# Nursing Practice in Rural and Remote Canada II

## Northwest Territories Survey Fact Sheet


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The multi-method study, *Nursing Practice in Rural and Remote Canada II* (*RRNII*), aims to 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 in rural and remote 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, Kulig, Stewart, Pitblado, & Knock, 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. This fact sheet presents initial results from the national survey about the nature of nursing practice in Northwest Territories (hereafter NT), including how nurses experience accessibility and quality of PHC in their workplace.

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 who resided in the rural areas (less than 10,000 core population) of each Canadian province and to all nurses who worked in Nunavut, Northwest Territories, and the Yukon.

We received a total of 3,822 completed questionnaires by mail or on-line (2,082 RNs, 163 NPs, 1,370 LPNs, and 207 RPNs) from across Canada.

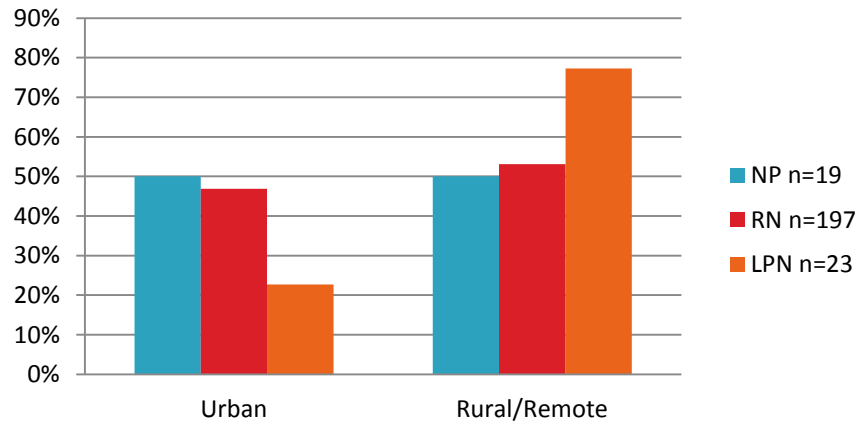

**Figure 1.**

The national response rate was 40% (margin of error 1.5%). All 77 LPNs in NT were surveyed. All 1,122 RNs and NPs in both Nunavut and Northwest Territories were surveyed through the Registered Nursing Association of NU and NT which is responsible for regulating the RNs and NPs in both territories. **From Northwest Territories, a total of 239 nurses responded: 197 RNs, 19 NPs, and 23 LPNs**.

In this fact sheet, we compare three sets of data: NT nurse data from the *RRNII* survey, rural Canada nurse data from the *RRNII* survey, and data for all NU and NT nurses from the Canadian Institute for Health Information analysis of the 2015 regulated nursing workforce database (CIHI, 2016). The CIHI data helps to situate the *RRNII* study findings in the context of the overall NU and NT nursing workforce. Wherein the CIHI population data combines NU and NT RNs and NPs, we are only able to report on this amalgamated information for the nursing groups of RNs and NPs. The response rate for all NU and NT nurses (RNs, NPs, and LPNs) was 31% (n=398, margin of error 3.7%). We can say the following: with 95% confidence, the survey sample of RNs, NPs, and LPNs in NU and NT was representative of NU and NT nurses as a whole, and the separate survey sample of NT and NU RNs and NPs was representative of RNs and NPs as a whole; and say with below 85% confidence, the survey sample of LPNs in NT was representative of NT LPNs.

# *Who are the nurses in Northwest Territories?*

**Figure 2. The Regulated Nursing Workforce in NT by Nurse Type and Geographic Distribution.**




The geographic distribution of nurses in NT in the *RRNII* survey is illustrated in **Figure 2.**

The minority of NT nurse respondents (45%) from the *RRNII* survey reported growing up in a community with a population of less than 5,000, whereas 33% of NT nurses grew up in an urban community larger than 30,000.

A higher proportion of surveyed NT nurses reported living in their primary work community (78%) compared to rural nurses in Canada overall (58%). Nurses who lived outside of their primary work community traveled to work 1-6 times a year (69%), or on a monthly (16%) basis, which is a different pattern than that reported by rural nurses in Canada overall (11% and 2.7%). The majority of NT nurses were married or living with a partner (73%); the minority with dependent children (43%).

In 2015, the regulated nursing workforce (RNs, NPs, and LPNs) in NU and NT consisted of 1,191 nurses, with 49% working outside of Yellowknife; in comparison, 65% of the population was living outside of this regional center (CIHI, 2016).

## Age and Gender

In the *RRNII* survey results, 31% of NT nurses were 55 years of age or older, which is similar to rural nurses in Canada overall (32%); whereas 24% were under 35 years of age, compared to 19% of rural nurses in Canada overall. This difference is particularly striking for NT LPNs, 48% of whom were older than 55 years compared to 28% of rural LPNs in

Canada overall, and only 4.8% of NT LPNs were younger than 35 years of age compared to 21% of rural LPNs in Canada overall. See **Table 1** for the age distribution of nurses in NT and rural Canada.

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

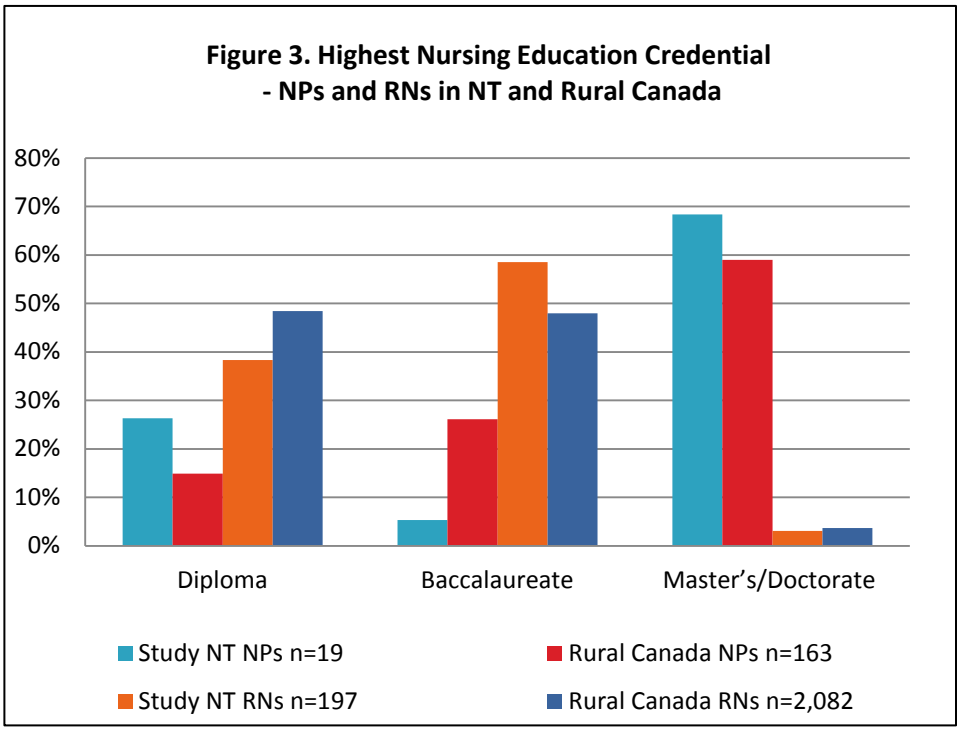
| | | <25 % | 25-34 % | 35-44 % | 45-54 % | 55-64 % | ≥65 % |
|---|---|---|---|---|---|---|---|
| Study NT NPs | (n=19) | 0.0 | 11.1 | 11.1 | 44.4 | 33.3 | 0.0 |
| Rural Canada NPs | (n=163) | 1.3 | 11.5 | 25.6 | 36.5 | 23.1 | 1.9 |
| Study NT RNs | (n=120) | 0.0 | 26.9 | 21.5 | 23.1 | 22.0 | 6.5 |
| Rural Canada RNs | (n=2,082) | 1.1 | 17.8 | 19.1 | 27.2 | 29.6 | 5.3 |
| Study NT LPNs | (n=23) | 0.0 | 4.8 | 19.0 | 28.6 | 42.9 | 4.8 |
| Rural Canada LPNs | (n=1,370) | 3.7 | 17.8 | 20.4 | 30.3 | 25.4 | 2.4 |

In the *RRNII* survey, the proportion of all male nurses (RNs, NPs, and LPNs combined) working in NT (8.7%) was higher compared to the proportion of rural male nurses in Canada overall (6.4%). Furthermore, 14% of LPNs in NT were male, compared to 5.6% of rural LPNs in Canada overall.

## Education

In the *RRNII* survey, the level of nursing education among nurses in NT was slightly above the education level of rural nurses in Canada overall. The highest obtained nursing education credential of NT nurses was a doctorate degree, while the most commonly obtained highest nursing education credential was a bachelor's degree in nursing (49%) followed by a diploma in nursing (43%). For rural nurses in Canada overall, a diploma in nursing (68%) was the most commonly earned highest education credential, followed by a bachelor's degree in nursing (28%). Furthermore, 6.3% of NT nurses held a rural and remote certificate.

**Figure 3. Highest Nursing Education Credential - NPs and RNs in NT and Rural Canada**




All surveyed NT LPNs held a diploma in nursing as their highest nursing credential (100%), while NT RNs were likely to either hold a bachelor's (59%) or a diploma (38%) in nursing as their highest nursing education credential. Across Canada, 99.6% of rural LPNs held a nursing diploma, with rural RNs likely to hold a diploma (48%) or a bachelor's degree in nursing (48%). **Figure 3** shows the highest nursing education credential of NPs and RNs in NT and rural Canada overall in the *RRNII* survey.

# *Where do nurses in Northwest Territories work?*

The large majority of NT nurses who responded to the survey were employed in nursing (90%), while the remaining 9.7% were either on leave (3.8%) or were retired and occasionally working in nursing on either a casual or short-term contract basis (5.9%). **Table 2** shows the population of primary work community of NT nurses in the *RRNII* study. A larger proportion of NT nurses worked in a community with a population under 1,000 (19%), compared to rural Canada nurses overall (14%). Considering each group of nurse, 77% of NT LPNs worked in a community with a population between 1,000-5,000, while 11% of NPs, 21% of RNs, and 0% of LPNs worked in a community with a population under 1,000, compared to 17% of NPs, 15% of RNs, and 12% of LPNs in rural Canada overall.

*Table 2. Population of Primary Work Community, Nurses in NT*

| Community Population | % (n=239) |
|---|---|
| ≤ 999 | 18.5 |
| 1,000 - 2,499 | 9.1 |
| 2,500 - 4,999 | 26.7 |
| 5,000 - 9,999 | 0.9 |
| ≥ 10,000 | 44.8 |

Furthermore, 22% of surveyed NT nurses reported their primary work community was only accessible by plane (national proportion 8.4%). In some cases, no scheduled flights were offered (6.4%) or one flight into the work community was scheduled on 1-4 days a week (21%). In the majority of cases (60%) the primary work community was at least 500 km away from an urban centre with a population larger than 10,000 (national proportion 14%). Finally, the large majority of NT nurses (88%) reported the distance to the next advanced referral centre was at least 1,000 km (national proportion 18%).

## Nursing Employment Status

The employment status of NT nurses in the *RRNII* study is different from that seen in rural Canada overall. A smaller proportion of NT nurses were employed in a permanent position (74%) and a higher proportion in a job share, casual or contract based position (33%) compared to rural nurses in Canada overall (84% and 21%). See **Table 3** for a detailed breakdown and comparison of nursing employment status between NT nurses and rural Canada nurses.

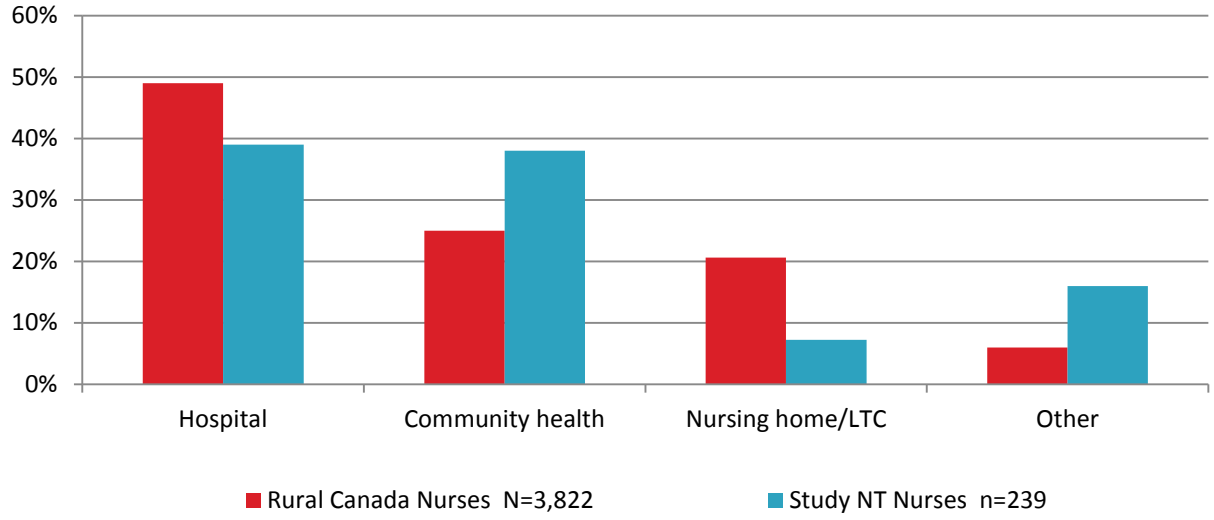
*Table 3. Employment Status, Study NT Nurses and Rural Canada Nurses*

| Employment status | NT (n=239)% | Rural Canada (N=3,822)% |
|---|---|---|
| Full-time/Permanent | 69.0 | 53.6 |
| Part-time/Permanent | 5.4 | 30.6 |
| Job share | 7.1 | 1.1 |
| Casual | 13.0 | 15.8 |
| Contract/Term | 13.0 | 4.5 |

A smaller proportion of surveyed NT nurses worked as staff nurses (65%) compared to rural nurses in Canada overall (80%), and a larger proportion worked as managers (15% and 8%). Interestingly, a larger proportion of surveyed NT LPNs reported working as managers (8.7%) compared to rural Canada LPNs (2.8%).

**Figure 4** shows the primary place of employment for rural nurses in Canada overall compared to surveyed NT nurses. A lower proportion of NT nurses worked in a hospital setting (39%) or a nursing home/long-term care facility (7.2%) compared to rural nurses in Canada overall (49% and 21%), and larger proportion worked in a community health care setting (38%) compared to rural nurses in Canada overall (25%).

**Figure 4. Nursing Workforce in NT and Rural Canada, Primary Place of Employment**




***Notes:***

***Hospital*** *includes hospital, mental health centres, rehabilitation/convalescent centres and integrated facilities.*

***Community health*** *includes community health centres, home care agency, nursing station (outpost or clinic), NP led clinic, multidisciplinary primary healthcare clinic, public health department/unit and physician's office/family practice unit or team.*

***Nursing home/LTC*** *includes nursing home/long-term care facility.*

***Other*** *place of work includes professional association/government, occupational health, private nursing agency/self-employed, educational institution and other place of work.*

## *What is the scope of practice of nurses in Northwest Territories?*

A distinctive characteristic of northern 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 and find commonalities, 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 perceive as their responsibilities rather than what may or may not be within their legislated scopes of practice. Detailed tables are included in **Appendix A**.

In the *RRNII* survey, 81% of RNs, 84% of NPs, and 65% of LPNs in NT reported working within their licensed scope of practice, compared to 84% of rural RNs, 83% of NPs, and 77% of LPNs in Canada overall. Important to note is that 17% of NT RNs reported working beyond their scope of practice compared to 9.8% of rural Canada RNs overall. A greater proportion of NT LPNs reported working below their scope of practice (30%) than did rural LPNs in Canada overall (18%).

In terms of *Promotion, Prevention and Population Health,* the majority of NT nurses reported being responsible for chronic disease management (67%), life-style modification programs (61%), and public and population health programs (57%). NT RNs and LPNs reported greater engagement on most related items than rural RNs and LPNs in Canada overall (Appendix A). See **Figure 5** for a comparison of promotion, prevention and population health activities between NT and rural Canada nurses overall.

**Figure 5. Promotion, Prevention and Population Health: Nurses in NT and Rural Canada**

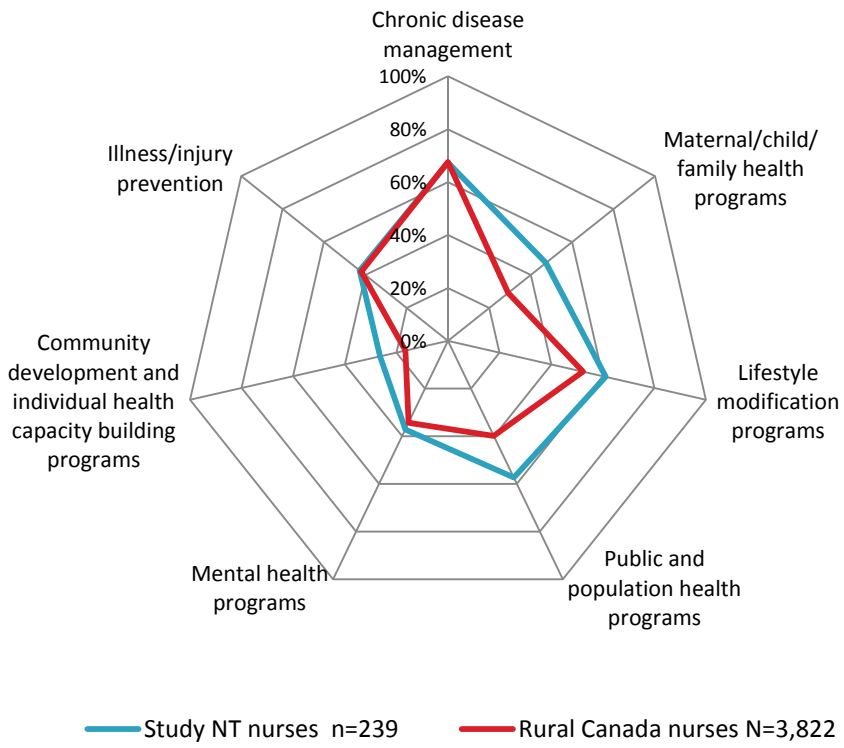
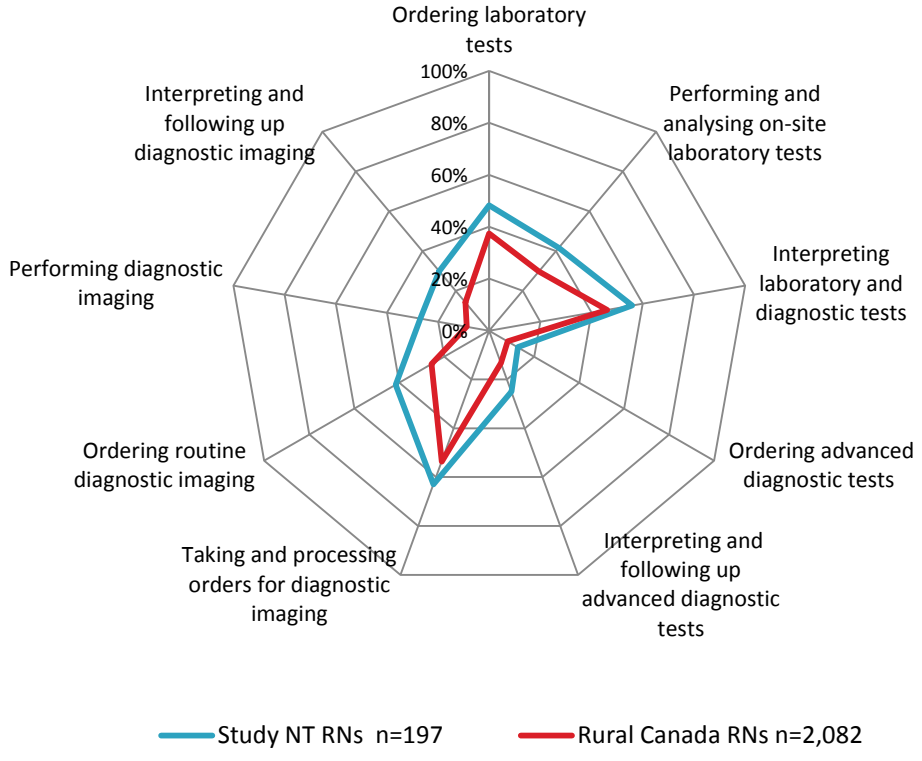



**Figure 6. Diagnostics: RNs in NT and Rural Canada**




Regarding *Assessment,* NT nurses reported providing health and wellness assessments such as focused history and physical assessment (75%), complete history and physical assessment (70%), older adult health assessment (62%), mental health assessment (55%), infant and child health assessment (46%), and sexual assault assessment (38%). Overall, the reported assessment responsibility of NT nurses was larger for most activities than for rural Canada nurses in general. For instance, 67% of rural nurses in Canada overall reported providing focused history and physical assessment, 25% infant and child health assessment and, 14% reported responsibility for sexual assault assessment.

In the category of *Diagnostics,* which included *Laboratory Tests, Diagnostic Tests,* and *Diagnostic Imaging,* NT nurses often reported greater activity than their counterparts; this was especially evident for NT RNs **(Figure 6)**. For all nurse types combined, NT nurses were responsible for taking and processing orders for (66%), and obtaining samples for (63%), laboratory tests. These nurses also indicated that interpreting laboratory and diagnostic tests (56%) and ordering laboratory tests (49%) were part of their nursing responsibility.

The majority of NT nurses reported being responsible for taking and processing orders for

**Figure 7. Theraputic Management: NT NPs, RNs and LPNs**

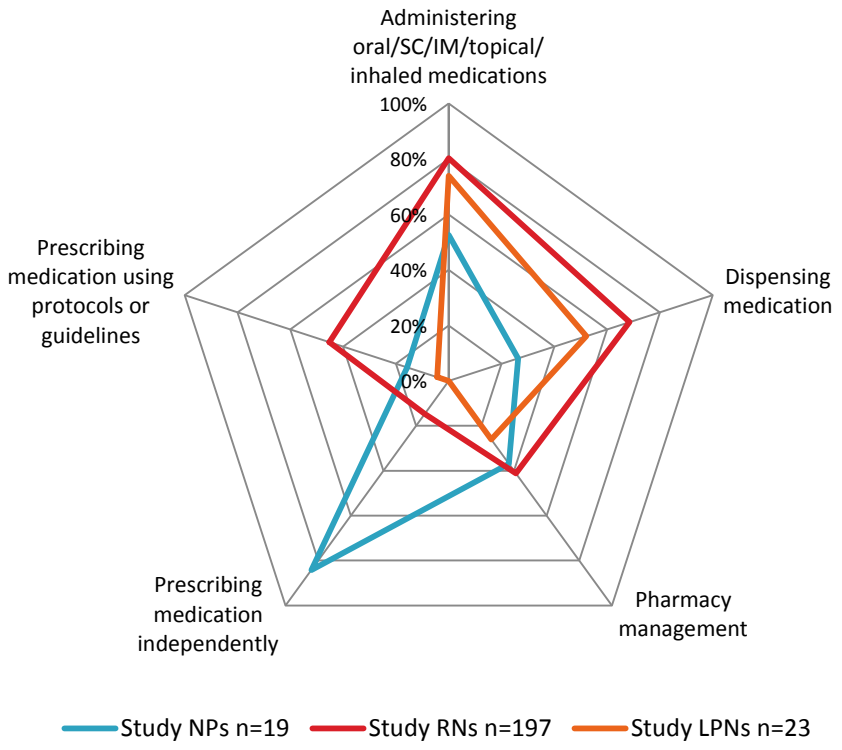
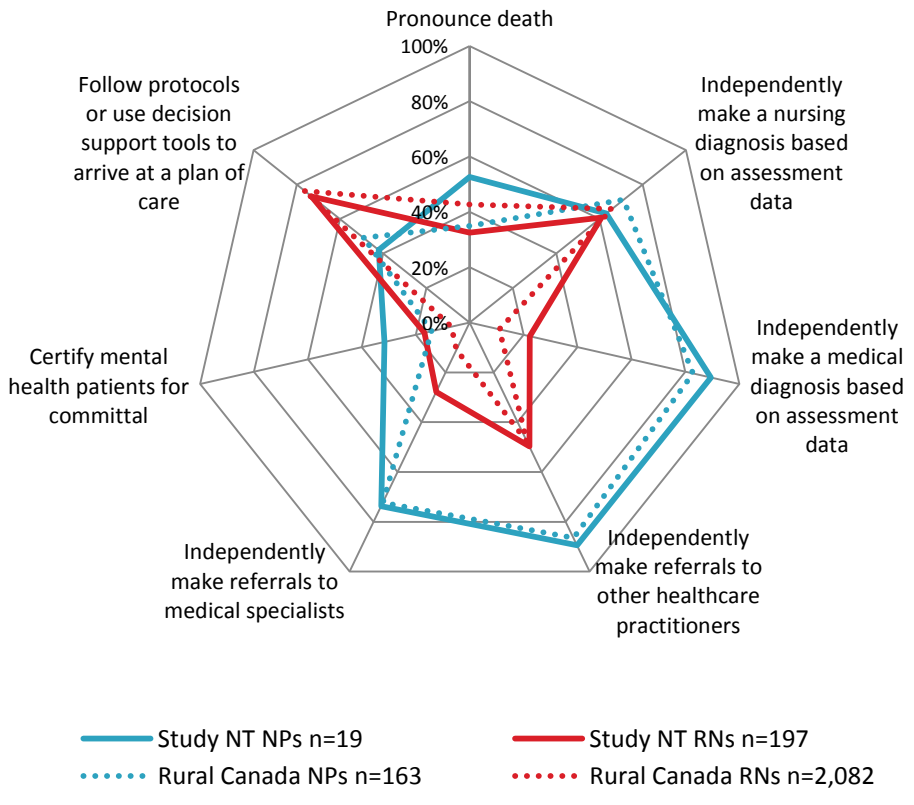



**Figure 8. Diagnosis and Referral: NPs and RNs in NT and Rural Canada**




advanced diagnostic tests (53%) and diagnostic imaging (59%). The minority of NT nurses indicated responsibility for ordering routine diagnostic imaging (43%), interpreting and following up diagnostic imaging (31%), and performing diagnostic imaging (24%).

NT RNs reported having an extended role in the category of *Therapeutic Management* compared to their counterparts, whereas NT NPs and LPNs were often engaged to a similar, or lesser, extent than rural NPs and LPNs in Canada overall. **Figure 7** displays the reported therapeutic management practices of NT nurses. Overall, NT nurses reported being responsible for administering (77%) and dispensing medication (64%), with the minority of nurses reporting responsibility for prescribing medication using protocols or guidelines (39%) and pharmacy management (39%).

In the category of *Diagnosis and Referral,* the majority of NT nurses reported following protocols or using decision support tools in their nursing practice (70%). NT nurses also identified they were responsible for independently making a nursing diagnosis based on assessment data (59%), independently making referrals to other healthcare practitioners (51%), and pronouncing death (31%). See **Figure 8** for a comparison of diagnosis and

referral activities between NT and rural Canada NPs and RNs.

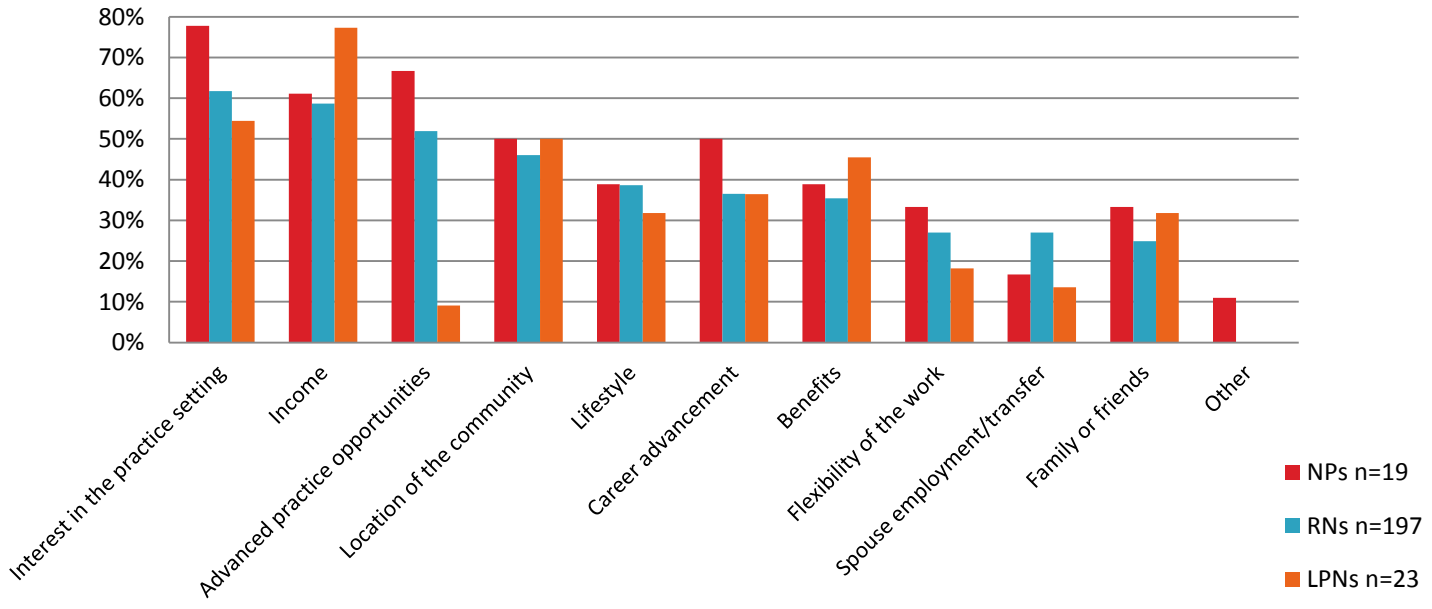
Surveyed NT nurses reported a greater responsibility for all *Emergency Care and Transportation* activities compared to rural nurses in Canada overall. NT nurses reported organizing urgent or emergent medical transportation (56%) and responding to or leading emergency calls as first responders (29%), compared to 45% and 15% of rural nurses in Canada overall. Both NT NPs and RNs organize urgent or emergent medical transportation, provide care during urgent or emergent medical transportation, and respond to or lead emergency search and rescue calls in rural, remote or wilderness settings more frequently than rural NPs and RNs in Canada overall (see Appendix A).

When it comes to *Leadership*, the majority of NT nurses reported supervising/mentoring nursing colleagues (65%), which is a greater proportion compared to rural nurses in Canada overall (50%). However, a lower proportion of NT nurses indicated that they supervise/mentor nursing students (59%) compared to their counterparts (63%). NT NPs indicated greater responsibility for supervising or mentoring nursing colleagues (68%) than rural NPs in Canada overall (55%). NT LPNs reported greater engagement in leading a unit/shift in a practice setting (39%), and a lower engagement in supervising or mentoring nursing students (35%) compared to rural LPNs in Canada overall (31% and 57%).

## *What are the career plans of nurses in Northwest Territories?*

Recruiting and retaining nurses in rural nursing positions is an ongoing challenge (Kulig, Kilpatrick, Moffitt, & Zimmer, 2015). For all NT nurses in the *RRNII* study, the most influential reasons they came to work in their primary work community were interest in the practice setting (62%), income (61%), advanced practice opportunities (49%), and location of the community (47%). For rural nurses in Canada overall, the most reported recruitment factors were location (56%) and interest in the practice setting (53%). See **Figure 9** for a breakdown of recruitment factors by type of nurse.

**Figure 9. Reasons Why NT Nurses Came to Work in their Community**

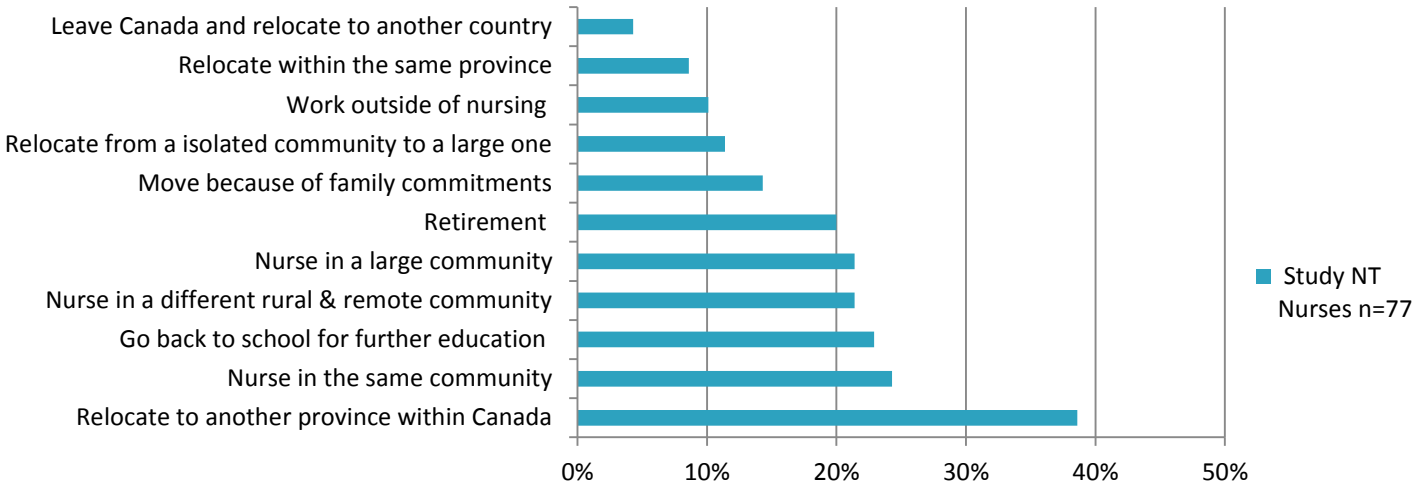



NT survey respondents were asked the reasons why they continue working in their primary work community. The strongest retention factors were interest in the practice setting (65%), income (65%), and advanced practice opportunities (47%). Benefits (45%), location of the community (44%), lifestyle (44%), and family or friends (41%) were

also viewed as retention factors. The large majority (87%) of NT nurses were satisfied with their primary work community; the remaining 13% were either neutral or were dissatisfied.

In the *RRNII* survey results, 34% of NT nurses indicated that they were planning to leave their present position within the next 12 months, which is a greater proportion than that found for rural nurses in Canada overall (26%). This included 24% of NPs, 34% of RNs, and 48% of LPNs. NT nurses who intended to leave (n=77) reported a variety of career plans, which are illustrated in **Figure 10**. Most often, they intended to relocate to another province or territory within Canada (39%), or nurse in the same community (24%). Of these nurses who intend to relocate outside of NT, 59% were younger than 45 years of age.

**Figure 10. Future Plans of NT Nurses who Intended to Leave Within Next 12 Months**



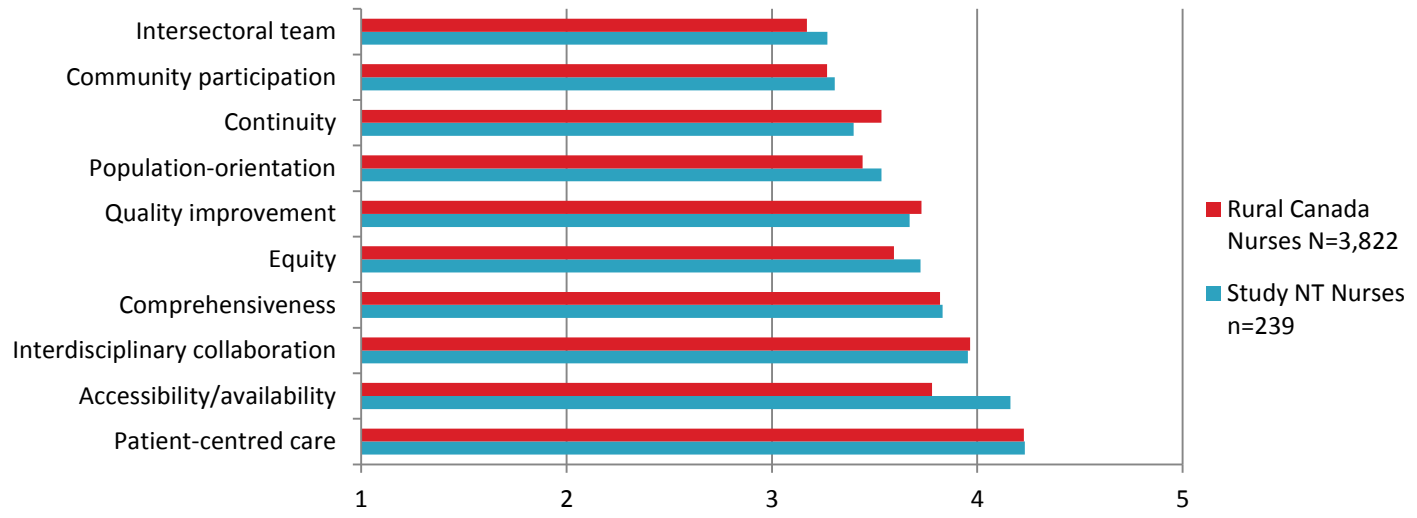

Some of the NT nurses who stated they intended to leave said they would consider continuing to work in a northern/remote community if certain conditions were met, such as if they were able to work short-term contracts (55%), receive an annual cash incentive (49%), have increased flexibility in scheduling (43%), and have opportunities to update their skills and knowledge (38%).

## *What do Northwest Territories nurses say about primary health care in their workplace?*

In the *RRNI* survey findings, it was clear that rural nurses in all settings were engaged in primary health care. In the *RRNII* survey, nurses were asked about aspects of health care at their workplace through the Primary Health Care Engagement Scale (Kosteniuk et al, 2016). Items were grouped in 10 categories: patient-centred care, interdisciplinary collaboration, comprehensiveness of care, quality improvement, and 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 11**.

It is evident that NT nurses in the *RRNII* study were engaged in primary health care, often to a similar extent as rural nurses in Canada overall, although NT nurses did have noticeably higher means in five categories compared to rural nurses in Canada overall. Important to note are the differences between NT and rural Canada on *Accessibility*.

**Figure 11. Nurses' Perspectives on Primary Health Care in their Workplace**




In general, *Patient-Centred Care* was regarded strongly positive by NT nurses in the *RRNII* study. Included are nurses' perceptions that their patients are treated with respect and dignity, that their workplace is a safe place for patients to receive healthcare services, that providers are concerned with maintaining patient confidentiality, and that providers are supported in thinking of patients as partners.

NT nurses also rated *Accessibility* to healthcare services strongly positive. These nurses felt strongly positive that patients needing urgent care can see a healthcare provider the same day, and that if their workplace is closed, patients can see a healthcare provider in person. NT nurses felt positive that services are organized to be as accessible as possible and that when their workplace is closed, patients can get medical advice by phone.

In terms of *Interdisciplinary Collaboration*, NT nurses provided positive ratings. NT nurses were positive that where overlap in responsibilities occurs, it is understood who should take the lead for a particular patient. Important to note is that NT nurses were strongly positive that healthcare providers from other disciplines consult them regarding patient care and that a collaborative atmosphere exists between healthcare providers from different disciplines.

Overall, *Comprehensiveness* of care was regarded positively. NT nurses were positive that their workplace addresses chronic conditions and that their workplace offers harm reduction or illness prevention initiatives. NT nurses were strongly positive that patients are referred to necessary services when they require a service their workplace does not provide.

NT nurses felt positively about *Equity*, having identified that patients in their workplace can afford to receive the health care they need, that their workplace is organized to address the needs of vulnerable or special needs populations, and that patients are able to access healthcare services regardless of individual or social characteristics and regardless of geographic location. Important to note is how NT nurses were strongly positive that healthcare providers understand the impact of social determinants of health.

Similarly, NT nurses gave positive reports on *Quality Improvement*. Nurses were strongly positive that there is a process in their workplace for responding to critical incidents, and were positive that patient charts are kept current, that their workplace uses patient health indicators to measure quality improvement, and also that quality is regularly measured in their workplace.

In the category of *Population-orientation,* NT nurses generally held positive views. NT nurses reported their workplace keeps current registries of patients who have chronic conditions and that there is monitoring within their workplace of patient outcome indicators, among other dimensions.

Despite positive views overall, NT nurses raised some concerns regarding *Continuity of Care.* While NT nurses were strongly positive that they have a good understanding of their patients' health history and have easy access to information about their patients' past health care provided in their workplace, continuity of care was difficult across settings. These nurses found care coordination for patients outside of their workplace difficult, and did not have easy access to information about their patients' past health care provided outside of their workplace. These two dimensions were perceived negatively.

When it comes to *Community Participation,* NT nurses were positive that their workplace supports healthcare providers in thinking of the community as a partner and that their workplace seeks input from the community about the healthcare services it needs, among other dimensions.

Finally, *Intersectoral Teams* was viewed positively by NT nurses. These nurses were positive that they personally work closely with community agencies, that their workplace works closely with community agencies, and that there have been improvements in the way community services are delivered based on community agencies working together. NT nurses reported to a lesser extent, but still positively, that community agencies meet regularly to discuss common issues that affect health.

Please note that the Primary Health Care Engagement Scale continues to be refined. Further details are available from the authors.

# Limitations

Since the CIHI population data combines NU and NT, we were only able to report on certain information with NT and NU combined. The number of NU RNs, NPs, and LPNs was sufficient for analysis at the territorial level. We can say the following: with 95% confidence, the survey sample of RNs, NPs, and LPNs in NU and NT was representative of NU and NT nurses as a whole, and the separate survey sample of RNs and NPs in NU and NT was representative of RNs and NPs in NU and NT; and say with below 85% confidence, the survey sample of NT LPNs was representative of LPNs in NT. We compared the age and gender characteristics of the study's sample with all rural nurses in the territories of NU and NT to see how similar or different they were. The two samples were comparable, for both age and gender (CIHI, 2017). In this fact sheet, not all statistical measures are reported. As well, results should be interpreted with caution.

# Summary

In 2015, the regulated nursing workforce (RNs, NPs, and LPNs) in NU and NT consisted of 1,191 nurses in total, with 49% working outside of Yellowknife; in comparison, 65% of the population was living outside of this regional center (CIHI, 2016).

In the *RRNII* study, a larger proportion of nurses in NT were living in their primary work community compared to rural nurses in Canada overall. The majority of NT nurses living outside of their work community travel to work a couple times a year.

A larger proportion of NT nurses were male compared to across rural Canada overall. More than half of NT RNs hold a bachelor's degree as their highest nursing education credential, which is a larger proportion than in rural Canada overall. There was a higher proportion of RNs and LPNs in NT above 65 years of age, compared to the rest of Canada overall.

A larger proportion of NT nurses work in a community smaller than 5,000 than do their counterparts. In some cases, their work communities were only accessible by plane and the large majority of NT nurses reported the distance to the next advanced referral centre was at least 1,000 km.

A smaller proportion of NT nurses were employed in a permanent position and a higher proportion reported working in a job share, casual or contract based position. A lower proportion of the nursing workforce in NT works in a hospital or nursing home, and a larger proportion works in a community health care setting compared to rural nurses in Canada overall.

A similar proportion of NT nurses indicated working within their licensed scope of practice compared to rural nurses in Canada overall. A larger proportion of NT NPs and RNs reported that they work beyond their scope than seen for rural Canada NPs and RNs, while one third of NT LPNs reported they work below their scope. In general, NT RNs were more engaged in nursing practice activities than their rural Canadian counterparts.

The most influential recruitment and retention factors for NT nurses were interest in the practice setting, income, and advanced practice opportunities. Just over one third of NT nurses indicated that they were planning to leave their present position within the next 12 months and a relatively large proportion of those who intend to leave are planning to relocate to another province or territory.

NT nurses were engaged in primary health care. In comparison to rural nurses in Canada overall, the category of *Accessibility* was regarded more positively by NT nurses, among other categories.

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# *Appendix A: Scope of Practice: Northwest Territories and Rural Canada RNs, NPs, and LPNs*

| | Study NPs | | Study RNs | | Study LPNs | |
|---|---|---|---|---|---|---|
| **Promotion, Prevention, and Population Health** | **NT % (n=19)** | **Rural Canada % (n=163)** | **NT % (n=197)** | **Rural Canada% (n=2,082)** | **NT % (n=23)** | **Rural Canada% (n=1,370)** |
| Chronic disease management | 78.9 | 90.8 | 65.5 | 62.7 | 73.9 | 74.9 |
| Maternal/child/family health programs | 52.6 | 70.6 | 49.7 | 35.2 | 21.7 | 18.0 |
| Lifestyle modification programs | 68.4 | 83.4 | 60.4 | 50.7 | 60.9 | 50.1 |
| Public and population health programs | 57.9 | 68.7 | 57.9 | 43.4 | 52.2 | 32.3 |
| Mental health programs | 31.6 | 44.2 | 37.1 | 30.4 | 43.5 | 32.4 |
| Community development/individual health capacity building programs | 21.1 | 31.9 | 26.9 | 17.7 | 26.1 | 12.6 |
| Illness/injury prevention | 47.4 | 45.4 | 41.1 | 38.4 | 52.2 | 47.4 |
| None of the above | 5.3 | 2.5 | 21.3 | 21.8 | 17.4 | 17.3 |

| **Assessment** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Complete history and physical assessment | 89.5 | 87.1 | 67.5 | 59.6 | 69.6 | 68.5 |
| Focused history and physical assessment | 94.7 | 92.6 | 74.6 | 70.3 | 65.2 | 61.4 |
| Infant and child health assessment | 63.2 | 77.3 | 47.7 | 32.3 | 13.0 | 12.5 |
| Older adult health assessment | 78.9 | 83.4 | 57.9 | 61.2 | 78.3 | 79.7 |
| Family assessment | 57.9 | 44.2 | 26.9 | 25.0 | 21.7 | 16.9 |
| Community assessment | 21.1 | 17.8 | 21.8 | 16.2 | 13.0 | 10.6 |
| Mental health assessment | 73.7 | 76.7 | 54.3 | 40.7 | 47.8 | 34.3 |
| Sexual assault assessment/exam | 57.9 | 31.3 | 39.6 | 19.4 | 4.3 | 5.0 |
| Third party assessment | 68.4 | 69.3 | 39.1 | 18.7 | 8.7 | 8.6 |
| Other assessment | 10.5 | 3.1 | 3.6 | 2.5 | 0.0 | 0.9 |
| None of the above | 5.3 | 2.5 | 16.8 | 10.7 | 17.4 | 10.8 |

| **Therapeutic Management** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Administering oral/SC/IM/topical/inhaled medications | 52.6 | 74.8 | 80.2 | 80.0 | 73.9 | 89.5 |
| Dispensing medication | 26.3 | 47.9 | 68.5 | 54.2 | 52.2 | 63.8 |
| Pharmacy management | 36.8 | 25.8 | 41.1 | 25.3 | 26.1 | 15.8 |
| Prescribing medication independently | 84.2 | 81.0 | 14.7 | 7.8 | 0.0 | 3.3 |
| Prescribing medication using protocols or guidelines | 15.8 | 37.4 | 45.2 | 29.5 | 4.3 | 11.5 |
| Other medication related responsibilities | 0.0 | 9.2 | 8.1 | 8.3 | 8.7 | 5.8 |
| None of the above | 5.3 | 3.1 | 14.7 | 14.8 | 17.4 | 8.6 |

| **Laboratory Tests** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Taking and processing orders for laboratory tests | 26.3 | 27.0 | 69.0 | 64.5 | 73.9 | 61.2 |
| Ordering laboratory tests | 89.5 | 89.6 | 48.2 | 37.4 | 21.7 | 28.5 |
| Obtaining samples for laboratory tests | 47.4 | 55.2 | 64.0 | 57.3 | 65.2 | 57.0 |
| Performing and analyzing on-site laboratory tests | 42.1 | 40.5 | 41.6 | 29.8 | 21.7 | 19.7 |
| Interpreting laboratory and diagnostic tests | 94.7 | 90.2 | 55.8 | 46.2 | 26.1 | 24.5 |
| None of the above | 5.3 | 3.1 | 20.3 | 19.6 | 17.4 | 18.4 |

| | Study NPs | | Study RNs | | Study LPNs | |
|---|---|---|---|---|---|---|
| **Diagnostic Tests** | **NT % (n=19)** | **Rural Canada % (n=163)** | **NT % (n=197)** | **Rural Canada% (n=2,082)** | **NT % (n=23)** | **Rural Canada% (n=1,370)** |
| Taking and processing orders for advanced diagnostic tests | 21.1 | 19.0 | 57.9 | 46.4 | 39.1 | 41.1 |
| Ordering advanced diagnostic tests | 52.6 | 60.7 | 12.7 | 8.1 | 4.3 | 7.6 |
| Performing advanced diagnostic tests | 57.9 | 40.5 | 5.1 | 1.6 | 4.3 | 1.3 |
| Interpreting and following up advanced diagnostic tests | 73.7 | 73.0 | 24.9 | 13.3 | 4.3 | 6.1 |
| None of the above | 21.1 | 18.4 | 39.1 | 49.2 | 56.5 | 55.8 |

| **Diagnostic Imaging** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Taking and processing orders for diagnostic imaging | 21.1 | 20.2 | 62.9 | 53.7 | 60.9 | 48.3 |
| Ordering routine diagnostic imaging | 78.9 | 84.7 | 41.6 | 25.7 | 21.7 | 16.9 |
| Ordering advanced diagnostic imaging | 73.7 | 48.5 | 7.1 | 5.9 | 8.7 | 7.4 |
| Performing diagnostic imaging | 26.3 | 10.4 | 26.9 | 8.8 | 0.0 | 0.9 |
| Interpreting and following up diagnostic imaging | 78.9 | 71.8 | 29.9 | 14.3 | 4.3 | 3.3 |
| None of the above | 5.3 | 11.7 | 28.4 | 39.0 | 34.8 | 46.4 |

| **Diagnosis and Referral** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Follow protocols/use decision support tools to arrive at a plan of care | 42.1 | 49.1 | 73.1 | 76.3 | 60.9 | 74.3 |
| Independently make a nursing diagnosis based on assessment data | 63.2 | 71.2 | 60.9 | 65.9 | 34.8 | 36.4 |
| Independently make a medical diagnosis based on assessment data | 89.5 | 82.8 | 22.3 | 11.0 | 8.7 | 2.8 |
| Independently make referrals to other healthcare practitioners | 89.5 | 86.5 | 49.7 | 47.7 | 30.4 | 28.5 |
| Independently make referrals to medical specialists | 73.7 | 72.4 | 27.9 | 11.0 | 4.3 | 4.7 |
| Certify mental health patients for committal | 31.6 | 14.1 | 16.8 | 6.8 | 0.0 | 0.9 |
| Pronounce death | 52.6 | 35.0 | 32.5 | 42.7 | 4.3 | 22.9 |
| None of the above | 5.3 | 4.9 | 19.3 | 12.6 | 34.8 | 20.2 |

| **Emergency Care and Transportation** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Organize urgent or emergent medical transport | 42.1 | 39.9 | 61.4 | 52.0 | 17.4 | 35.5 |
| Provide care during urgent/emergent medical transportation | 42.1 | 33.1 | 29.4 | 35.4 | 26.1 | 19.6 |
| Respond/lead emergency calls as a first responder | 31.6 | 19.6 | 31.0 | 17.8 | 8.7 | 10.9 |
| Respond/lead emergency search and rescue calls in rural, remote or wilderness settings | 15.8 | 6.7 | 17.8 | 5.4 | 0.0 | 1.8 |
| None of the above | 52.6 | 50.3 | 35.0 | 41.3 | 60.9 | 52.8 |

| **Leadership** | **NT %** | **Canada %** | **NT %** | **Canada %** | **NT%** | **Canada%** |
|---|---|---|---|---|---|---|
| Supervising/mentoring nursing students | 68.4 | 68.7 | 61.4 | 66.6 | 34.8 | 56.6 |
| Supervising/mentoring nursing colleagues | 68.4 | 55.2 | 66.0 | 61.2 | 52.2 | 31.9 |
| Supervising/mentoring interprofessional students | 47.4 | 35.6 | 21.3 | 19.6 | 8.7 | 8.5 |
| Supervising/mentoring interprofessional colleagues | 26.3 | 20.9 | 18.3 | 15.2 | 4.3 | 6.3 |
| Leading a unit/shift in a practice setting | 26.3 | 16.6 | 44.2 | 47.2 | 39.1 | 30.7 |
| Leading an interdisciplinary health care team | 42.1 | 24.5 | 24.9 | 21.8 | 17.4 | 11.6 |
| Leading a community group | 21.1 | 15.3 | 15.2 | 10.1 | 4.3 | 2.0 |
| None of the above | 10.5 | 14.7 | 13.2 | 12.7 | 21.7 | 27.4 |