Nursing Practice in Rural and Remote Canada II

Nunavut 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 Nunavut (hereafter NU), 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. The national response rate was 40% (margin of error 1.5%).

Figure 1.

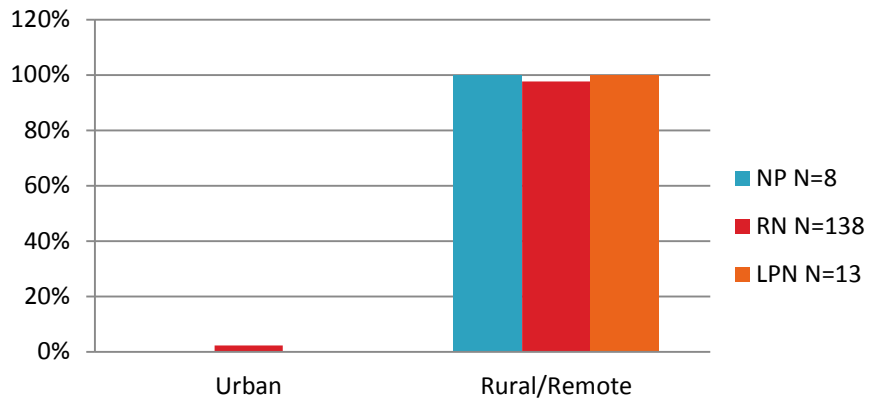
All 94 LPNs in NU were surveyed. All 1,122 RNs and NPs in both Nunavut and Northwest Territories were surveyed through the Registered Nursing Association of NU and NT which is responsible for regulating the RNs and NPs in both territories. **From Nunavut, a total of 163 nurses responded: 138 RNs, 8 NPs, and 13 LPNs**[1].

In this fact sheet, we compare three sets of data: NU 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. As the CIHI population data combines NU and NT RNs and NPs, we are only able to report on this combined 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 samples of RNs and NPs in NU and NT were representative of RNs and NPs in NU and NT. We can say with below 85% confidence that the survey sample of LPNs in NU was representative of NU LPNs.

As so few RPNs responded, we are unable to provide separate results for this nurse group.

Who are the nurses in Nunavut?

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



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

The minority of NU nurse respondents (34%) from the *RRNII* survey reported growing up in a community with a population of less than 5,000, whereas nearly half of NU nurses grew up in an urban community with a population larger than 30,000 (47%).

A lower proportion of surveyed NU nurses reported living in their primary work community (45%) 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 (77%) or on a monthly to bimonthly basis (20%), which is a different pattern than that reported by rural nurses in Canada overall (11% and 7%). The majority of NU nurses were married or living with a partner (58%); the minority with dependent children (30%).

In 2015, CIHI identified that the regulated nursing workforce (RNs, NPs, and LPNs) in NU and NT consisted of 1,191 nurses in total (CIHI, 2016). As all of the communities in Nunavut are under 10,000 people, all of the nurses in Nunavut are considered to be working in rural or remote settings.

Age and Gender

In the *RRNII* survey results, 40% of NU nurses were 55 years of age or older, compared to 32% of rural nurses in Canada overall; whereas only 22% were under 35 years of age, compared to 19% of rural nurses in Canada overall. The NU NPs were older than their rural counterparts in Canada overall, wherein 50% of NU NPs were over 55 years of age and only 25% of rural Canada NPs were in this age group. NU LPNs were generally younger than their counterparts in rural Canada overall (see **Table 1**).

[1] Due to small sample sizes, RPN respondent data are suppressed.

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

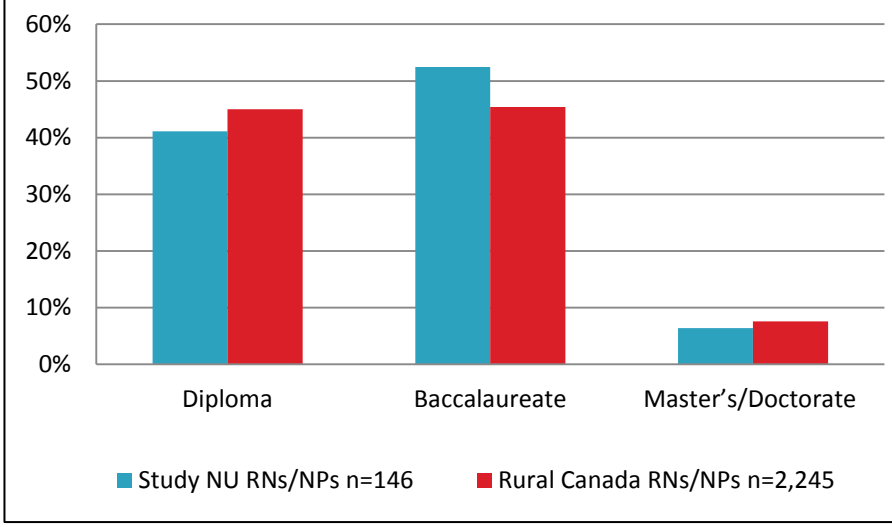
		<25 %	25-34 %	35-44 %	45-54 %	55-64 %	≥65 %
Study NU RNs	(n=138)	0.0	21.1	25.8	12.5	31.3	9.4
Rural Canada RNs	(n=2,082)	1.1	17.8	19.1	27.2	29.6	5.3
Study NU LPNs	(n=13)	23.1	15.4	23.1	30.8	7.7	0.0
Rural Canada LPNs	(n=1,370)	3.7	17.8	20.4	30.3	25.4	2.4

In the *RRNII* survey, the proportion of all male nurses (RNs, NPs, LPNs, and RPNs combined) working in NU (15%) was higher compared to the proportion of rural male nurses in Canada overall (6.4%). Furthermore, 13% of RNs in NU were male, compared to 6.2 % of rural RNs in Canada overall.

Education

In the *RRNII* survey, the level of nursing education among nurses in NU was slightly above the education level of rural nurses in Canada overall. The highest obtained nursing education credential of NU nurses was a doctorate degree, while the most commonly obtained highest nursing education credential was a diploma in nursing (48%), followed by a bachelor's degree in nursing (47%). 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, 3.1% of NU nurses held a rural and remote certificate.

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



All surveyed NU LPNs held a diploma in nursing as their highest nursing credential, while NU RNs were likely to either hold a bachelor's (53%) or a diploma (42%) 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 RNs and NPs in NU and rural Canada overall in the *RRNII* survey.

Where do nurses in Nunavut work?

The large majority of NU nurses who responded to the survey were employed in nursing (90%), while the remaining 10% were either on leave (5.6%) or were retired and occasionally working in nursing on either a casual or short-term contract basis (4.4%). **Table 2** shows the population of primary work community of NU nurses in the *RRNII* survey. A larger proportion of nurses in NU worked in a small community with a population under 1,000 (RNs 24% and LPNs 31%), compared to rural nurses in Canada overall (RNs 15% and LPNs 12%). Furthermore, the large majority of surveyed NU nurses (98%) reported their primary work community was only accessible by plane (national proportion 8.4%).

In some cases, no scheduled flights were offered (2.1%) or one flight into the work community was scheduled on 1-4 days a week (12%). In the majority of cases (59%) the primary work community was at least 1,000 km away from an urban center with a population larger than 10,000 (national proportion 7.0%). Finally, the large majority of NU nurses (84%) reported the distance to the next advanced referral centre was at least 1,000 km (national proportion 18%).

Table 2. Population of Primary Work Community, Nurses in NU

Community Population	% (n=163)
≤ 499	9.8
500 - 999	14.4
1,000 - 2,499	42.5
2,500 – 4,999	7.2
5,000 - 9,999	24.2
≥ 10,000	2.0

Interestingly, NU nurses reported a lower sense of work community cohesion on several items compared to rural nurses in Canada overall. For instance, only 49% of NU nurses agreed that they feel a sense of belonging to their community, compared to 75% of rural nurses in Canada overall, and only 48% of NU nurses agreed that living in their community gives them a sense of community, compared to 70% of rural nurses in Canada overall. Nurses who did not agree were either neutral, or disagreed. These findings could be reflective of the large proportion of NU nurses who fly in to their primary work community, or could relate to the greater proportion of casual and contract/term nurses in NU compared to across rural Canada overall.

Nursing Employment Status

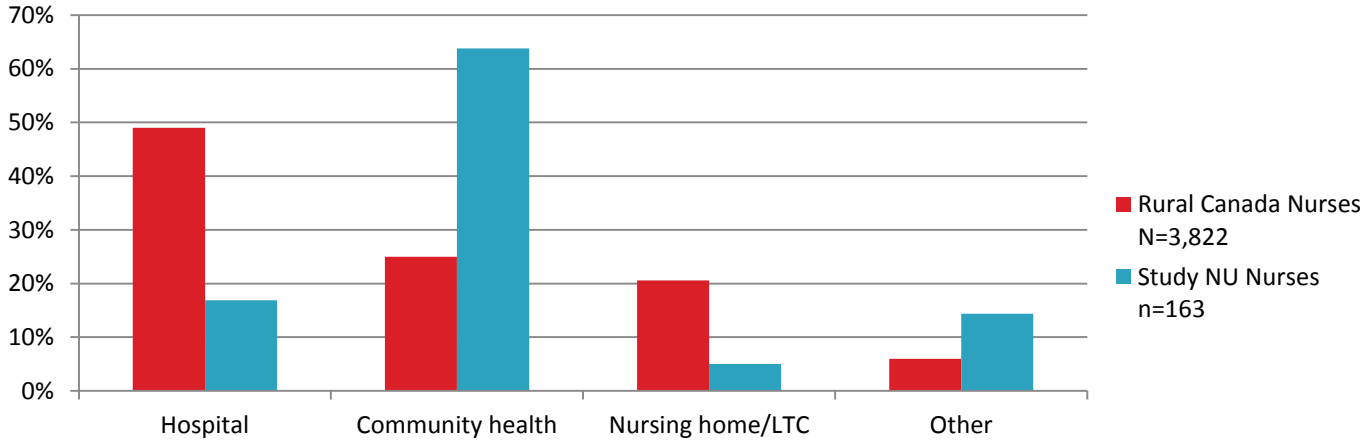
In the *RRNII* survey, the employment status of NU nurses was different from that seen in rural Canada overall. A smaller proportion of NU nurses were employed in a permanent position (51%) and a higher proportion in a casual or contract based position (61%) compared to rural nurses in Canada overall (84% and 20%). See **Table 3** for a detailed breakdown and comparison of nursing employment status between NU nurses and rural Canada nurses. The large majority of surveyed NU nurses worked as staff nurses (80%), the same as rural Canada overall (80%), and the small minority as managers (10%).

Table 3.Employment Status, Study NU Nurses and Rural Canada Nurses

Employment status	NU % (n=163)	Rural Canada % (N=3,822)
Full-time/Permanent	39.2	53.6
Part-time/Permanent	11.4	30.6
Job share	0.0	1.1
Casual	33.5	15.8
Contract/Term	27.2	4.5

Figure 4 shows the primary place of employment for rural nurses in Canada overall compared to surveyed NU nurses. As Figure 4 shows, a lower proportion of NU nurses worked in a hospital setting (17%) or a nursing home/long-term care facility (5.0%) compared to rural nurses in Canada overall (49% and 21%), and larger proportion worked in a community health care setting (64%) compared to rural nurses in Canada overall (25%).

Figure 4. Nursing Workforce in NU and 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 Nunavut?

A distinctive characteristic of northern nursing is its broad scope of practice, which is closely related to the remote/northern 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**.

A lower proportion of NU nurses in the *RRNII* survey reported working within their licensed scope of practice than rural nurses in Canada overall (66% vs 82%). While the large majority of NU NPs (75%) and the majority of RNs (65%) reported working within their licenced scope of practice, 25% of NPs reported working under their scope (6.3% rural Canada NPs) and 32% of RNs reported working beyond their scope (9.8% rural Canada RNs). The majority of NU LPNs (54%) reported working within their licenced scope of practice; the remainder (46%) reported working below their scope, which is a larger proportion than the national LPN proportion (18%). Due to the low number of NU NP respondents, we are focusing on the nursing responsibilities of all nurse types combined (RNs, NPs, LPNs, and RPNs) and on the separate reported responsibilities of NU RNs and LPNs in the following sections.

In terms of *Promotion, Prevention and Population Health,* the majority of NU nurses (RNs, NPs, LPNs, and RPNs combined) reported being responsible for chronic disease management (68%), population health programs (61%), life-style modification programs (60%), and maternal/child/family health programs (53%). NU RNs reported greater engagement on most related items than rural RNs in Canada overall, whereas NU LPNs reported less engagement on all items than rural LPNs in Canada overall (Appendix A). See **Figure 5** for a comparison of promotion, prevention and population health activities between NU and rural Canada nurses overall.

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

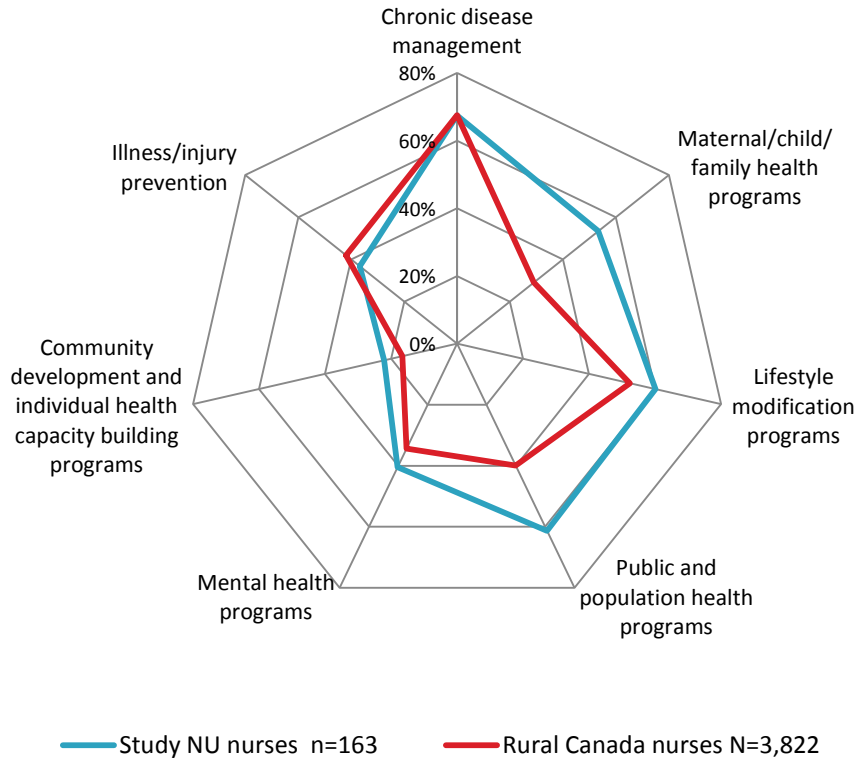
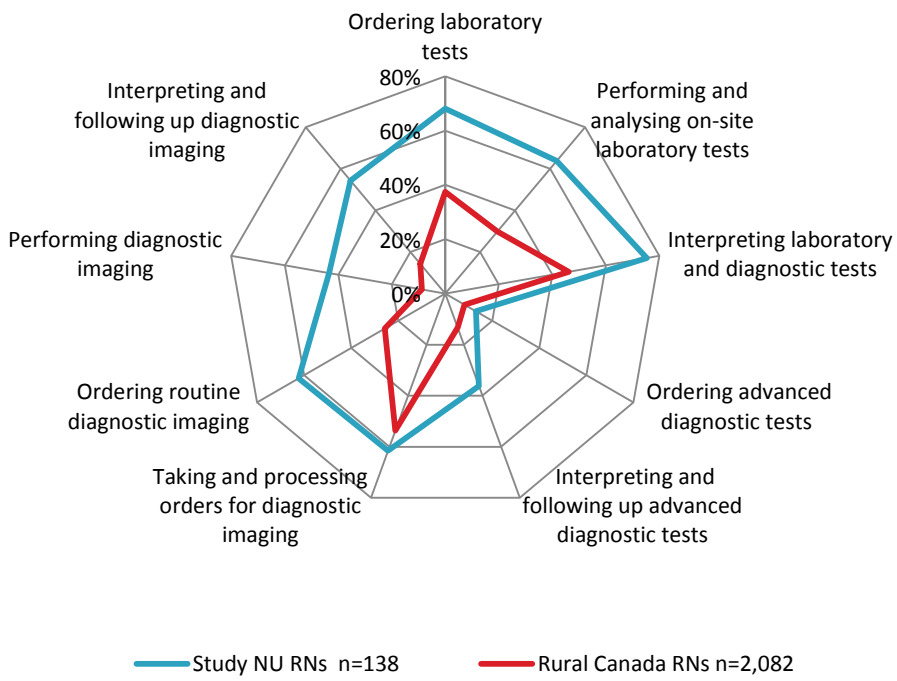


Figure 6. Diagnostics: RNs in NU and Rural Canada



Regarding *Assessment,* NU nurses reported providing health and wellness assessments such as focused history and physical assessment (82%), complete history and physical assessment (74%), older adult health assessment (70%), infant and child health assessment (63%), mental health assessment (62%), and third party assessment (54%). Overall, the reported assessment responsibility of NU nurses was substantially 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, and 25% infant and child health assessment.

In the category of *Diagnostics,* which included *Laboratory Tests, Diagnostic Tests,* and *Diagnostic Imaging,* NU RNs often reported greater activity than their counterparts (**Figure 6**). On the other hand, NU LPNs generally reported lower responsibility than rural LPNs in Canada overall for diagnostic activities. For all nurse types combined, NU nurses were responsible for obtaining samples for (76%), and taking and processing orders for (71%), laboratory tests. These nurses also indicated that interpreting laboratory and diagnostic tests (71%) and ordering laboratory tests (66%) were part of their nursing responsibility. Important to note is that 47% of NU nurses indicated they were not responsible for any aspect of diagnostic tests. The majority of NU nurses identified responsibility for taking and processing orders for diagnostic imaging (58%), ordering routine diagnostic imaging (58%), and interpreting and following up diagnostic imaging (51%).

The NU NPs and RNs reported having an extended role in the category of *Therapeutic Management* compared to their counterparts, whereas NU LPNs were often engaged to a similar, or lesser, extent as rural LPNs in Canada overall. **Figure**

7 displays the reported therapeutic management practices of NU nurses. Overall, NU nurses reported responsibility for administering medication (88%), dispensing medication (78%), prescribing medication using protocols or guidelines (58%), and pharmacy management (51%).

Figure 7. Theraputic Management: NU NPs, RNs and LPNs

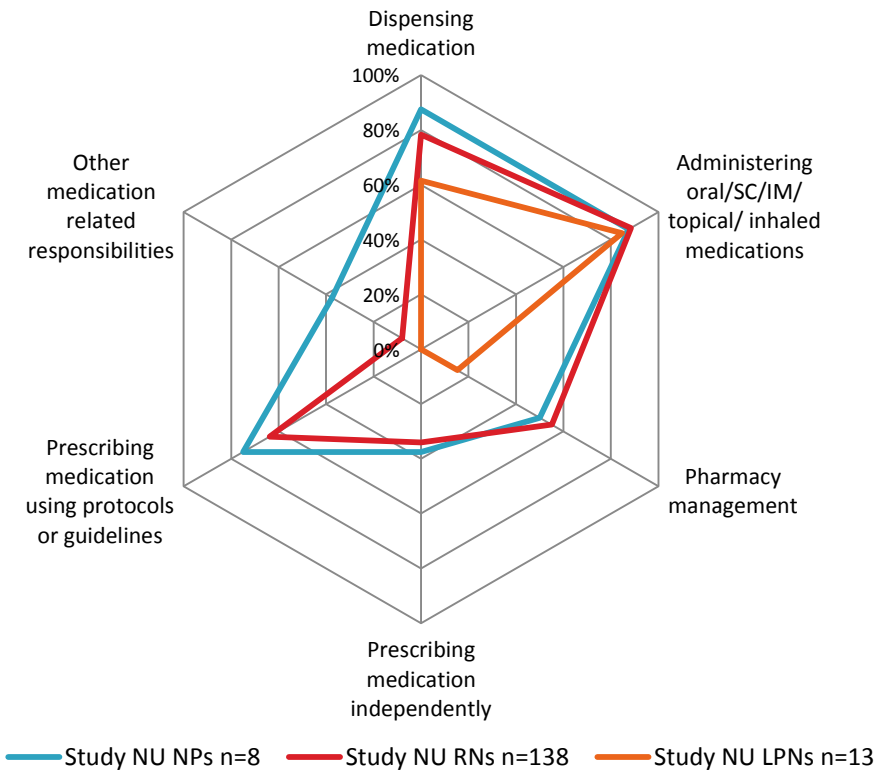
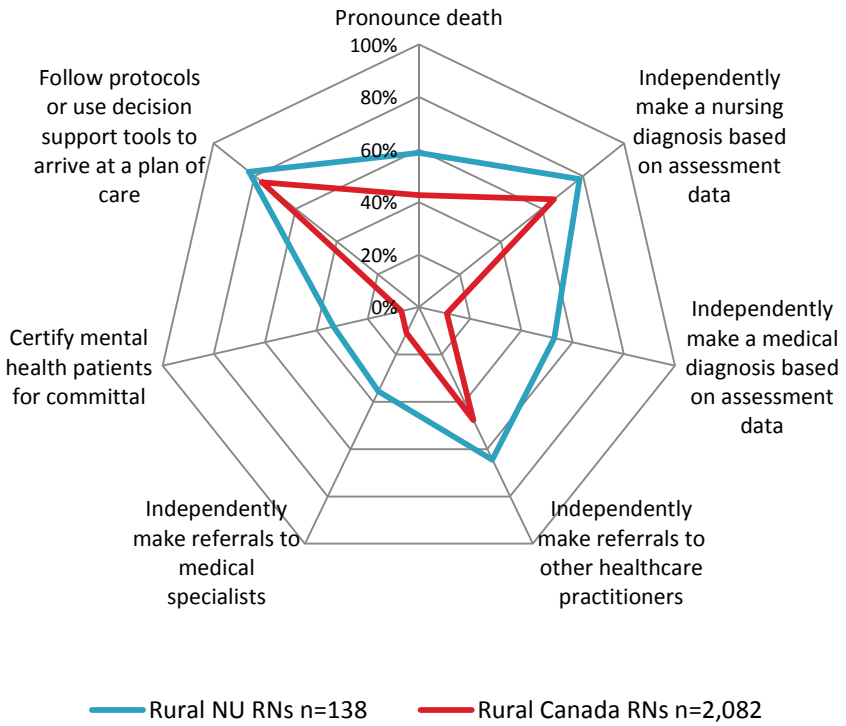


Figure 8. Diagnosis and Referral: RNs in NU and Rural Canada



In the category of *Diagnosis and Referral,* the large majority of NU nurses reported following protocols or using decision support tools in their nursing practice (81%). NU nurses also identified they were responsible for independently making a nursing diagnosis based on assessment data (75%), independently making referrals to other healthcare practitioners (61%), and pronouncing death (53%). NU RNs had a generally wider diagnosis and referral responsibility than that of rural RNs in Canada overall (**Figure 8**).

A larger proportion of NU nurses reported being responsible for all *Emergency Care and Transportation* activities compared to rural nurses in Canada overall. NU nurses reported organizing urgent or emergent medical transportation (68%) and providing care during urgent or emergent medical transportation (50%), compared to only 45% and 28% of rural nurses in Canada overall. NU RNs organize urgent or emergent medical transportation, respond to or lead emergency calls as first responders, and respond to or lead emergency search and rescue calls in rural, remote or wilderness settings more frequently than rural RNs in Canada overall (see Appendix A).

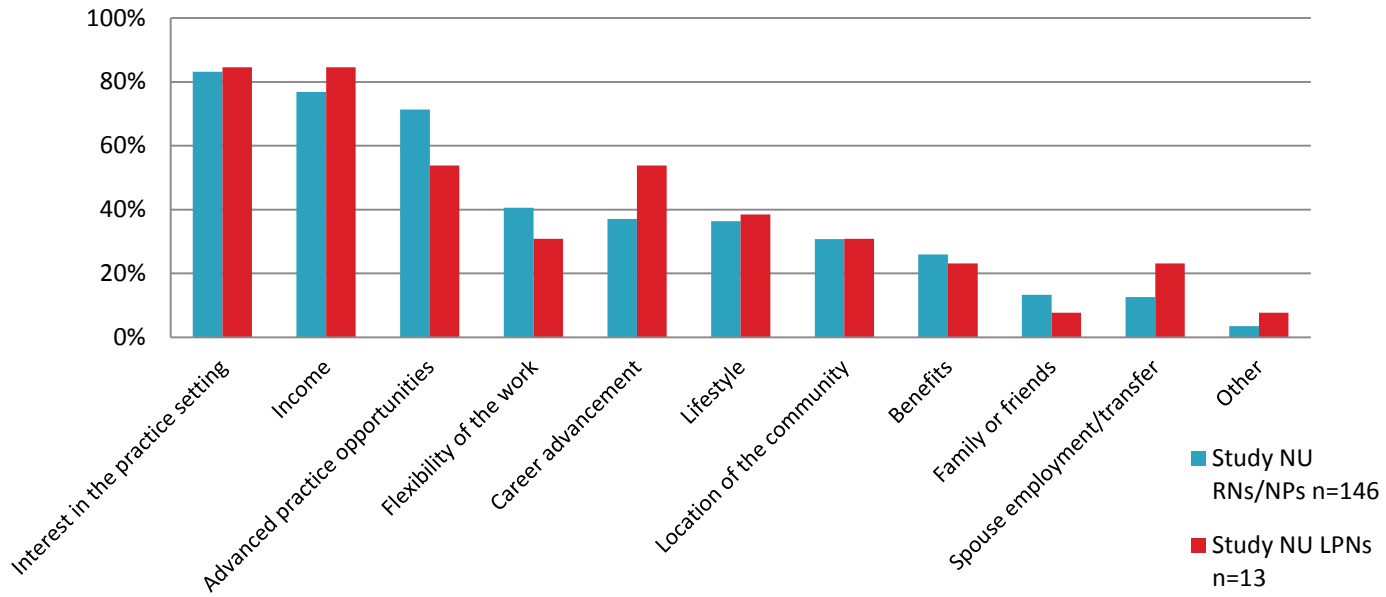
When it comes to *Leadership*, the majority of NU nurses reported supervising/mentoring nursing colleagues (59%), which is a greater proportion compared to rural nurses in Canada overall (50%). However, a lower proportion of NU nurses

indicated that they supervise/mentor nursing students (45%) compared to their counterparts (63%). NU LPNs reported a greater engagement in leading a unit/shift in a practice setting (62%), and a lower engagement in supervising or mentoring nursing students (15%) compared to rural LPNs in Canada overall (31% and 57%).

What are the career plans of nurses in Nunavut?

Recruiting and retaining nurses in rural nursing positions is an ongoing challenge (Kulig, Kilpatrick, Moffitt, & Zimmer, 2015). For all *RRNII* NU nurse respondents, the most influential reasons they came to work in their primary work community were interest in the practice setting (83%), income (78%), and advanced practice opportunities (70%). 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.

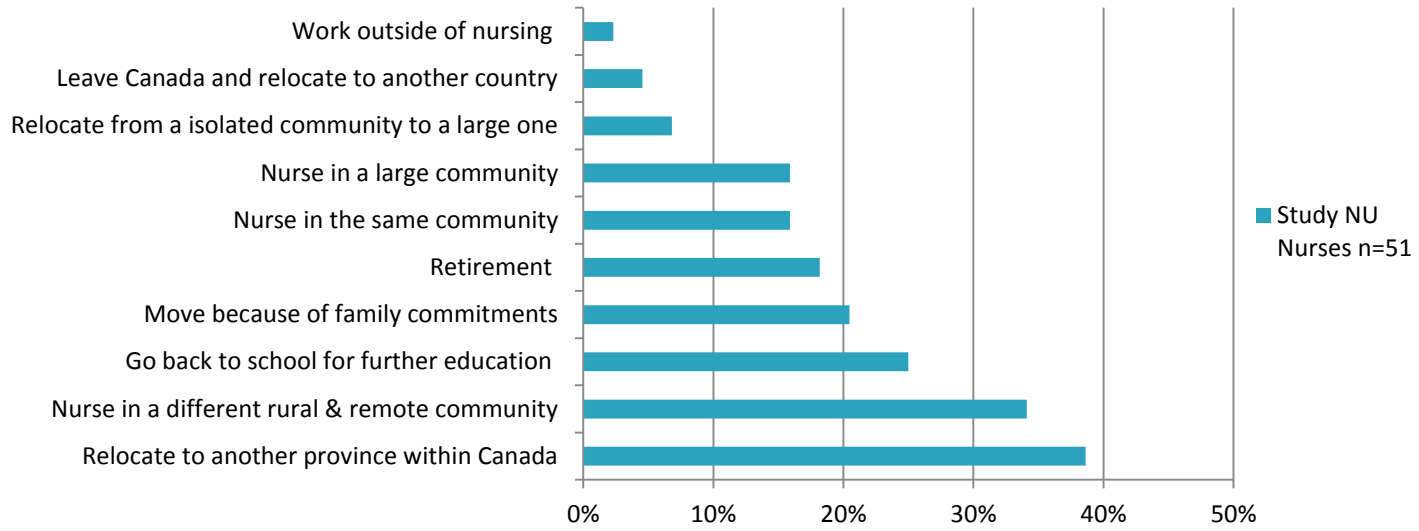
Figure 9. Reasons Why NU Nurses Came to Work in their Community



NU 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 (76%), income (76%), and advanced practice opportunities (61%). Flexibility of work (55%) and lifestyle (43%) were also viewed as retention factors. The majority (72%) of NU nurses reported being satisfied with their primary work community; the remaining 28% were either neutral or were dissatisfied. A greater proportion of rural nurses in Canada overall were satisfied with their primary work community (84%) compared to NU nurses.

In the *RRNII* survey results, 32% of NU 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 25% of NPs, 33% of RNs and 31% of LPNs. NU nurses who intended to leave (n=51) 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 a different rural or remote community (34%). Looking at the nurses who intend to relocate outside of NU, 69% are younger than 45 years of age.

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



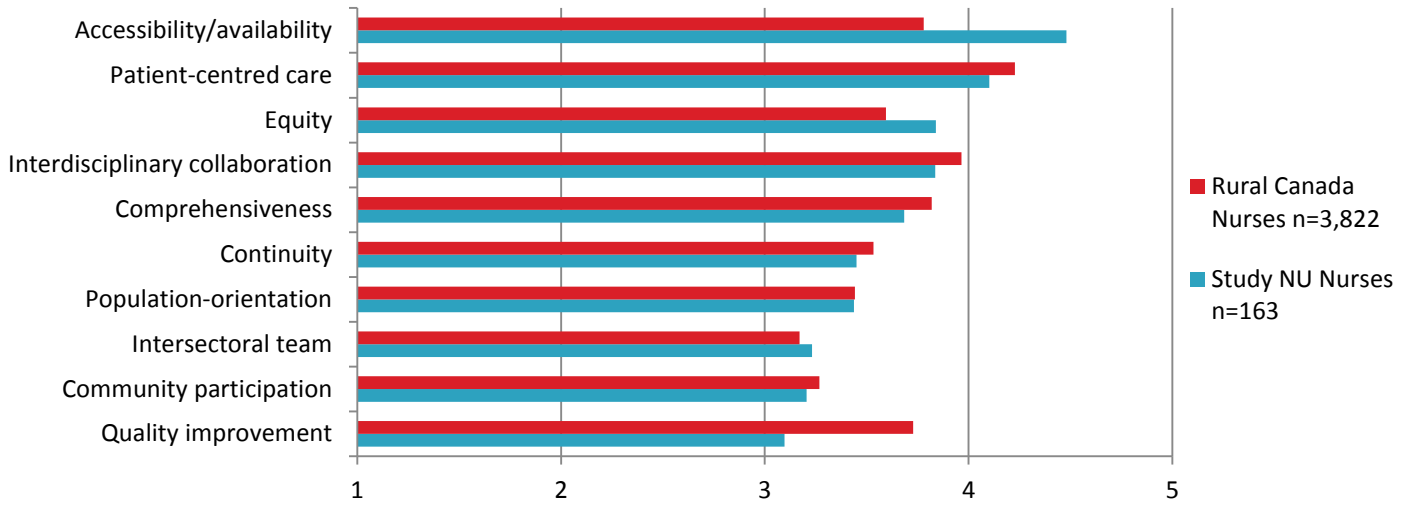
Some of the NU nurses who stated they intended to leave said they would consider continuing to work in a northern/remote community if certain conditions were met, such as if they were able to work short-term contracts (59%), receive an annual cash incentive (45%), have increased flexibility in scheduling (33%), and have opportunities to update their skills and knowledge (33%).

What do Nunavut 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 primary 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 NU nurses in the *RRNII* study were engaged in primary health care, often to a different extent than rural nurses in Canada overall, which is illustrated by lower means in six categories and higher means in three categories compared to rural nurses in Canada overall. Important to note are the differences between NU and Canada on *Quality Improvement* and *Accessibility*.

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



In general, *Accessibility* to healthcare services was regarded strongly positive. NU nurses in the *RRNII* study reported that patients needing urgent care can see a healthcare provider the same day when their workplace is open, 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.

NU nurses rated *Patient-Centred Care* strongly positive. 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, and that providers are concerned with maintaining patient confidentiality. There were positive ratings that providers are supported in thinking of patients as partners.

Surveyed NU 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. Important to note is how NU nurses were strongly positive that, regardless of geographic location, all patients have access to the same healthcare services, and that healthcare providers understand the impact of social determinants of health.

In terms of *Interdisciplinary Collaboration*, NU nurses were positive 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 for a particular patient. NU nurses were strongly positive that a collaborative atmosphere exists between healthcare providers from different disciplines.

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

NU nurses rated *Continuity of Care* positively, although an interesting pattern of results must be noted. While NU 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 indicated they did not have easy access to information about their patients' past health care provided outside of their workplace. These two dimensions were perceived negatively.

Similarly, *Population-orientation* was viewed positively by NU nurses, who 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.

In the category of *Intersectoral Teams,* NU nurses generally held positive ratings. NU 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. NU nurses reported that community agencies do not meet regularly to discuss common issues that affect health; this dimension was perceived negatively.

When it comes to *Community Participation,* NU 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, NU nurses gave positive reports on *Quality Improvement*. Nurses were positive that there is a process in their workplace for responding to critical incidents and that patient charts are kept current. However, NU nurses felt their workplace does not use patient health indicators to measure quality improvement and also felt that quality is not regularly measured in their workplace. These two dimensions were perceived negatively.

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 as a whole; and say with below 85% confidence, the survey sample of NU LPNs was representative of LPNs in NU. 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, CIHI identified that the regulated nursing workforce (RNs, NPs, and LPNs) in NU and NT consisted of 1,191 nurses in total (CIHI, 2016). As all of the communities in Nunavut are under 10,000 people, all of the nurses in Nunavut are considered to be working in rural or remote settings.

In the *RRNII* study, a smaller proportion of nurses in NU were living in their primary work community compared to rural nurses in Canada overall. The majority of NU nurses living outside of their work community travel to work a couple times a year. The finding that NU nurses do not feel as connected with their community may be reflective of this, and could have implications for a potentially higher turnover rate of NU nurses.

NU nurses generally work in smaller and more remote communities than their counterparts in Canada. In most cases, their work communities were only accessible by plane and the distance to the next advanced referral centre was at least 1,000 km.

A larger proportion of NU nurses were male compared to across rural Canada overall. More than half of NU RNs hold a bachelor's degree as their highest nursing credential, which is a larger proportion than in rural Canada overall.

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

A lower proportion of NU nurses indicated working within their licensed scope of practice than in rural Canada overall. One third of NU RNs reported they work beyond their scope, while just under half of LPNs stated that they work below their scope. In general, NU RNs were more engaged in practice activities related to scope of practice than their Canadian counterparts, whereas NU LPNs generally showed less engagement.

The most influential recruitment and retention factors for NU nurses were interest in the practice setting, income, and advanced practice opportunities. Just over one third of NU 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.

NU nurses were engaged in primary health care. In comparison to rural nurses in Canada overall, the category of *Accessibility* to healthcare services was regarded more positively while the category of *Quality Improvement* was regarded less positively by NU nurses.

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Appendix A. Scope of Practice: Nunavut and Rural Canada RNs and LPNs

	Study RNs		Study LPNs	
Promotion, Prevention, and Population Health	**NU % (n=138)**	**Rural Canada % (n=2,082)**	**NU % (n=13)**	**Rural Canada % (n=1,370)**
Chronic disease management	67.4	62.7	61.5	74.9
Maternal/child/family health programs	56.5	35.2	7.7	18.0
Lifestyle modification programs	58.0	50.7	46.2	50.1
Public and population health programs	63.8	43.4	30.8	32.3
Mental health programs	39.9	30.4	30.8	32.4
Community development and individual health capacity building programs	22.5	17.7	7.7	12.6
Illness/injury prevention	36.2	38.4	25.0	47.4
None of the above	21.7	21.8	23.1	17.3

Assessment	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Complete history and physical assessment	74.6	59.6	76.9	68.5
Focused history and physical assessment	83.3	70.3	84.6	61.4
Assessment Infant and child health assessment	64.5	32.3	53.8	12.5
Older adult health assessment	66.7	61.2	76.9	79.7
Family assessment	37.0	25.0	38.5	16.9
Community assessment	24.6	16.2	15.4	10.6
Mental health assessments	60.1	40.7	61.5	34.3
Sexual assault assessment/exam	51.4	19.4	7.7	5.0
Third party assessment	56.5	18.7	15.4	8.6
Other assessment	5.1	2.5	0.0	0.9
None of the above	5.1	10.7	0.0	10.8

Therapeutic Management	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Administering oral/SC/IM/topical/inhaled medications	88.4	80.0	84.6	89.5
Dispensing medication	78.3	54.2	61.5	63.8
Pharmacy management	55.1	25.3	15.4	15.8
Prescribing medication independently	34.1	7.8	0.0	3.3
Prescribing medication using protocols or guidelines	63.8	29.5	0.0	11.5
Other medication related responsibilities	8.0	8.3	0.0	5.8
None of the above	8.0	14.8	15.4	8.6

Laboratory Tests	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Taking and processing orders for laboratory tests	75.4	64.5	46.2	61.2
Ordering laboratory tests	68.1	37.4	23.1	28.5
Obtaining samples for laboratory tests	76.1	57.3	84.6	57.0
Performing and analyzing on-site laboratory tests	63.8	29.8	7.7	19.7
Interpreting laboratory and diagnostic tests	75.4	46.2	15.4	24.5
Are you responsible for - None of the above	8.0	19.6	15.4	18.4

	Study RNs		Study LPNs	
Diagnostic Tests	**NU % (n=138)**	**Rural Canada % (n=2,082)**	**NU % (n=13)**	**Rural Canada % (n=1,370)**
Taking and processing orders for advanced diagnostic tests	46.4	46.4	23.1	41.1
Ordering advanced diagnostic tests	13.0	8.1	0.0	7.6
Performing advanced diagnostic tests	2.2	1.6	0.0	1.3
Interpreting and following up advanced diagnostic tests	36.2	13.3	0.0	6.1
None of the above	43.5	49.2	76.9	55.8

Diagnostic Imaging	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Taking and processing orders for diagnostic imaging	61.6	53.7	30.8	48.3
Ordering routine diagnostic imaging	62.3	25.7	7.7	16.9
Ordering advanced diagnostic imaging	7.2	5.9	0.0	7.4
Performing diagnostic imaging	43.5	8.8	0.0	0.9
Interpreting and following up diagnostic imaging	54.3	14.3	7.7	3.3
None of the above	21.0	39.0	61.5	46.4

Diagnosis and Referral	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Follow protocols or use decision support tools to arrive at a plan of care	82.6	76.3	76.9	74.3
Independently make a nursing diagnosis based on assessment data	78.3	65.9	30.8	36.4
Independently make a medical diagnosis based on assessment data	52.9	11.0	0.0	2.8
Independently make referrals to other healthcare practitioners	64.5	47.7	15.4	28.5
Independently make referrals to medical specialists	35.5	11.0	7.7	4.7
Certify mental health patients for committal	33.3	6.8	0.0	0.9
Pronounce death	58.7	42.7	7.7	22.9
None of the above	8.0	12.6	23.1	20.2

Emergency Care and Transportation	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Organize urgent or emergent medical transport	71.0	52.0	30.8	35.5
Provide care during urgent/emergent medical transportation	54.3	35.4	15.4	19.6
Respond/lead emergency calls as a first responder	47.1	17.8	30.8	10.9
Respond/lead emergency search and rescue calls in rural, remote or wilderness settings	21.0	5.4	0.0	1.8
None of the above	20.3	41.3	46.2	52.8

Leadership	**NU %**	**Rural Canada %**	**NU %**	**Rural Canada %**
Supervising/mentoring nursing students	48.6	66.6	15.4	56.6
Supervising/mentoring nursing colleagues	61.6	61.2	30.8	31.9
Supervising/mentoring interprofessional students	17.4	19.6	0.0	8.5
Supervising/mentoring interprofessional colleagues	21.7	15.2	15.4	6.3
Leading a unit/shift in a practice setting	37.7	47.2	61.5	30.7
Leading an interdisciplinary health care team	21.7	21.8	23.1	11.6
Leading a community group	13.0	10.1	7.7	2.0
None of the above	15.9	12.7	23.1	27.4