadian province (derived by analysis of the population of rural nurses in the 2010 Canadian Institute for Health Information Nurses Database). We also sent questionnaires to all rural and remote NPs, and to all nurses who worked in Nunavut, Northwest Territories, and the Yukon.

### Response Rate

We received a total of 3,822 completed questionnaires (eligible sample = 9,622) by mail or on-line (2,082 RNs, 163 NPs, 1,370 LPNs, and 207 RPNs) from across Canada. The national response rate was 40% (margin of error 1.5%), with some variation between the provinces and territories. Of the 3,822 survey respondents, a total of 245 (6.8%) nurses identified themselves as having First Nations, Inuit or Métis ancestry (116 RNs, 6 NPs, 107 LPNs, and 16 RPNs).

## Introduction and Overview of Report

This report adds to a limited knowledge on the Indigenous nurses who choose to practice in rural and remote settings. The aim of this report is to examine the nature of practice for nurses who have Indigenous (i.e., First Nations, Inuit, or Métis) ancestry and who work in rural and remote settings in Canada. This report provides mainly descriptive statistical information from the *RRNII* survey; qualitative comments are used to enhance and highlight findings. The data examined in this report summarizes results from the self-identified Indigenous nurses who participated in the national survey, including a description of their demographic characteristics, their work settings, the nature of their practice, and their career plans.

*"Our practice is much different than that of facilities in the south. I feel great pride to service our population. I have the opportunity to work with individuals from my community and from even more rural northern communities in the NWT. Culture plays a huge role in my practice – influences my nursing every day." (RN, Northwest Territories/Nunavut)*

# DEMOGRAPHIC CHARACTERISTICS

## Region of Residence

Of the Indigenous nurses who responded to the *RRNII* survey, 30% identified Manitoba or Saskatchewan as their region of residence, while only 2.0% listed their region of residence as Québec. For a breakdown across all regions, please see **Figure 1**. The greatest proportion of Indigenous nurse respondents were from Manitoba (19%; n= 47), followed by Northwest Territories (15%; n = 36), Nova Scotia (14%; n = 33), Saskatchewan (11%; n = 26), Newfoundland and Labrador (9.0% n = 22), British Columbia (6.9%; n = 17), Ontario (6.9%; n = 17), Alberta (6.5%; n = 16), Yukon (4.9%; n = 12), New Brunswick (2.9%; n = 7), Nunavut (2.9%; n = 7), and then Québec (2.0%; n = 5). There were no Indigenous nurses from PEI.

**Figure 1.**

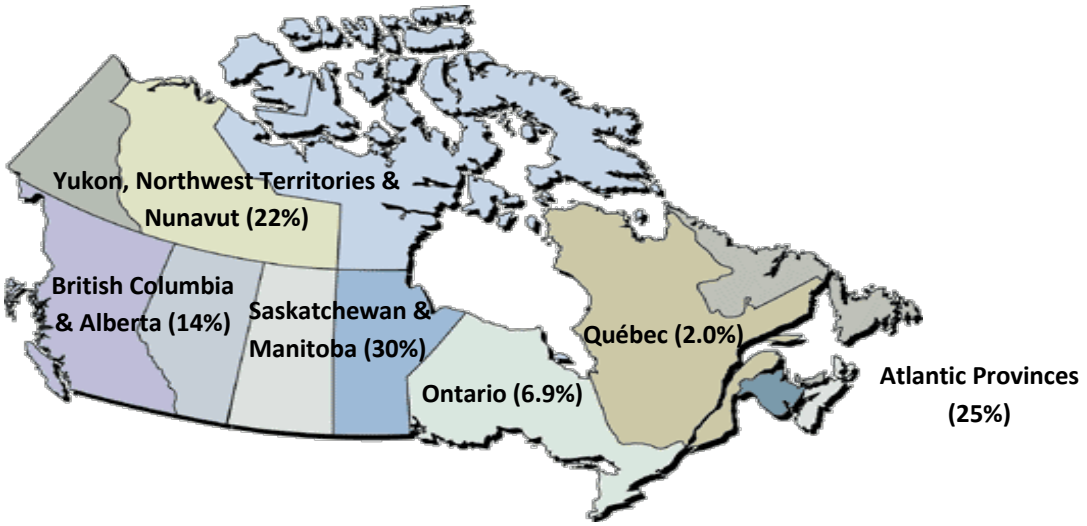



Image retrieved from: http://www.foodsafetyfirst.ca/the-solutions/2008-election/

## Age and Gender

In the *RRNII* survey results, only 22% of Indigenous nurses were under 35 years of age, whereas 23% were 55 years of age or older. For an age distribution breakdown by nurse type for Indigenous and non-Indigenous nurses in Canada, please see **Table 1**[1].

*Table 1. Age Distribution of LPNs and RNs in Rural Canada*

| | < 25 % | 25-34 % | 35-44 % | 45-54 % | 55-64 % | ≥ 65 % |
|---|---|---|---|---|---|---|
| Indigenous RNs (n = 116) | 0.9 | 24.3 | 22.5 | 25.2 | 25.2 | 1.8 |
| Non-Indigenous RNs (n = 1,847) | 1.0 | 17.4 | 18.9 | 27.0 | 30.3 | 5.5 |
| Indigenous LPNs (n = 107) | 2.0 | 18.0 | 18.0 | 42.0 | 19.0 | 1.0 |
| Non-Indigenous LPNs (n = 1,168) | 3.7 | 17.6 | 20.0 | 29.6 | 26.7 | 2.4 |

The large majority of Indigenous nurse respondents were female (96%). The proportion of Indigenous male nurses (4.2%) was lower than the proportion of non-Indigenous rural male nurses in Canada overall (6.7%).

## Marital Status and Dependent Children or Relatives

In the *RRNII* survey, 54% of Indigenous nurses reported having either dependent children or dependent adults living in their home.

Nearly 80% of Indigenous nurses were married or living with a partner; 11% were single, 10% divorced/separated and 0.8% widowed.

## General and Mental Health

The majority of Indigenous nurses reported that they were in excellent health (14%) or good/very good health (76%); a small minority nurses identified that they were in fair/poor health (9.8%). Indigenous nurses reported similarly about their mental health, such that 18% identified they were in excellent mental health or in good/very good mental health (73%); the remaining nurses were in fair/poor mental health (9.0%). Similar findings are seen for both RNs and LPNs.

## Size of Childhood and Primary Work Community

The large minority (41%) of Indigenous nurses reported that their childhood community had a population of 1,000-9,999. Notably, 34% of all Indigenous nurses grew up in a community with a population of less than 1,000, which is similar to that found for non-Indigenous nurses (35%).

[1] NP and RPN data are suppressed due to low sample size.

The majority (53%) of Indigenous nurses indicated that their primary work community had a population of 1,000-9,999, whereas 18% of all Indigenous nurses worked in a community with a population of less than 1,000. For a breakdown by type of nurse see **Table 2**.

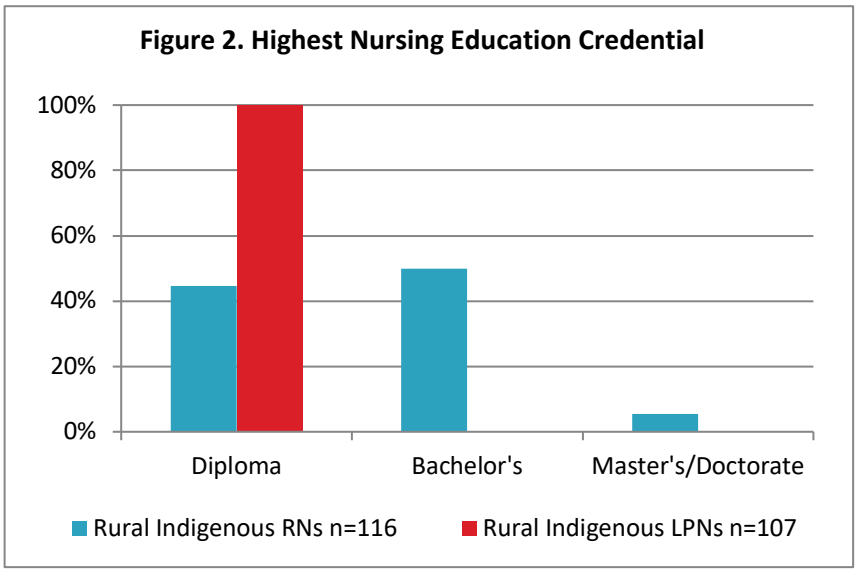
*Table 2. Population of Primary Work Community, RNs and LPNs in Rural Canada*

| Community Population | Indigenous LPNs % (n = 107) | Indigenous RNs % (n = 116) | Non-Indigenous LPNs (n=1,168) | Non-Indigenous RNs (n=1,847) |
|---|---|---|---|---|
| ≤ 999 | 12.9 | 23.2 | 11.8 | 14.2 |
| 1,000 - 2,499 | 18.8 | 18.2 | 12.3 | 14.3 |
| 2,500 - 4,999 | 12.9 | 15.2 | 15.3 | 13.1 |
| 5,000 - 9,999 | 20.8 | 19.6 | 32.4 | 26.3 |
| 10,000 - 29,999 | 24.8 | 17.9 | 22.3 | 26.7 |
| ≥ 30,000 | 9.9 | 5.4 | 5.8 | 5.4 |

## Education

Indigenous nurses most commonly held a diploma in nursing (71%), followed by a bachelor's degree in nursing (25%) as their highest obtained nursing education credential. Although the large majority of Indigenous nurses held an education credential in nursing, 6.1% of nurses also had a non-nursing credential (bachelor's, master's or doctoral degree) in addition to their nursing credential. **Figure 2** shows nursing education credentials for RNs compared to LPNs.

**Figure 2. Highest Nursing Education Credential**




## Number of Years Licensed to Practice and Number of Years Employed

Regarding duration of primary position, 15% of Indigenous nurses had been in their primary position for 20 years or more, 52% for 3-19 years, and 33% for 2 years or less. Nearly a fifth (19%) of Indigenous nurses had been employed by their primary employer for 20 years or more.

While almost half (48%) of Indigenous RNs reported being in their primary position for 5 years or less, 63% of Indigenous LPNs have been in their primary position for 5 years or less.

In the *RRNII* survey, respondents were asked to record the year they were first registered/licensed to practice in Canada. This variable was recoded into career stage and analysis showed that a greater proportion of RNs overall were in the late career stage (24%) compared to LPNs (9.3%). Conversely, a greater proportion of LPNs were in the early career stage (55%) compared to RNs (35%).

# WORK SETTINGS

## Nursing Employment Status

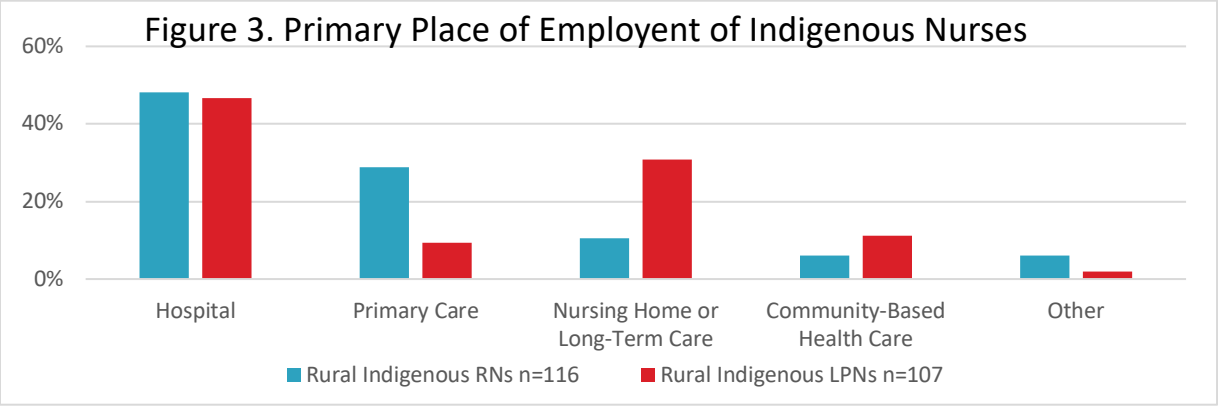
Of the 245 rural Indigenous nurses who responded to the survey, 2.0% were retired and occasionally employed in nursing. Rural Indigenous nurses were more likely to be employed in a permanent full-time position (62%) than in a permanent part-time position (22%). One fifth (20%) of Indigenous nurses reported working in a casual nursing position. Indigenous LPNs (27%) were more likely to work in a permanent part-time position than Indigenous RNs (17%); both most often reported working in a permanent full-time position, 59% and 61% respectively.

## Work Setting and Main Area of Nursing Practice

The large majority of rural Indigenous nurses worked as staff nurses (81%), followed by managers (10%), and clinical nurse specialists (3.8%). Most often, Indigenous nurses reported acute care (45%) as their area of current practice, followed by long-term care (30%), and community health (19%). Indigenous LPNS (94%) were more likely to report working as staff nurses than Indigenous RNs (76%).

Indigenous nurses were more likely to be employed in a public facility (83%) than in a private facility (6.2%). Important to note is that 10% of Indigenous nurses' primary work facility was owned by a tribal band or council, compared to 1.3% of non-Indigenous nurses. The majority of Indigenous nurses reported living in their primary work community (58%), the same percentage as rural and remote nurses overall.

Nurses who completed the *RRNII* survey were asked to report their primary place of employment. Most often, rural Indigenous nurses worked in a hospital (44%), followed by a primary care setting (22%), nursing home or long-term care facility (20%), or a community based health care setting (9.1%). A small proportion of Indigenous nurses (4.5%) reported a different primary place of work. These findings are consistent with the primary places of employment reported by non-Indigenous nurses, who also most often identified a hospital setting (46%), followed by a nursing home or long-term care facility (21%), a primary care setting (17%), a community based health care setting (13%), or other settings (4.5%). For further information, please refer to **Figure 3**.



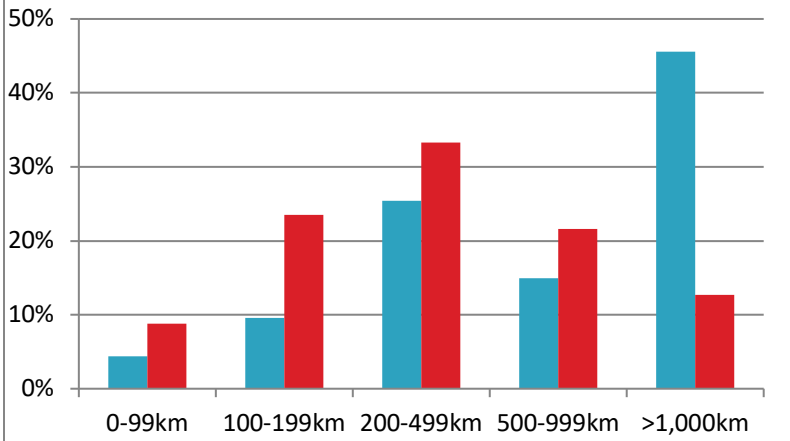
## Rural versus Remote Practice and Distance from Major Centres

The majority of Indigenous nurses reported their primary work community to be rural (52%), followed by rurban (25%) – which is defined as having characteristics of both rural and urban places such as the presence of large box stores – and then remote (20%). The large majority of Indigenous nurses (90%) indicated having worked in one to three rural or remote communities for three months or longer over the course of their nursing career, while only 5.1% of nurses had worked in four to six communities.

The majority of Indigenous nurses (63%) indicated that they travelled less than one hour a week for work-related activities and 26% reported spending one to five hours per week travelling for work-related activities.

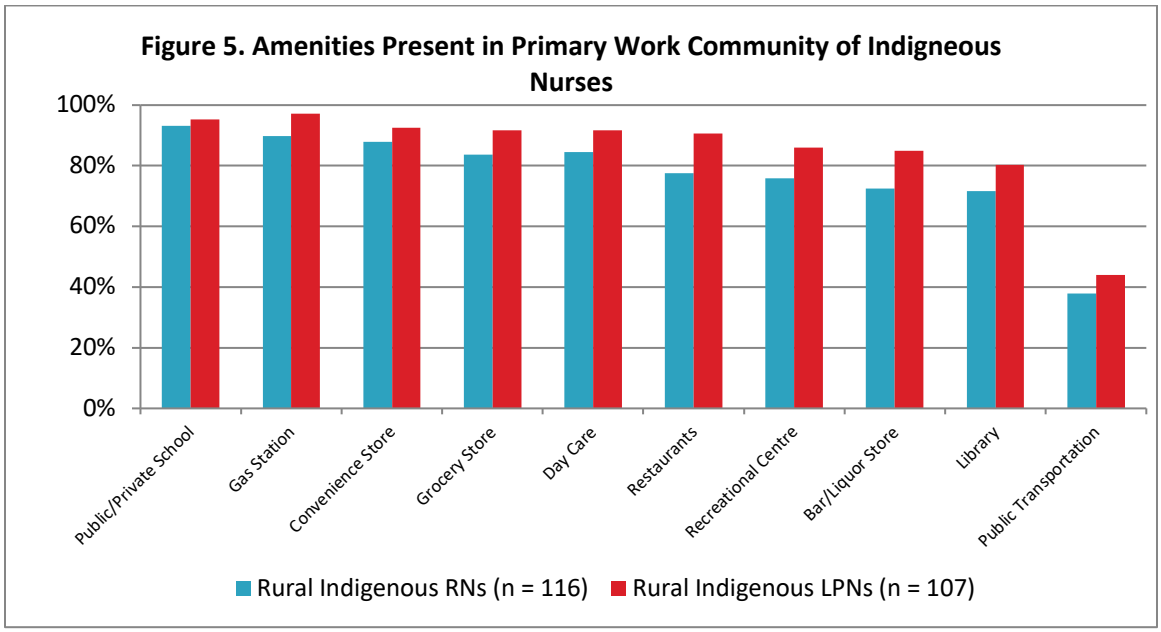
The sizable minority (42%) of Indigenous nurses reported working less than 100km from a centre with a population of 10,000-49,999, and 14% of nurses reported their primary work community being less than 100km from a centre with a population over 50,000. The majority of Indigenous nurses (52%) reported that their primary work community was less than 100km from a basic referral centre, while only 8.4% of these nurses reported that their primary work community was less than 100km from an advanced referral centre. A greater proportion of non-Indigenous nurses reported being less than 100km from an advanced referral centre (16%). Indigenous RNs often worked further away – more than 100km – from a basic referral centre than did LPNs (56%; 44%). For information on distance from advanced referral centre, please see **Figure 4**.

**Figure 4. Distance in Kilometres from Advanced Referral Centre for Indigenous LPNs and RNs**




The small minority of Indigenous nurses lived in a primary work community that was only accessible by plane (8.4%).

Indigenous nurses reported that various amenities were present in their primary work community, including a public/private school (94%), gas station (94%) and convenience store (91%). These findings are consistent with those found for non-Indigenous nurses. For further amenities available to Indigenous RNs and LPNs, please see **Figure 5**.




## Work Hours

Most often, Indigenous nurses worked full-time hours (52%), with 24% working less than full-time hours and 24% working more than full-time hours. A greater proportion of Indigenous LPNs than RNs (58%; 45%) worked full-time hours, while a greater proportion of RNs than LPNs worked more than full-time hours (27%; 22%). Day shifts (61%) and rotating shifts (29%) were the most common with shift lengths typically 8 hours (49%) or 12 hours (38%). Indigenous nurses reported that they do not usually have input into how their work schedule is developed (55%), but that their shift pattern is predictable (75%) and that their number of rest days are adequate (74%).

## Requirement to be On Call

Almost a third (32%) of Indigenous nurses were required to be on-call for their work. Indigenous RNs (44%) were more likely to be on-call than Indigenous LPNs (20%). Of the nurses who were required to be on-call, 32% reported being called back to work at least a few times a week and 20% reported being called back to work on their days off. The majority of Indigenous nurses were satisfied with the amount of time they were on-call (50%); the remaining 50% were either neutral (30%) or were dissatisfied (21%).

# Work Environment

## Practice Resources and Demands

Two scales measuring the rural and remote nurses' perceived level of job-related resources and demands in their primary workplace were included in the survey. The 24-item Job Resources in Nursing

(JRIN) scale (Penz et al., 2018) consisted of six subscales (i.e., Supervision, Recognition and Feedback; Training, Professional Development and Continuing Education; Collegial Support; Staffing and Time; Technology; Autonomy and Control) measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). For the Indigenous nurses, the average score on the JRIN was 77.7 (Range 47-113), indicating they perceived their primary work settings to have a medium level of overall job resources. In order to assess specific resource areas, the mean item scores were also calculated for each of the six subscales in the JRIN. Rural Indigenous nurses reported a high level of agreement that they receive adequate supervision, recognition and feedback (*M*=3.16); collegial support (*M*=3.87); access to technology (*M*=3.19); training, professional development and continuing education (*M*=3.15); and adequate amounts of autonomy and control (*M*=3.36). Notably, Indigenous nurses reported the lowest level of perceived resources related to the adequacy of staffing and time (*M*=2.73).

The 22-item Job Demands in Nursing (JDIN) scale (Penz et al., 2018) consisted of six subscales (i.e., Work-related Travel; Preparedness/Scope of Practice; Equipment and Supplies; Safety; Comfort with Working Conditions; Isolation) measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The average score on the JDIN for the Indigenous nurses was 53 (Range 27-92), which suggests that they perceived that their primary work settings have medium to low job demands overall. The mean item scores were also calculated for each of the six subscales in the JDIN. On a positive note, rural Indigenous nurses reported relatively low level of job demands on work-related travel (*M*=2.51); preparedness/extended scope of practice (*M*=2.42); equipment and supplies (*M*=2.64); isolation (*M*=2.28); and safety (*M*=2.66). The highest area of job demands for the Indigenous nurses was comfort with working conditions (*M*=2.87), which included response items related to the demands of their physical and mental workload.

## Violence and Abuse in the Workplace

Indigenous nurses both experienced and witnessed violence in their workplace while carrying out their nursing responsibilities. In just the four weeks preceding the survey, Indigenous nurses personally experienced emotional abuse (41%), threat of assault (25%), physical assault (20%), and verbal/sexual harassment (19%). A small proportion reported experiencing property damage (3.7%), stalking (2.9%) and sexual assault (1.6%). For the Indigenous RNs in particular, the most commonly reported violence experienced was emotional abuse (47%) and verbal/sexual harassment (22%), while the Indigenous LPNS most commonly reported experiencing emotional abuse (38%) and physical assault (30%). Notably, a lower proportion of non-Indigenous nurses reported experiencing emotional abuse (35%), but reports were similar for other kinds of violence.

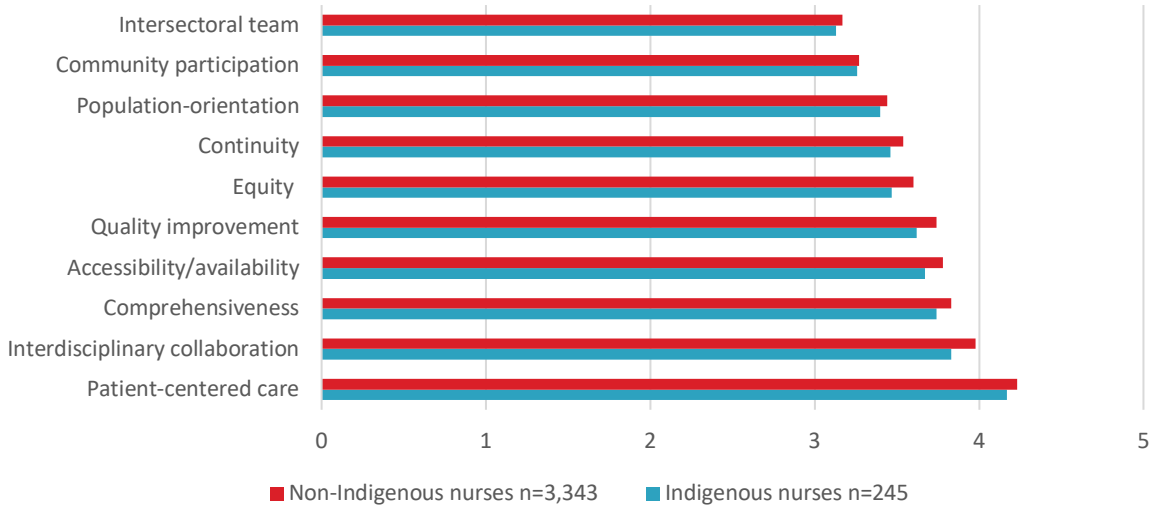
When Indigenous nurses were asked a question related to 'witnessing' violence in the workplace in the four weeks prior to the survey, the findings were also concerning. A total of 41% of the Indigenous nurses had witnessed emotional abuse, 31% the threat of assault, 25% physical assault, and 19% had witnessed verbal/sexual harassment (19%). A smaller proportion had witnessed property damage

(7.4%), sexual assault (2.9%) and stalking (1.7%). These findings are consistent among Indigenous RNs and LPNs. Non-Indigenous nurses witnessed similar levels of violence as the Indigenous nurses.

## Perceptions of Primary Health Care Engagement

In the RRNII survey it was clear that rural Indigenous nurses in all settings were engaged in primary health care. Nurses were asked about aspects of primary health care at their workplace through the Primary Health Care Engagement Scale (Kosteniuk et al., 2016; Kosteniuk et al., 2017). Items were grouped in 10 categories: patient-centred care, interdisciplinary collaboration, comprehensiveness of care, quality improvement, accessibility/availability, continuity of care, equity, population-orientation, community participation, and intersectoral team. Each item was rated on a 5 point Likert Scale (1=strongly disagree to 5=strongly agree). Mean scores are reported in **Figure 6.**

Figure 6. Rural Nurses' Perspectives on Primary Health Care in their Workplace




In general, rural Indigenous nurses rated *Patient-Centered Care* strongly positively. Indigenous nurses reported that their workplace is a safe place for patients to receive healthcare services, that their patients are treated with respect and dignity, and that providers in their workplace are concerned with maintaining patient confidentiality. Moreover, Indigenous nurses felt positive that providers are supported in thinking of patients as partners.

*"As a Métis I feel proud of my heritage and represent my family and community very well. Getting to know the patients and their families providing follow-up and guidance to influence greater health in my community." (NP, Saskatchewan)*

Rural Indigenous nurses rated *Interdisciplinary Collaboration* positively. Included are nurses' perceptions that a collaborative atmosphere exists between healthcare providers from different disciplines within their workplace, that healthcare providers from other disciplines consult them regarding patient care, and that where overlap in responsibilities occurs, it is understood who should take the lead with a patient.

In terms of *Comprehensiveness*, rural Indigenous nurses responded positively that patients are referred to necessary services when they require a service their workplace does not provide, that their workplace offers harm reduction or illness prevention initiatives, and that chronic conditions are addressed.

Regarding *Accessibility/Availability* to healthcare services, rural Indigenous nurses were positive that services are organized to be as accessible as possible and that when their workplace is closed, patients can see a healthcare provider in person or can get medical advice by phone (if they need urgent care). Important to note is that rural Indigenous nurses were strongly positive that patients needing urgent care can see a healthcare provider the same day when their workplace is open.

Rural Indigenous nurses gave positive reports of *Quality Improvement*, identifying that patient charts are kept current and that there is a process in their workplace for responding to critical incidents. Rural Indigenous nurses reported to a lesser extent, but still positively, that their workplace uses patient health indicators to measure quality improvement and that quality is regularly measured in their workplace.

*Equity* of health care was perceived positively by rural Indigenous nurses, who reported that healthcare providers understand the impact of social determinants of health, that all patients have access to the same healthcare services regardless of geographic location and regardless of individual or social characteristics, and that their workplace is organized to address the needs of vulnerable or special needs populations. Rural Indigenous nurses reported that some patients in their workplace do not receive the healthcare services they need because they cannot afford it; this dimension was perceived less positively.

Similarly, *Continuity of Care* was perceived positively by rural Indigenous nurses, although an interesting pattern of results must be noted. While rural Indigenous nurses were strongly positive that they have a good understanding of their patients' health history and that they have easy access to information about their patients' past care provided by healthcare providers within and outside their workplace, challenges with coordinating care were reported. Some rural Indigenous nurses reported that coordinating care for patients that takes place outside of their workplace was difficult, and this dimension was perceived negatively.

Regarding *Population Orientation*, rural Indigenous nurses positively rated the fit between services in their workplace and the community's health care needs, that their workplace monitors patient outcome indicators, and that their workplace quickly responds to health needs of the community. These nurses

were also positive that their workplace keeps current registries of patients who have chronic conditions and that their workplace has taken part in a needs assessment of the community.

*Community Participation* was positively rated by rural Indigenous nurses, who agreed that their workplace seeks input from the community about the healthcare services it needs, that their workplace supports healthcare providers in thinking of the community as a partner, that community members are treated as partners when making decisions about health care service delivery changes, and that their workplace has implemented changes which emerged from community consultations.

Finally, rural Indigenous nurses reported positively on *Intersectoral Teams*. Although rural Indigenous nurses were positive that their workplace works closely with community agencies, that they personally work closely with community agencies, and that there has been improvement in the way community services are delivered based on community agencies working together, rural Indigenous nurses reported that community agencies do not meet regularly to discuss common issues that affect health.

## Working with Other Nurses

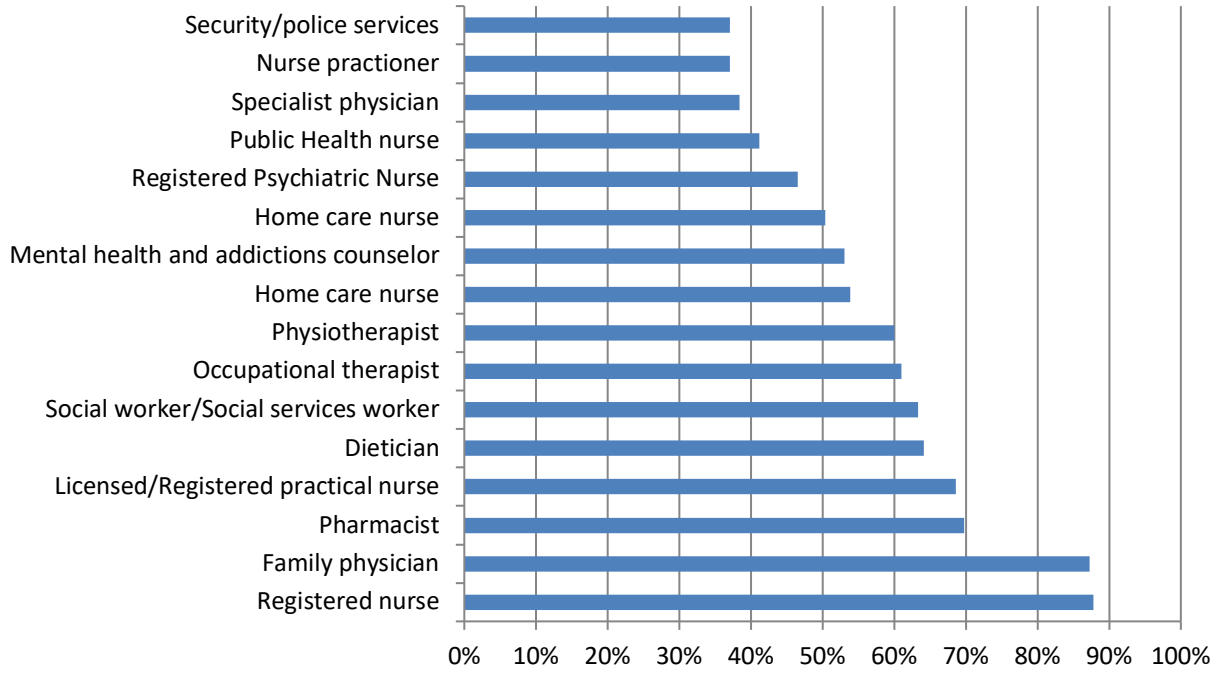
Nurses were asked to report on the number of nurses at their primary workplace including themselves. Most nurses worked with other nurses. The large majority of Indigenous nurses reported that there were not any RPNs (77%) or NPs (75%) at their workplace, while a much smaller proportion of Indigenous nurses indicated there were no LPNs (27%) or RNs (11%) at their workplace. Notably, 6.1% of all Indigenous nurses reported working alone, with no other nurses at their primary workplace, which was similar for non-Indigenous nurses (6.0%).

## Interprofessional Practice

*"I was hired on full-time in my own First Nations reserve…. At first I was afraid to step out into a rural area, but I did get lots of support from my co-workers. After all, I am the only registered psychiatric nurse in my community.." (RPN, Manitoba)*

The large majority of Indigenous nurses reported having a support network of colleagues who provide consultation and/or professional support (84%), which was similar to non-Indigenous nurses (83%). Nurses were asked to indicate those providers who are part of their usual interprofessional team. Most often, Indigenous and non-Indigenous nurses identified working with RNs and family physicians, although other providers were identified (**Figure 4**). Similar proportions of Indigenous and non-Indigenous LPNs reported working with family physicians (93%; 93%), other LPNs (92%; 95%), and RNs (89%; 91%). Comparably, Indigenous and non-Indigenous RNs worked with other RNs (90%; 89%) and family physicians (81%; 85%). However, Indigenous RNs also commonly reported working with social workers (74%), while non-Indigenous RNs more commonly reported working with pharmacists (69%).

**Figure 4. Who Indigenous Nurses Work With**




# NURSING PRACTICE

## Scope of Practice

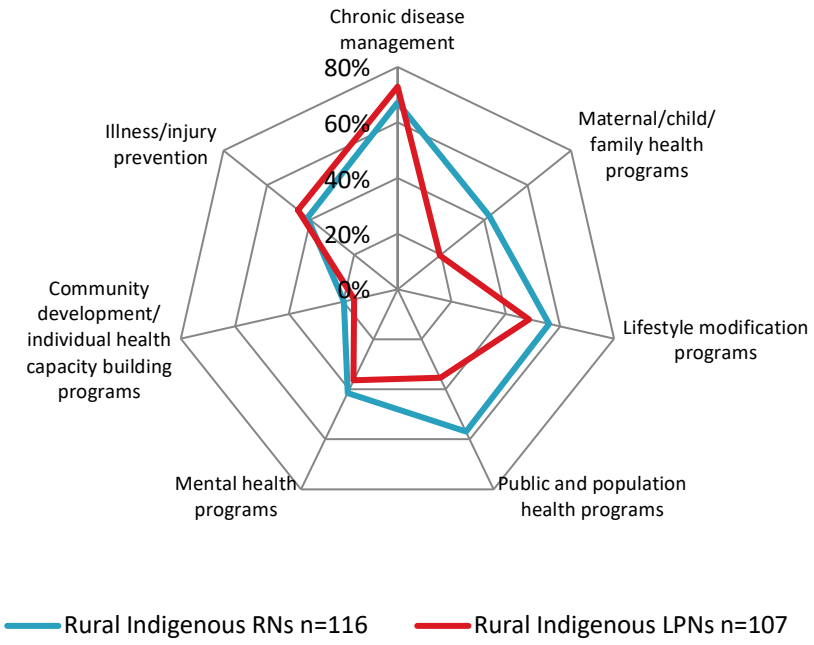
A distinctive characteristic of rural nursing is its broad scope of practice, which is closely related to the rural context of each community and limited access to healthcare resources. In an attempt to shed some light on this phenomenon, nine main categories of practice were presented to respondents, each consisting of several items. Survey respondents were asked to mark all items they were responsible for. Note that the responses relate to what nurses perceived as their responsibilities rather than what may or may not have been within their legislated scope of practice.

The large majority of rural Indigenous nurses reported working within their registered/licensed scope of practice (75%), which is lower than the proportion of non-Indigenous nurses who reported the same (83%). The remaining Indigenous and non-Indigenous nurses either thought of their nursing role as below their licensed scope of practice (14%; 10%) or as beyond their licensed scope of practice (10%; 8%).

All Indigenous NPs and RPNs identified working within their licensed scope of practice, whereas 78% of Indigenous RNs identified working within their licensed scope (15% beyond; 7.0% below) and 67% of Indigenous LPNs identified working within their licensed scope (7.5% beyond; 25% below). The majority of non-Indigenous nurses also reported working within their scope of practice: 82% of NPs (11% beyond; 7% below), 85% of RNs (10% beyond; 6% below), 89% of RPNs (6% beyond; 5% below), and 78% of LPNs (5% beyond; 17% below). See **Appendix A** for a detailed comparison of nursing responsibilities.

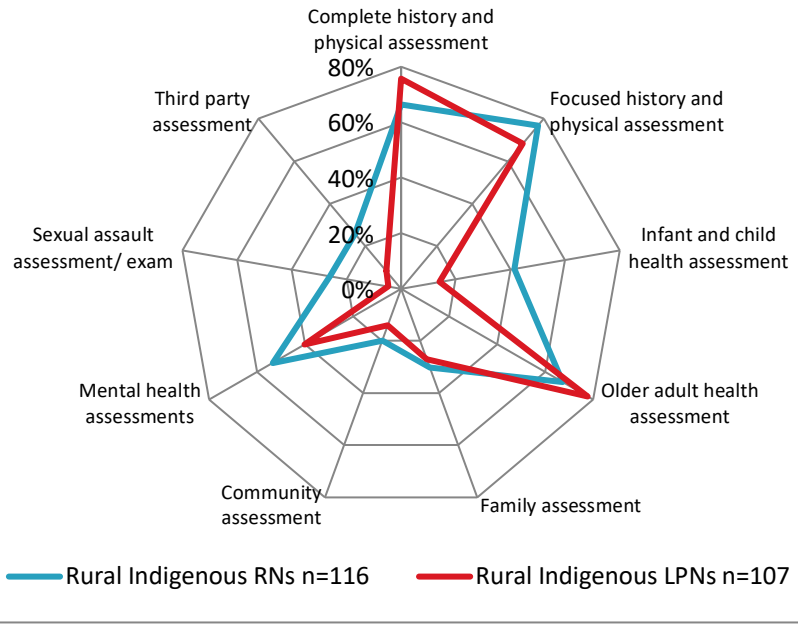
In terms of *Promotion, Prevention and Population Health* (**Figure 5**), rural Indigenous nurses reported providing chronic disease management (70%), lifestyle modification programs (53%), public and population health programs (46%), mental health programs (43%), and illness/injury prevention (43%). About a third of nurses identified providing maternal/child/ family health programs (31%) while about a fifth of nurses identified providing community development and individual health capacity building programs (19%).

**Figure 5. Promotion, Prevention and Population Health**



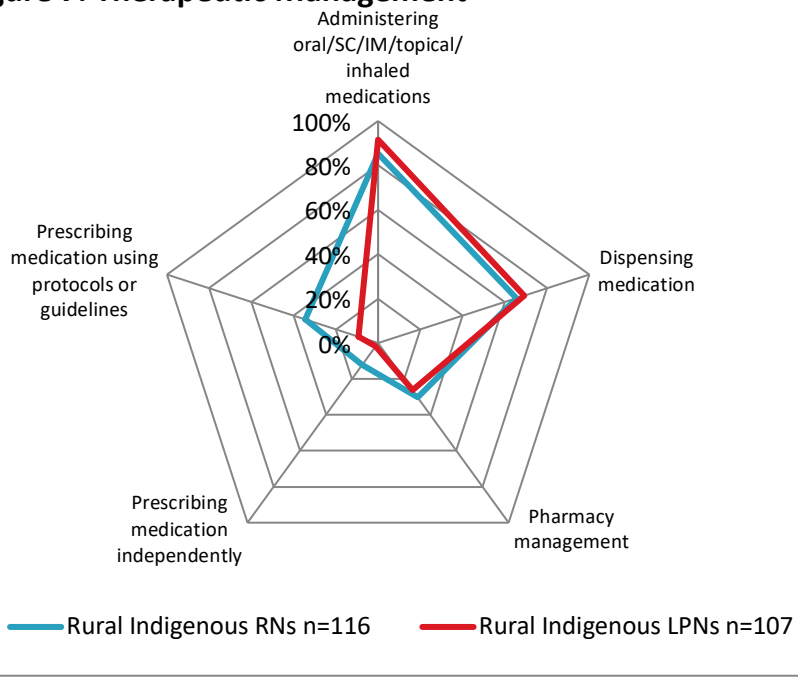
Regarding *Assessment* (**Figure 6**), the majority of Indigenous nurses indicated responsibility for focused history and physical assessment (72%), older adult health assessment (71%), complete history and physical assessment (69%), and mental health assessment (52%). The minority of Indigenous nurses provided family assessment (29%), and infant and child health assessment (28%) and a smaller minority provided third party assessment (18%), community assessment (17%), and sexual assault assessment/exam (15%).

**Figure 6. Assessment**



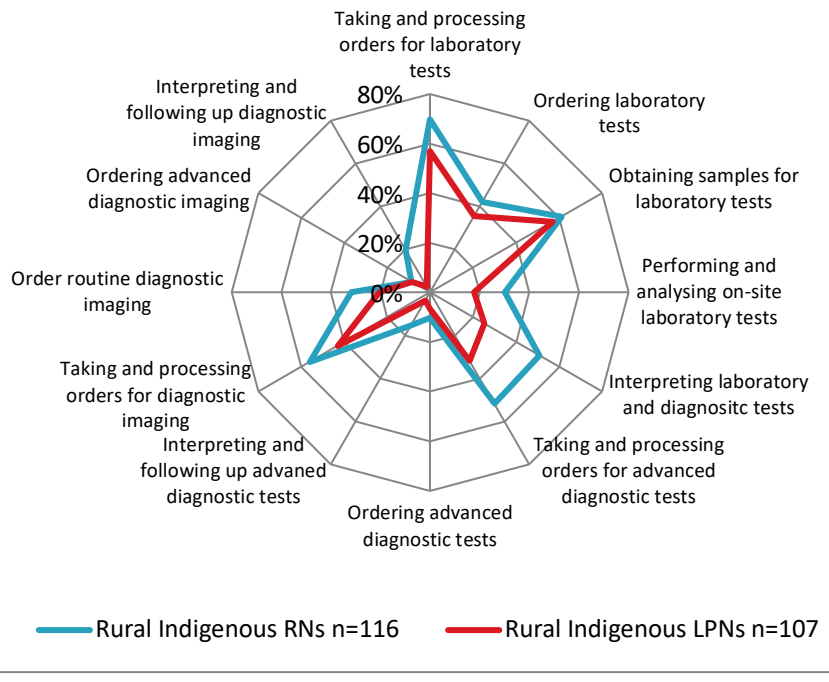

Concerning *Therapeutic Management* (**Figure 7**), most Indigenous nurses reported being responsible for administering medication (86%) and dispensing medication (64%). A lower proportion reported involvement in pharmacy management (27%), prescribing medication using protocols or guidelines (22%), or prescribing medication independently (9.0%).

**Figure 7. Therapeutic Management**




With regard to *Diagnostics* (**Figure 8**), which included *Laboratory Tests*, *Diagnostic Tests*, and *Diagnostic Imaging*, rural Indigenous nurses reported taking and processing orders for laboratory tests (61%), obtaining samples for laboratory tests (56%), interpreting laboratory and diagnostic tests (40%), ordering laboratory tests

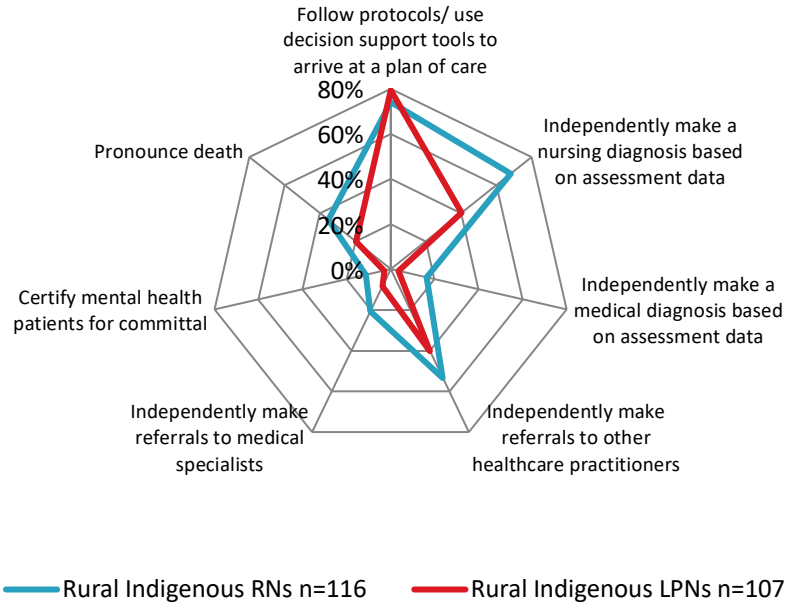
**Figure 8. Diagnostics**




(39%), and performing and analyzing on-site laboratory tests (24%).

Indigenous nurses identified responsibility for taking and processing orders for advanced diagnostic tests (40%), although the majority (56%) of Indigenous nurses reported they were not responsible for diagnostic testing, including ordering, performing and interpreting tests. Finally, Indigenous nurses reported responsibility for taking and processing orders for diagnostic imaging (48%) and ordering routine diagnostic imaging (27%); however, other tasks (ordering advanced diagnostic imaging, performing diagnostic imaging, interpreting and following up diagnostic imaging) were seldom identified as areas of responsibility. Notably, many (45%) did not identify diagnostic imaging as a responsibility.

**Figure 9. Diagnosis and Referral**

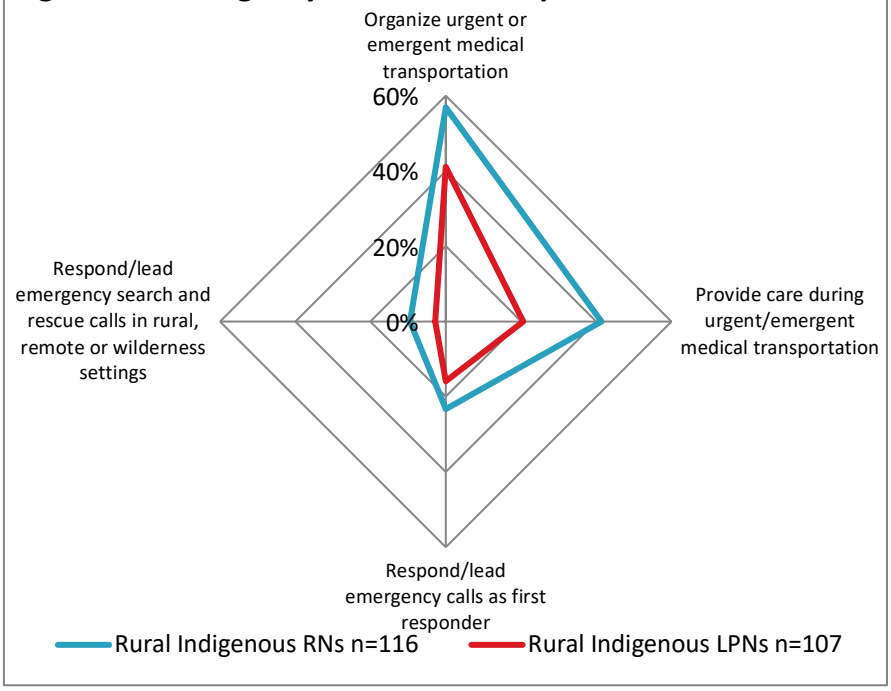



Rural Indigenous nurses perceived several elements of *Diagnosis and Referral* (**Figure 9**) to be within their responsibilities, including following protocols or using decision support tools to arrive at a plan of care (76%), independently make a nursing diagnosis based on assessment data (56%), and independently making

referrals to other healthcare practitioners (50%). A lower proportion of nurses indicated responsibility for pronouncing death (28%), independently making referrals to medical specialists (17%), independently making a medical diagnosis based on assessment data (12%), and certifying mental health patients for committal (7.8%).

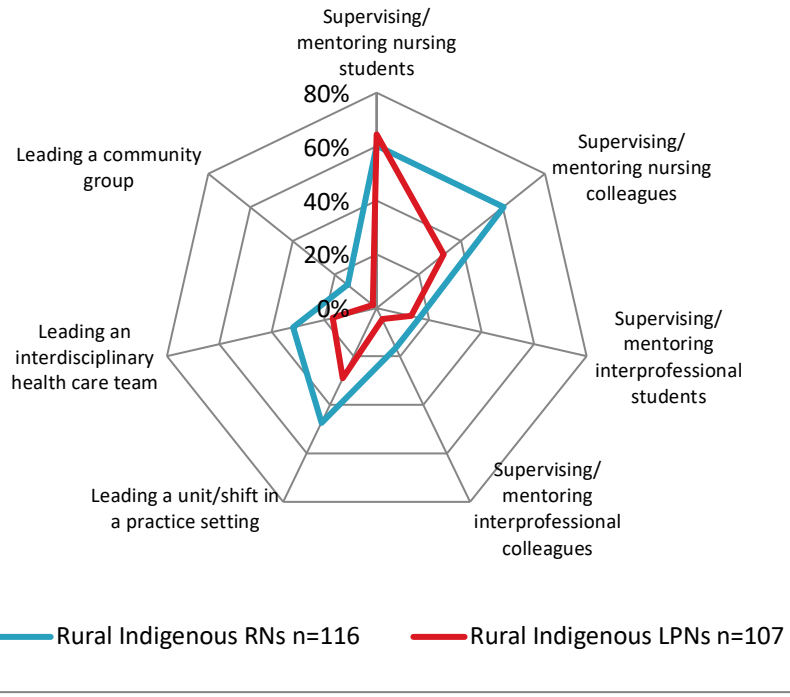
In terms of *Emergency Care and Transportation* (**Figure 10**), rural Indigenous nurses reported organizing urgent or emergent medical transportation (49%) and providing care during urgent or emergent medical transportation (29%). Indigenous nurses reported responding to or leading emergency calls as a first responder (20%) and responding to or leading emergency search and rescue calls (6.1%). The large minority reported that they are not responsible for any items in this category (44%).

**Figure 10. Emergency Care and Transportation**




In regard to *Leadership* (**Figure 11**), rural Indigenous nurses reported responsibility for supervising/mentoring: nursing students (62%) or nursing colleagues (48%), and leading a unit/shift (38%), or interdisciplinary health care team (25%). Fewer were responsible for supervising/mentoring interprofessional students (15%), interprofessional or colleagues (11%), and leading a community group (8.6%).

**Figure 11. Leadership**



## Perceptions of Nursing Practice

In the survey, 30% of Indigenous nurses reported that they think of their role as an advanced practice nursing role and that it is recognized as such by their employer or organization; 16% reported that they think of their role as an advanced nursing practice role but that it is not recognized by their employer or organization. Indigenous RNs (37%) were more likely to report that they think of their role as an advanced practice nursing role and that it is recognized by their employers than Indigenous LPNs (19%).

The majority of Indigenous nurses (70%) reported they were satisfied with their day-to-day routine. Furthermore, 80% of these nurses reported that they feel adequately prepared for their area of practice. The vast majority of Indigenous nurses believed they have the necessary knowledge to do their work (88%); 92% felt that they have the necessary skills to do their work.

## Competence and Confidence

Nurses who responded to the *RRNII* survey were asked to describe their level of competence and confidence in their work (Penz et al., 2019). The majority of Indigenous nurses identified their level of competence as somewhat high (67%), followed by extremely high (32%), then somewhat low (1.7%). These findings are consistent with both Indigenous RNs and LPNs.

Similarly, the majority of Indigenous nurses reported their level of confidence in their work as somewhat high (68%), followed by extremely high (24%); 7.8% reported their confidence as somewhat low or extremely low. Indigenous RNs (95%) reported higher confidence in their work than did Indigenous LPNs (89%). With regard to the development of their competence, most often, Indigenous nurses reported their competence in rural nursing practice as accomplished (47%), followed by developing (44%). The remaining nurses either reported expert (4.1%) or beginning/novice/entry-level (4.1%) development of competence. Indigenous RNs more often reported expert competency (8.0%) and less often reported developing competency (40%) than did LPNs (0.9%; 48%).

## Rural/Remote Nursing Patient Population

The nurses were asked to report on the demographics of their patient populations. Overall, Indigenous nurses reported that on a weekly basis, they provide nursing care to older adults (65 years and older), adults (25 to 64 years), youth (15 to 24 years), children (1 to 14 years), and newborn infants (less than one year old). The majority of Indigenous nurses (70%) reported that older adults represent 25% or more of the patients they see on a weekly basis. Similarly, 56% of Indigenous nurses reported that adults represent 25% or more of the patients they see on a weekly basis. The small minority of Indigenous nurses (9.8%) indicated that youth comprise 25% or more of the patients they see on a weekly basis; 7.4% reported that children represent 25% or more of the patients they see on a weekly basis and 6.4% reported that newborn infants represent 25% or more of the patients they see on a weekly basis.

Nurses who completed the *RRNII* survey were also asked to report on what percentage of their patients were of Indigenous (First Nations, Inuit, Métis) ancestry. The majority of Indigenous nurses (58%) reported that 30% or more of their patient population was Indigenous, while a sizeable minority (38%) reported that 70% or more of their patients were of Indigenous ancestry. This compares to non-Indigenous nurses, of whom 31% cared for a patient population comprised of 30% or more persons of Indigenous ancestry. Only 14% of non-Indigenous nurses cared for a patient population that was comprised of 70% or more of persons of Indigenous ancestry.

*"To nurse in my home First Nation community is my dream. I became a nurse to help my people and to serve them in their own language and cultural needs. My people are my life… I feel that those nurses coming to work in our communities need more opportunities to learn about cultural competence so they may be able to deliver culturally safe care to our people." (RN, New Brunswick)*

Almost half of the Indigenous nurses (49%) and a similar proportion of non-Indigenous nurses (46%) reported that they received adequate cultural sensitivity training; the remaining nurses were either neutral (20%; 24%) or disagreed (31%; 30%).

## Nursing Knowledge: Information Access and Education Sources

*"Being First Nations makes a huge difference when communicating with other First Nations. I am knowledgeable about First Nations history and culture." (RN, Northwest Territories/Nunavut)*

In the *RRNII* survey, nurses were asked to indicate how often they use in-person and online/electronic sources to update their nursing knowledge. Indigenous nurses reported using primarily online/electronic sources (73%) once a month or more to update their knowledge, rather than in-person education sources (50%). Similar reports were given by non-Indigenous nurses (71%; 48%). Indigenous RNs and LPNs both used online/electronic sources more often than in-person sources, but RNs reported using both online/electronic sources (76%) and in-person sources (54%) more often than did LPNs (69%; 46%). This pattern was consistent among non-Indigenous nurses, such that RNs used both online/electronic sources (76%) and in-person sources (50%) more often than LPNs (61%; 43%).

Indigenous nurses reported using online/electronic information sources at least once a month. Internet search engines were used the most (91%), followed by policies, protocols, standards, or regulatory tools (81%), clinical practical guidelines (76%), nursing/medical textbooks (65%), practice support resources (63%), nursing/medical journals (60%), and research databases (47%).

Of the print/paper information services Indigenous nurses reported using at least once a month, policies, protocols, standards or regulatory tools were used the most often (75%), followed by clinical practice guidelines (67%), nursing/medical textbooks (65%), and nursing/medical journals (49%).

## SATISFACTION

### Work Satisfaction

The large majority of Indigenous nurses reported that they were satisfied with their current nursing practice (79%); the remaining nurses were either neutral (9.0%) or dissatisfied (11%). Indigenous RNs (82%) and LPNs (77%) were largely satisfied with their current nursing practice. These percentages were similar for non-Indigenous RNs and LPNs (85%; 77%).

### Community Satisfaction

The large majority of Indigenous nurses reported that they were satisfied with their primary work community (85%); the remaining nurses were either neutral (9.4%) or dissatisfied (6.1%). Community satisfaction for non-Indigenous nurses was similar with the majority satisfied (84%), and the rest neutral (11%) or dissatisfied (4.8%). Indigenous and non-Indigenous RNs (85%; 86%) and LPNs (83%; 81%) were comparably satisfied with their primary work communities.

### Work Engagement and Burnout

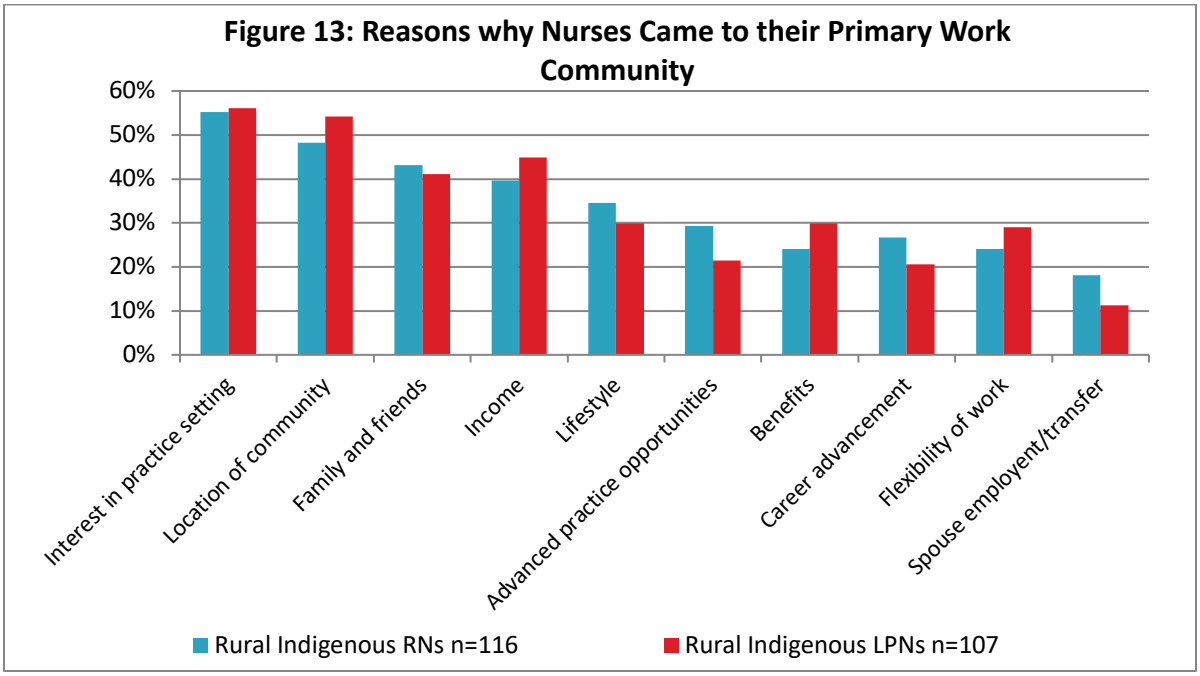
Of the surveyed Indigenous nurses, 81% reported that they feel enthusiastic about their job. Approximately a fifth of Indigenous nurses (21%) indicated that their job inspires them; 95% felt proud of the work that they do. However, important to note is that 28% of Indigenous nurses reported feeling burned out from their work often, very often or always; 45% reported feeling burned out sometimes, while 28% indicated they rarely/never feel burned out. A smaller proportion of non-Indigenous nurses reported frequently feeling burned out from their work (23%).

## RECRUITMENT AND RETENTION

### Recruitment

Rural Indigenous nurses most often reported coming to work in their primary work community because of an interest in the practice setting (56%), location of the community (51%), family or friends (42%), and income (42%). See **Figure 13** for a breakdown of recruitment factors by type of nurse. A small minority (16%) of Indigenous nurses received financial incentives to take up their primary position.

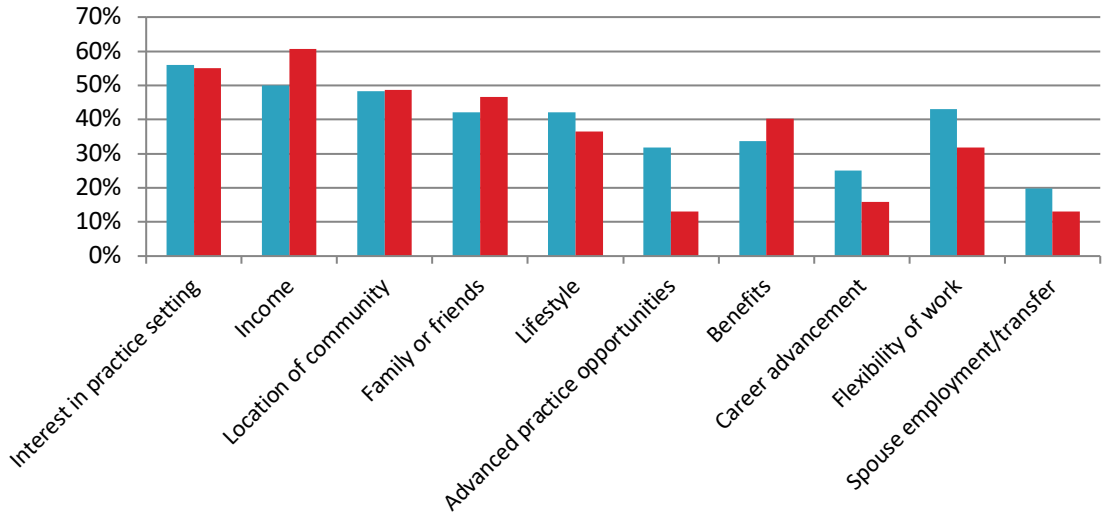
*"I grew up in the community where I now practice, I couldn't imagine working anywhere else, especially with all my family still living here. I feel honoured to be able to give back to the community. The elders and other community members really appreciate that young, First Nations members have chosen to come back and help the community." (RN, Yukon)*




## Retention

When asked why they continue working in their primary work community, Indigenous nurses more often reported the retention factors of interest in the practice setting (57%), income (56%), location (48%), and family or friends (44%). For a breakdown of retention factors by type of nurse, see **Figure 14**. There were several notable differences in retention factors between Indigenous and non-Indigenous RNs and LPNs. A greater proportion of Indigenous RNs reported the retention factors of advanced practice opportunities (32%) and career advancement (25%) than did non-Indigenous RNs (21%; 15%), whereas a lower proportion of Indigenous RNs reported the retention factors of family or friends (42%) and lifestyle (42%) compared to non-Indigenous RNs (52%; 48%). A greater proportion of Indigenous LPNs reported the retention factor of interest in the practice setting (55%) compared to non-Indigenous LPNs (48%), while a lower proportion of Indigenous LPNs reported the retention factor, location of community (49%) compared to non-Indigenous LPNs (59%). In summary, Indigenous RNs and LPNs more often reported nursing practice retention factors, while non-Indigenous RNs and LPNs more often reported personal factors.

**Figure 14. Reasons Nurses Continue Working in their Primary Work Community**




## Plans in the Next 12 Months

Of the surveyed rural and remote Indigenous nurses, 28% (n = 68) were planning to leave their present position within the next 12 months. When examined by nurse type, all Indigenous NPs (100%) were planning to stay in their present position within the next 12 months, whereas 37% of RNs, 21% of LPNs, and 19% of RPNs were planning to leave. The same percentages of non-Indigenous RNs and LPNs were planning to leave; however more non-Indigenous NPs (25%) and RPNs (25%) were planning to leave their present nursing position within the next 12 months.

Indigenous nurses who were planning to leave reported plans to nurse in a large community (25%) or relocate to another province within Canada (25%). Almost as often, Indigenous nurses reported plans to go back to school for further education within nursing (23%). Notably, there were differences among the reported career plans of four groups: rural Indigenous RNs, rural Indigenous LPNs, rural non-Indigenous RNs, and rural non-Indigenous LPNs. Rural Indigenous RNs most often reported plans to relocate to another province within Canada (33%) or to nurse in a different rural/remote community (26%). Rural Indigenous LPNs most frequently reported plans to nurse in a large community (32%) or go back to school for further education within nursing (32%). In comparison, rural non-Indigenous RNs most often reported plans to retire (34%) or nurse in the same community (31%). Rural non-Indigenous LPNs most often reported plans to nurse in the same community (37%) or retire (25%).

Indigenous nurses who were planning to leave their primary position within the next 12 months identified they would consider continuing to nurse in a rural/remote community if they could have

increased flexibility in scheduling (56%), receive an annual cash incentive (56%), or if they could work short-term contracts (49%). While non-Indigenous nurses reported a similar ranking of factors, a much smaller proportion reported that increased flexibility in scheduling (39%), receiving an annual cash incentive (41%), or working short-term contracts (33%) would make them consider continuing to nurse in a rural/remote community. This pattern of results is seen for eight of the eleven factors surveyed, which may indicate that Indigenous nurses are more willing to stay in a rural/remote community than are non-Indigenous nurses.

### Plans in the Next 5 Years

When asked about career plans for the next 5 years, rural Indigenous nurses most often reported plans to nurse in the same community (61%), followed by plans to go back to school for further education within nursing (23%), and plans to retire (19%). Rural non-Indigenous nurses most often reported plans to nurse in the same community (63%), retire (30%), or go back to school for further education within nursing (14%). The different proportions of Indigenous (19%) and non-Indigenous (30%) nurses reporting they would retire in the next 5 years could be explained by age, as a greater proportion of Indigenous nurses reported being under 55 years of age (76%) than did non-Indigenous nurses (67%).

Rural Indigenous RNs and LPNs both most often reported plans to nurse in the same community (51%; 68%), go back to school for further education within nursing (22%; 25%), or retire (20%; 17%).

## WHAT WE HAVE LEARNED ABOUT RURAL/REMOTE INDIGENOUS NURSES

It is estimated that there are approximately 9,700 Indigenous nurses in both urban and rural settings nationwide (University of Saskatchewan, 2018). The 246 Indigenous nurses who responded to the *RRNII* survey provide a glimpse of the intersection between geographic locale and Indigenous ancestry. Their responses echo and extend data from Indigenous RNs who responded to the *RRNI* survey (Kulig et al., 2006; Stewart et al., 2005).

In the *RRNII* survey, we see that Indigenous nurses worked in smaller communities that were more distant from both basic and advanced referral centres in comparison to non-Indigenous nurses' work communities. A higher proportion of Indigenous nurses than non-Indigenous nurses reported that the people they cared for were Indigenous.

The vast majority of Indigenous nurses felt proud of the work they do and the majority felt enthusiastic about what they do. They indicated that they were able to implement the principles of primary healthcare, including importantly, being supported to treat patients as partners. At the same time, they noted challenges in collaborating with community agencies and care providers outside their workplaces. Indigenous nurses noted that they had a support network of colleagues and other professionals.

The large majority of Indigenous and non-Indigenous RNs and LPNs reported that they worked within their legislated scope of practice. More Indigenous RNs than non-Indigenous RNs reported working beyond their legislated scope of practice, with fewer Indigenous LPNs than non-Indigenous LPNs working below their scope of practice. This pattern could be related to higher proportion of Indigenous nurses who worked in smaller and more remote communities, possibly influencing their working beyond or below their legislated scopes.

Indigenous nurses' responses to questions of job resources and demands indicate that attention is needed with regard to adequacy of staffing, safety, and isolation. A sizeable minority of Indigenous nurses were required to be on-call, something that we have found in both the *RRNI* and *RRNII* studies that contributes to rural nurses leaving their position (Stewart et al., 2005; Stewart et al., 2020). Of concern is that a greater percentage of Indigenous nurses than non-Indigenous nurses reported feeling burned out from their work.

Notably both Indigenous and non-Indigenous nurses reported a high level of experiencing and witnessing violence and abuse, including emotional abuse, threat of assault, physical assault, and verbal/sexual harassment. The Indigenous nurses' experience of a higher level of emotional abuse, however, may relate to experiences of systemic racism.

Retention factors for Indigenous nurses, that is their intention to stay in the community, were their preferences for advanced practice and career opportunities as well as interest in the practice setting. It would be critical to avoid taking for granted Indigenous nurses' presence in small communities. Employers would be wise to be attuned to the challenges for Indigenous nurses of living and working in very small communities, especially those where the nurses may have grown up.

To retain Indigenous nurses, it would be important to consider the desire that many have for further education and knowledgeable leadership. They require sensitive supports that could prevent burnout and address the realities of their everyday lives and practice.

## Strengths & Limitations

The *RRNII* findings provide a rare insight into the working lives of Indigenous nurses serving some of the most under-resourced rural and remote communities in Canada. This study is the first survey of all types of nurses in the regulated nursing workforce in rural and remote Canada. The questionnaire was iteratively designed with nursing policy-makers and planners, who ensured the inclusion of important issues for Canadian rural and remote nurses. Although the questionnaire was lengthy, the use of newly developed and standardized scales and the opportunity to compare findings with the *RRNI* study were positive.

The *RRNII* sample of rural nurses might not be representative for each type of nurse when broken down by province. Nor may the sample of Indigenous rural nurses be representative. As such, certain findings should be interpreted with caution. It should be noted that some respondents may have interpreted

certain items in ways unintended by the researchers (e.g., scope of practice items), possibly reducing the reliability of these items. As well, provincial and territorial variations in terminology and legislation may have also had an effect on the interpretation of some items. However, the research and advisory teams representing all provinces and territories reviewed the final version of the survey carefully in this regard.

## POLICY IMPLICATIONS

The implications build on key principles and calls to action of the Truth and Reconciliation Commission of Canada (2015) and echo Nowgesic's (2018) call for partnering.

### Workforce Planning

- There is pressing need to address the paucity of information about Indigenous nurses in Canada, especially in rural and remote areas

### Recruitment

- Rural Indigenous students with an interest in nursing need to be supported to access relevant education as close to their communities as possible
- In collaboration with Indigenous communities and organizations, educational institutions need to develop policies and processes to admit Indigenous students, enhance student supports, and tailor programs and courses in relational ways
- More responsive, rural and remote nursing basic and continuing education programs are needed. Of special concern are initiatives that assist nurses to obtain advanced education relevant to working in rural, remote, and Indigenous communities.

### Retention

- Greater opportunities are needed for Indigenous nurses to enroll and be well-supported in advanced education and graduate degree programs, including programs that can be accessed at a distance
- Partnered initiatives between health services in sparsely populated areas, Indigenous health services, and educational institutions have the potential to assist Indigenous RNs to become managers, health service leaders and nurse educators
- A strength to build on is that the majority of rural Indigenous nurses are highly engaged and have high community satisfaction, which contributes to the potential of continuity of care and culturally safe care in their communities
- Greater understanding is needed of the everyday experiences of Indigenous nurses as they navigate both living and working in small rural and remote communities, especially their home communities
- As many Indigenous nurses are younger, less experienced, and working alone in smaller communities, extended orientation and formal mentorships with rural experienced nurses are warranted

- Formal supports, including organizational strategies that go beyond peer support, are required to address workload pressures, overtime, and the threat of burnout.
- Healthcare organizations, in collaboration with Indigenous nurses, need to jointly develop health and wellness approaches that address anti-Indigenous racism in the workplace
- Supports are particularly needed for the high proportion of Indigenous nurses who have both experienced and witnessed violence.

## REFERENCES

NOTE: The references below are only those cited in this document. For the full list of *RRNII* and *RRNI* publications and presentations, see **http://www.unbc.ca/rural-nursing**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## Appendix A: Scope of Practice: Rural BC and Canada RNs and LPNs

| | Rural RNs | | Rural LPNs | |
|---|---|---|---|---|
| **Promotion, Prevention, and Population Health** | **Indigenous % (n=116)** | **Non-Indigenous % (n=1,847)** | **Indigenous % (n=107)** | **Non-Indigenous % (n=1,168)** |
| Chronic disease management | 67.2 | 63.4 | 72.9 | 76.7 |
| Maternal/child/family health programs | 42.2 | 35.5 | 19.6 | 18.2 |
| Lifestyle modification programs | 56.0 | 51.6 | 48.6 | 51.5 |
| Public and population health programs | 56.9 | 43.5 | 35.5 | 32.8 |
| Mental health programs | 41.4 | 30.3 | 36.4 | 32.4 |
| Community development/individual health capacity building programs | 19.8 | 18.0 | 15.9 | 12.2 |
| Illness/injury prevention | 41.4 | 38.8 | 45.8 | 48.5 |
| None of the above | 18.1 | 20.9 | 15.0 | 15.6 |

| **Assessment** | **Indigenous %** | **Non-Indigenous %** | **Indigenous %** | **Non-Indigenous %** |
|---|---|---|---|---|
| Complete history and physical assessment | 66.4 | 60.0 | 75.7 | 69.7 |
| Focused history and physical assessment | 76.7 | 71.0 | 68.2 | 61.8 |
| Infant and child health assessment | 41.4 | 32.5 | 14.0 | 12.7 |
| Older adult health assessment | 67.2 | 61.7 | 77.6 | 81.6 |
| Family assessment | 30.2 | 25.1 | 27.1 | 15.8 |
| Community assessment | 19.8 | 16.2 | 14.0 | 10.4 |
| Mental health assessment | 53.4 | 40.3 | 40.2 | 34.8 |
| Sexual assault assessment/exam | 25.9 | 19.1 | 4.7 | 5.4 |
| Third party assessment | 25.9 | 18.6 | 8.4 | 8.4 |
| Other assessment | 1.7 | 2.6 | 0.9 | 0.9 |
| None of the above | 7.8 | 9.5 | 7.5 | 9.2 |

| **Therapeutic Management** | **Indigenous %** | **Non-Indigenous %** | **Indigenous %** | **Non-Indigenous %** |
|---|---|---|---|---|
| Administering oral/SC/IM/topical/inhaled medications | 85.3 | 80.8 | 91.6 | 91.4 |
| Dispensing medication | 65.5 | 54.4 | 69.2 | 64.6 |
| Pharmacy management | 30.2 | 25.6 | 26.2 | 15.5 |
| Prescribing medication independently | 12.1 | 7.6 | 1.9 | 3.6 |
| Prescribing medication using protocols or guidelines | 34.5 | 29.8 | 9.3 | 12.2 |
| Other medication related responsibilities | 9.5 | 8.4 | 8.4 | 5.7 |
| None of the above | 12.1 | 13.6 | 5.6 | 6.8 |

| Laboratory Tests | Indigenous % | Non-Indigenous % | Indigenous % | Non-Indigenous % |
|---|---|---|---|---|
| Taking and processing orders for laboratory tests | 69.8 | 65.1 | 57.0 | 63.2 |
| Ordering laboratory tests | 42.2 | 38.0 | 35.5 | 28.3 |
| Obtaining samples for laboratory tests | 61.2 | 58.2 | 57.0 | 58.0 |
| Performing and analyzing on-site laboratory tests | 30.2 | 29.9 | 17.8 | 20.5 |
| Interpreting laboratory and diagnostic tests | 50.9 | 46.9 | 25.2 | 25.2 |
| None of the above | 17.2 | 18.4 | 18.7 | 16.7 |

| | Rural RNs | | Rural LPNs | |
|---|---|---|---|---|
| **Diagnostic Tests** | **Indigenous %** | **Non-Indigenous %** | **Indigenous %** | **Non-Indigenous %** |
| Taking and processing orders for advanced diagnostic tests | 51.7 | 46.5 | 31.8 | 42.4 |
| Ordering advanced diagnostic tests | 10.3 | 7.9 | 6.5 | 8.0 |
| Performing advanced diagnostic tests | 0.9 | 1.7 | 0.0 | 1.5 |
| Interpreting and following up advanced diagnostic tests | 15.5 | 13.2 | 3.7 | 6.5 |
| None of the above | 44.8 | 48.9 | 66.4 | 54.4 |

| Diagnostic Imaging | Indigenous % | Non-Indigenous % | Indigenous % | Non-Indigenous % |
|---|---|---|---|---|
| Taking and processing orders for diagnostic imaging | 56.0 | 54.1 | 43.0 | 49.7 |
| Ordering routine diagnostic imaging | 31.9 | 25.8 | 20.6 | 16.9 |
| Ordering advanced diagnostic imaging | 8.6 | 5.7 | 8.4 | 7.2 |
| Performing diagnostic imaging | 13.8 | 8.7 | 0.0 | 1.0 |
| Interpreting and following up diagnostic imaging | 19.8 | 14.2 | 2.8 | 3.5 |
| None of the above | 37.9 | 38.2 | 51.4 | 44.9 |

| Diagnosis and Referral | Indigenous % | Non-Indigenous % | Indigenous % | Non-Indigenous % |
|---|---|---|---|---|
| Follow protocols / use decision support tools to arrive at a plan of care | 74.1 | 77.6 | 79.4 | 75.4 |
| Independently make a nursing diagnosis based on assessment data | 68.1 | 67.2 | 40.2 | 37.0 |
| Independently make a medical diagnosis based on assessment data | 16.4 | 10.9 | 3.7 | 2.9 |
| Independently make referrals to other healthcare practitioners | 53.4 | 48.6 | 40.2 | 28.2 |
| Independently make referrals to medical specialists | 20.7 | 10.5 | 8.4 | 4.5 |
| Certify mental health patients for committal | 11.2 | 6.5 | 2.8 | 0.8 |
| Pronounce death | 35.3 | 44.0 | 19.6 | 23.7 |
| None of the above | 12.9 | 11.1 | 15.0 | 18.8 |

| Emergency Care and Transportation | Indigenous % | Non-Indigenous % | Indigenous % | Non-Indigenous % |
|---|---|---|---|---|
| Organize urgent or emergent medical transport | 56.9 | 52.3 | 41.1 | 35.7 |
| Provide care during urgent/emergent medical transportation | 41.4 | 35.3 | 20.6 | 19.8 |
| Respond/lead emergency calls as a first responder | 23.3 | 17.8 | 15.9 | 10.4 |
| Respond/lead emergency search and rescue calls in rural, remote or wilderness settings | 9.5 | 5.1 | 2.8 | 1.8 |
| None of the above | 35.3 | 40.8 | 50.5 | 52.5 |

| Leadership | Indigenous % | Non-Indigenous % | Indigenous % | Non-Indigenous % |
|---|---|---|---|---|
| Supervising/mentoring nursing students | 60.3 | 68.0 | 64.5 | 57.2 |
| Supervising/mentoring nursing colleagues | 60.3 | 62.6 | 31.8 | 32.7 |
| Supervising/mentoring interprofessional students | 16.4 | 20.1 | 13.1 | 8.5 |
| Supervising/mentoring interprofessional colleagues | 16.4 | 15.1 | 4.7 | 6.4 |
| Leading a unit/shift in a practice setting | 47.4 | 48.2 | 29.0 | 31.7 |
| Leading an interdisciplinary health care team | 31.9 | 21.7 | 16.8 | 11.6 |
| Leading a community group | 13.8 | 10.2 | 1.9 | 2.1 |
| None of the above | 12.9 | 11.1 | 23.4 | 25.9 |