

Nursing Practice in Rural and Remote Canada II

Registered Psychiatric Nurse National Survey Fact Sheet

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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 to better support nurses and improve health services in these areas.

The multi-method national study, Nursing Practice in Rural and Remote Canada II (RRNII) 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 aims to provide insights into the work lives and practice experiences of registered nurses (RNs), practitioners nurse 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/ruralnursing).

This survey partially replicates and considerably extends a national, cross-

sectional survey rural/remote RNs and NPs undertaken in 2001-2004, the Nature of Nursing Practice in Rural 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 registered psychiatric nurses (RPNs), who practice in the four western provinces as well as the territories. Please note that RPNs are only regulated in BC, AB, SK, MB and the Yukon; RPNs who practice in NWT and NU are regulated in one of these jurisdictions. This fact sheet summarizes results from the national survey regarding the nature of RPN nursing practice in rural/remote Canada, including a description of the RPNs, their work settings, perceptions of scope of practice, career plans, and how these RPNs experience accessibility and quality of PHC in their workplace. Separate national reports or fact sheets for NPs, RNs, and LPNs are available on the *RRNII* website.

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 the 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

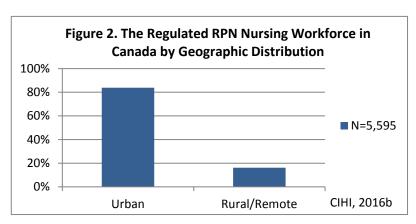
We received a total of 3,822 completed questionnaires (eligible sample = 9,622) by mail or on-line (2,082 RNs, 163 NPs, 1,370 LPNs, and 207 RPNs) from across Canada. The national response rate was 40% (margin of error 1.5%), with some variation between the provinces and territories. **From the four western provinces as well as the territories, a total of 207 RPNs responded**. Most RPNs who responded to the *RRNII* survey worked in the four western provinces; 6 RPNs worked in two of the three territories. The eligible sample of RPNs was 574 individuals and the response rate was 36% (n=207, margin of error 5.7%). We can say with 90% confidence that the rural RPN respondents in the four western provinces and the three territories are representative of rural RPNs in these regions as a whole¹.

In this fact sheet, the phrase 'rural Canada RPNs' is used to refer to the sample of RPNs who responded to the *RRNII* survey. The focus of this fact sheet is the rural RPN workforce data from the *RRNII* survey. To provide a context however, in this fact sheet, we compare three sets of data: rural RPN data from the *RRNII* survey, rural nurse (RNs, NPs, and LPNs) data for the four western provinces as well as the territories from the *RRNII* survey, and all RPN data from the Canadian Institute for Health Information analysis of the 2015 regulated nursing workforce database (CIHI, 2016a; CIHI, 2016b). The CIHI data situates the *RRNII* study findings in the context of the overall RPN nursing workforce. Given that RPNs practice in the four western provinces as well as in the territories, we provide comparisons of the *RRNII* RPN data with that of rural RNs, NPs, and LPNs in these same regions. These comparisons are detailed in **Appendix B**.

¹ The population of rural RPNs, the sample of RPNs, as well as the number of RPN surveys received back in the *RRNII* study from the sample, were used to calculate confidence levels and determine the representativeness of the respondents.

Who are the RPNs in rural Canada?

In 2010, approximately 20% of the general population lived in rural western Canada, which is where an estimated 16% of RPNs worked (Pitblado et al., 2013). Similarly, in 2015 over 15% of western Canada's RPNs worked in a rural or remote community (CIHI, 2016a). See Figure 2 for a breakdown of the rural and urban RPN nursing workforce in 2015.



Region of primary nursing employment

Of the 207 RPNs who responded to the *RRNII* survey, the greatest number resided in Manitoba (47%), followed by Saskatchewan (24%), Alberta (22%), British Columbia (4.3%), and the territories combined (2.9%).

Gender and age

The large majority of rural Canada RPNs were female (85%) with ages ranging from 21-75 years. Notably, a larger proportion of RPNs were male (15%) compared to 7.3% of RNs, 2.7% of NPs, and 6.1% of LPNs in rural western Canada. The average age of rural Canada RPNs (48.3) in the *RRNII* survey is similar to 2010, when the average age of rural RPNs was 48.6 years (Pitblado et al., 2013). On average, rural Canada RPNs were older than western RNs (47.8) and LPNs (46.5), and were similar in age to western NPs (48.5). The small minority of RPNs were under 35 years of age (14%) and 33% were 55 years of age or older. For a detailed age breakdown, see **Table 1**.

Table 1. Age Distribution of RPNs in Rural Canada

		< 25 %	25-34 %	35-44 %	45-54 %	55-64 %	≥ 65 %
RPNs	(n=207)	2.5	11.2	19.3	34.0	26.4	6.6

Marital status and dependents

The large majority of rural Canada RPNs were married or living with a partner (76%), 14% were divorced/separated, 7.9% were single, and 2.5% were widowed. A sizeable minority of RPNs had one or more dependent children living with them (45%) and 5.4% were providing care for a dependent adult in their home.

Indigenous ancestry

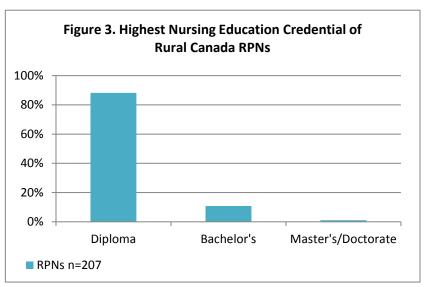
A small proportion of rural Canada RPNs in the *RRNII* survey self-declared as having First Nations, Inuit, or Métis ancestry (8.0%), in comparison to 7.0% of RNs, 5.6% of NPs, and 10% of LPNs. It is important to note that some nurses may have chosen not to self-declare.

General and mental health

The majority of rural Canada RPNs reported that they were in good/very good health (74%); the remaining RPNs were either in excellent health (17%) or were in fair/poor health (8.9%). These RPNs reported similarly about their mental health, such that 78% identified they were in good/very good mental health; the remaining RPNs were either in excellent mental health (16%) or were in fair/poor mental health (6.4%).

Education

Rural Canada RPNs most commonly held a diploma in nursing (88%), followed by a bachelor's degree in nursing (11%) as their highest obtained nursing education credential. Of the RPNs who held a diploma as their highest nursing credential, 94% held a diploma in psychiatric nursing and 2.4% held an advanced diploma in psychiatric Figure 3 nursing. See for a breakdown of RPNs' nursing credentials.



Although the large majority of rural Canada RPNs held an education credential in nursing, a subset of RPNs (n=26) held a non-nursing credential in addition to a nursing credential. The most common non-nursing credential was a bachelor's degree, which had been completed by 12% of RPNs.

Number of years licensed to practice

On average, rural Canada RPNs had been working as RPNs for 22.4 years. The majority of RPNs had been registered/licensed to practice in Canada for over 20 years (63%), whereas 22% had been licensed to practice for 10 years or less.

Size of childhood community

The majority (62%) of rural Canada RPNs reported growing up in a community with a population of less than 10,000; 37% of all RPNs grew up in a community with a population of less than 1,000. Notably, 22% of all RPNs grew up outside of any city or town.

What are the work settings of RPNs in rural Canada?

Nursing employment status

The large majority of rural Canada RPNs identified themselves as employed in nursing (93%), while the remaining 6.9% were either on leave (3.0%) or were retired and occasionally working in nursing (3.9%) on either a casual or short-term contract basis. It is unclear whether the RPNs who were retired and occasionally

working in nursing were only retired from full-time employment, or if their setting and provision of direct care had changed. The majority of RPNs held a full-time permanent position (63%) and 28% held a part-time permanent position (respondents could hold more than one position). A further 12% worked casual, 2.0% contract/term, and 0.5% in a job share.

The large majority of RPNs (89%) had worked in one to three different rural/remote communities, for three months or longer, over the course of their nursing career. In comparison, 79% of RNs, 59% of NPs, and 94% of LPNs in western Canada had worked in one to three different rural/remote communities.

Work setting and distance from major centres

The majority (55%) of rural Canada RPNs reported working in a primary work community of less than 10,000. A small minority of RPNs (10%) reported working in a community with a population of less than 1,000 and only 3.4% reported their primary work community to only be accessible by plane. **Table 2** shows the population of the primary work community of rural RPNs overall.

The majority of rural Canada RPNs reported living in their primary work community (61%). Of the nurses who were not residing in their primary work community, 64% traveled to work on a daily basis, with a typical commute time of up to seven hours per week (83%).

The majority of rural Canada RPNs (61%) indicated that they worked less than 100 km from a centre with a population of 10,000-49,999 and 33% of RPNs reported their primary work community being less than 100 km from a centre with a population of over 50,000. The majority of RPNs (73%) reported that their primary work community was less than 100 km from a basic referral centre. One third of RPNs (33%) identified that their primary work community was 100-199 km from an advanced referral centre.

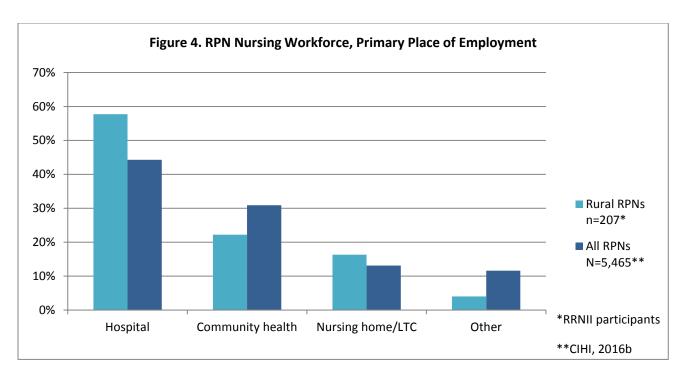
Table 2. Population of Primary Work Community, RPNs in Rural Canada

	RPNs
Community Population	% (n=207)
≤ 999	10.0
1,000 - 2,499	10.5
2,500 - 4,999	8.0
5,000 - 9,999	26.0
10,000 - 29,999	33.0
≥ 30,000	12.5

The large majority of rural Canada RPNs were satisfied with their home community (82%); the remaining 18% were either neutral (13%) or were dissatisfied (5.4%). Similarly, the large majority of RPNs were satisfied with their primary work community (83%); the remaining 17% were either neutral (10%) or were dissatisfied (6.9%).

Area of nursing practice and primary place of employment

We asked nurses to name their area of current practice and asked them to identify their primary place of employment along with their current primary position. The majority of rural Canada RPNs identified their area of current practice to be mental health (69%) and 23% identified long-term care. A further 10% identified community health (respondents could identify more than one practice area). **Figure 4** shows the primary place of employment for rural Canada RPNs compared to all RPNs in Canada overall. As Figure 4 shows, 58% of rural Canada RPNs worked in a hospital setting and 22% in a community health setting.



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 and public health department/unit.

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, physician's office/family practice unit or team and other place of work.

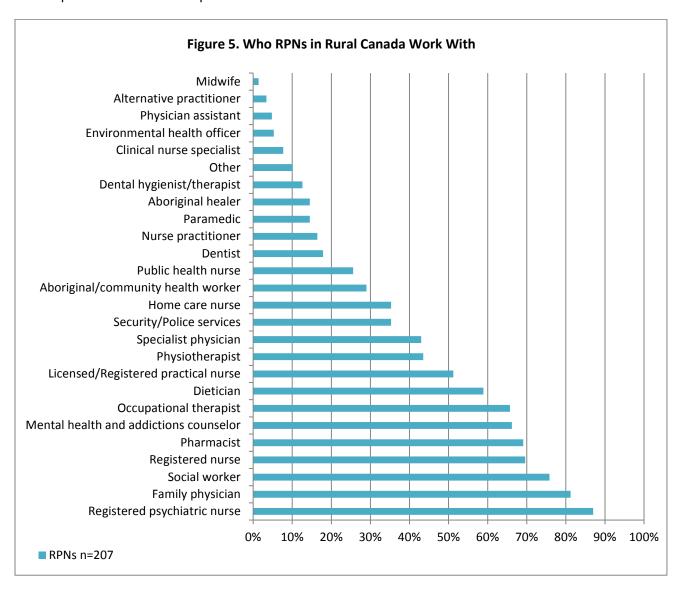
In terms of current primary position, the large majority of rural Canada RPNs worked as staff nurses (77%); 11% worked as clinical nurse specialists and 8.5% as managers. Regarding duration of primary position, 25% of rural Canada RPNs had been in their primary position for 20 years or more, 56% for 3-19 years, and 19% for 2 years or less. Nearly a third of RPNs (32%) had been employed by their primary employer for 20 years or more.

Finally, the large majority of RPNs were satisfied with their current nursing practice (78%); the remaining RPNs were either neutral (9.5%) or were dissatisfied (13%).

Interprofessional practice

Rural Canada RPNs worked in teams at their primary workplace. The majority of rural Canada RPNs (66%) reported that they work with one or more RNs and 74% of RPNs reported working with at least one other RPN. It was most common for RPNs to work with between two and four other RPNs (28%). Moreover, 46% of RPNs worked with LPNs. However, only 5.8% of RPNs worked with NPs. The configuration of their work teams is of interest, since 77% of RPNs worked as staff nurses and 58% worked in a hospital setting, which includes mental health centres.

The large majority of rural Canada RPNs had a support network of colleagues who would provide consultation and/or professional support (85%). RPNs identified a wide variety of providers that were part of their usual interprofessional team, including RPNs (87%), family physicians (81%), social workers (76%), RNs (70%), and pharmacists (69%). See **Figure 5** for a complete breakdown of providers who rural RPNs identified working with as part of their usual interprofessional team.



Work hours and requirement to be on-call

Most often, rural Canada RPNs worked full-time hours (49%), with 31% working less than full-time hours and 20% working more than full-time hours. Day shifts (64%) and rotating shifts (22%) were the most common, with shift lengths typically 8 hours (75%). Rural Canada RPNs reported that they usually have input into how their work schedule is developed (50%), that their shift pattern is predictable (90%), and that their number of rest days are adequate (85%).

The small minority of RPNs were required to be on-call for their work (22%). Of the RPNs who were required to be on-call, 44% reported being called back to work at least a few times a month. Furthermore, 35% of these RPNs reported that they are called back to work on their days off. The majority of RPNs were satisfied with the amount of time they were on-call (60%); the remaining 40% were either neutral (24%) or were dissatisfied (16%).

Information access and education sources

Rural Canada RPNs had access to various information sources in their primary workplace. For instance, RPNs had direct access to electronic communication between healthcare providers (91%), high speed internet (88%), and teleconferencing (81%). A smaller proportion of RPNs had direct access to videoconferencing (54%) and the minority had direct access to web conferencing (36%).

In the *RRNII* survey RPNs were asked to indicate how often they use in-person and online/electronic education sources to update their nursing knowledge. Most RPNs used online/electronic sources to update their nursing knowledge at least once per month (75%), rather than in person education sources (42%).

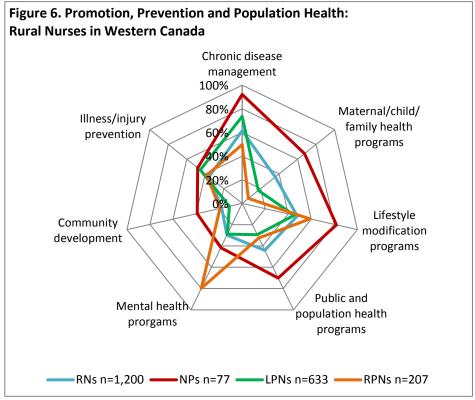
Violence in the workplace

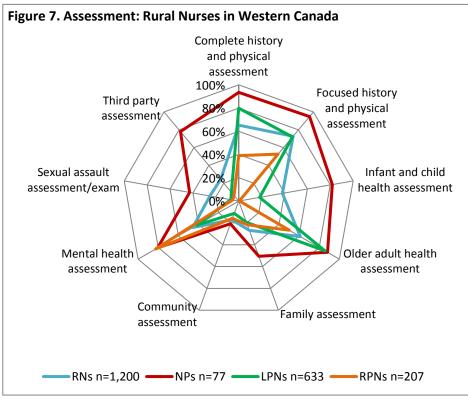
Rural Canada RPNs both experienced and witnessed violence in their workplace while carrying out their nursing responsibilities. In the four weeks before the survey, RPNs experienced emotional abuse (42%), threat of assault (39%) and physical assault (28%), and a smaller proportion experienced verbal/sexual harassment (23%), property damage (4.9%), stalking (2.0%), and sexual assault (1.0%).

In the *RRNII* survey, RPNs reported having witnessed violence in the workplace. Rural Canada RPNs had witnessed emotional abuse (48%), threat of assault (45%), physical assault (39%) and verbal/sexual harassment (31%), and some had witnessed property damage (11%), sexual assault (4.0%) and stalking (2.5).

What is the scope of RPN practice in rural Canada?

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 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.

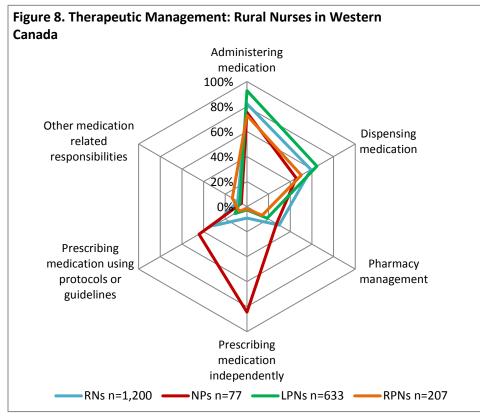


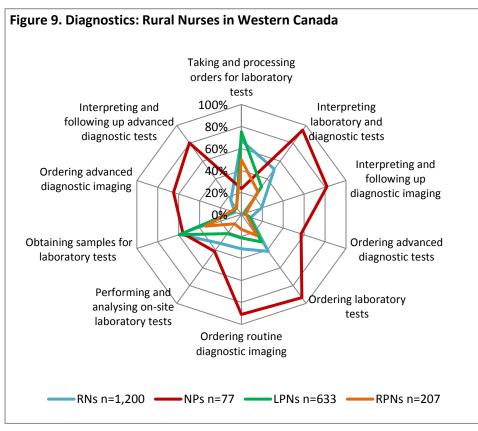


Note that the responses relate what to nurses perceived their as responsibilities rather than what may or may not have been within their legislated scope of practice. Detailed tables are included Appendix A.

The large majority of rural Canada **RPNs** reported working within their registered/licensed scope of practice (90%).The **RPNs** either remaining thought of their nursing role as beyond their licensed scope of practice (5.4%) or as below their licensed scope of practice (4.4%).

In terms of Promotion, Prevention and Population Health, rural Canada RPNs reported providing mental health programs (80%),lifestyle modification programs (59%), and chronic disease management (50%). As shown in Figure 6, rural Canada **RPNs** had dissimilar responsibility from other rural nurses western Canada, especially regarding the provision of mental health programs.

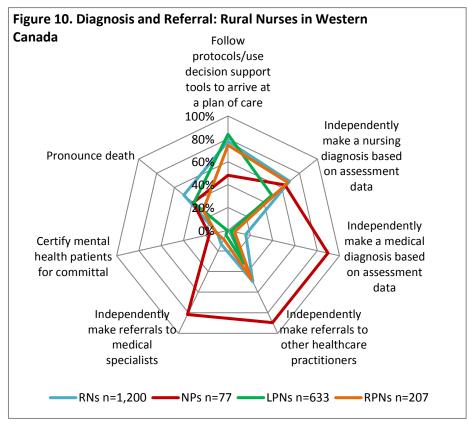


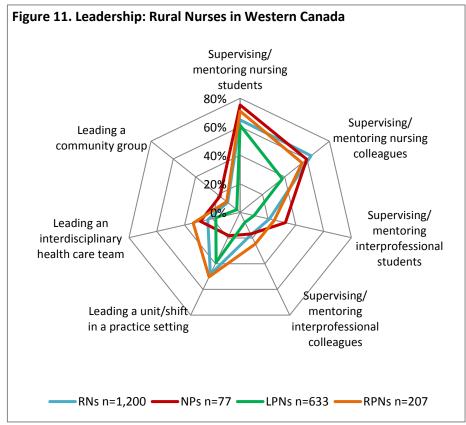


Regarding Assessment, rural Canada RPNs reported providing various health and wellness assessments. The large majority of RPNs indicated responsibility for providing mental health assessment (83%), and the majority identified providing focused history and physical assessment (53%), and older adult health assessment (50%). In most cases, rural Canada RPNs had a more narrow assessment responsibility their compared to counterparts in western Canada, with the exception mental health assessment (Figure 7).

Concerning **Therapeutic** Management, rural Canada **RPNs** identified being responsible for both administering (73%) and dispensing medication (50%). The reported management therapeutic responsibility of RPNs is displayed in Figure 8.

In relation to *Diagnostics*, which included *Laboratory Tests*, *Diagnostic Tests*, and *Diagnostic Imaging* (Figure 9), RPNs identified a limited responsibility. The majority of rural Canada RPNs indicated responsibility for taking and processing





orders for laboratory tests (50%). The majority of RPNs reported they were not responsible for any aspect of diagnostic tests (63%). Finally, the minority of rural Canada RPNs were responsible for taking and processing orders for diagnostic imaging (44%), while the majority of rural Canada RPNs reported no responsibility for diagnostic imaging (52%).

In terms of Diagnosis and Referral, rural Canada RPNs reported responsibility for following protocols or using decision support tools to arrive at a plan of care (74%) and independently making a nursing diagnosis based on assessment data (67%). Nearly half of these RPNs identified responsibility for independently making referrals to other healthcare practitioners (47%).The reported diagnosis and referral responsibility of rural Canada RPNs is similar to that of RNs and LPNs, although noticeable differences present between RPNs and NPs (Figure 10).

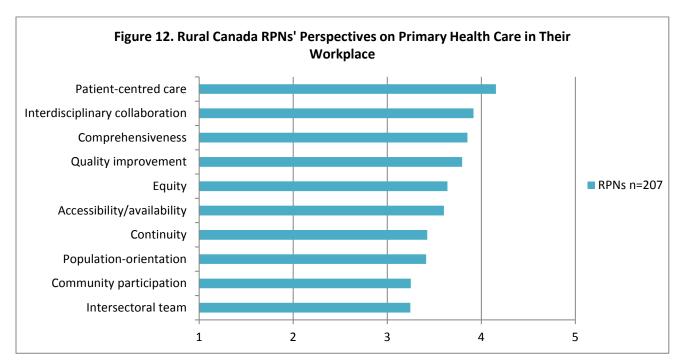
In regard to *Emergency Care* and *Transportation*, the majority of rural Canada RPNs did not report any responsibility (61%). Over a third of RPNs (35%) reported

that they organize urgent or emergent medical transportation.

Finally, in regard to *Leadership*, rural Canada RPNs indicated that they are responsible for supervising/mentoring nursing students (71%), supervising/mentoring nursing colleagues (56%), and leading a unit/shift in a practice setting (50%). Important to note is the generally wide leadership responsibility of rural Canada RPNs (**Figure 11**).

What do rural Canada RPNs say about primary health care in their workplace?

In the *RRNI* survey 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, 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 12**.



It is evident that rural Canada RPNs perceived their workplace to be engaged in primary health care, often to a similar extent as other rural nurses in the four western provinces and territories. Notably, RPNs gave lower ratings than RNs, NPs, and LPNs on *Accessibility*, and reported more positively on *Quality Improvement*, *Equity*, and *Intersectoral Teamwork* (**Appendix B**).

Rural Canada RPNs rated *Patient-Centred Care* strongly positive, reporting that their patients are treated with respect and dignity, their workplace is a safe place for patients to receive healthcare services, and that providers are concerned with maintaining patient confidentiality. These nurses were positive that providers are supported in thinking of their patients as partners.

In general, rural Canada RPNs rated *Interdisciplinary Collaboration* positively. Included are RPNs' perceptions that it is understood who should take the lead with a patient when there is overlap in responsibilities. RPNs 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.

Similarly, *Comprehensiveness* of care was rated positively. Rural Canada RPNs reported positively that their workplace offers harm reduction or illness prevention initiatives, that chronic conditions are addressed, and that patients are referred to necessary services when they require a service their workplace does not provide.

In terms of *Quality Improvement*, rural Canada RPNs were positive that their workplace keeps patient charts current, that their workplace uses patient health indicators to measure quality improvement, and that quality is regularly measured. Importantly, RPNs were strongly positive that there is a process in their workplace for responding to critical incidents.

Equity was also perceived positively by rural Canada RPNs. Included are RPNs' perceptions that their workplace is organized to address the needs of vulnerable or special needs populations and that patients have access to the same healthcare services regardless of geographic location or individual/social characteristics. RPNs reported to a lesser extent, but still positively, that patients in their workplace can afford to receive the healthcare services they need. Rural Canada RPNs were strongly positive that their workplace understands the impact of social determinants of health.

Overall, *Accessibility* to healthcare services was regarded positively, wherein rural Canada RPNs were positive that patients needing urgent care can see a healthcare provider the same day if their workplace is open. Also, RPNs were positive that health services are organized to be as accessible as possible and that if their workplace is closed, patients can see a healthcare provider in person or can get medical advice by phone.

Rural Canada RPNs also rated *Continuity of Care* positively, although an interesting pattern of results must be noted. These RPNs were strongly positive that they have a good understanding of their patients' health history and were positive that they have easy access to information about their patients' past care provided in their workplace. However, coordination of care across settings is a different matter. Coordinating care for patients that takes place outside of their workplace and getting access to information about patients' past health care provided by other healthcare providers outside of their workplace were difficult. These two dimensions were perceived negatively.

Population Orientation was perceived positively by rural Canada RPNs, with a good fit between workplace services and community healthcare needs. Also included are RPNs' perceptions that their workplace has taken part in a needs assessment of the community, that their workplace keeps current registries of patients with chronic conditions, that their workplace is quick to respond to the health needs of the community, and that their workplace monitors patient outcome indicators.

A similar pattern of results is seen regarding *Community Participation*, which was rated positively by rural Canada RPNs. These RPNs reported that community members are treated as partners when deciding about healthcare service delivery changes, that their workplace seeks input from the community about which services are needed, that healthcare providers are supported in thinking of the community as a partner, and that their workplace has implemented changes that emerged from community consultations.

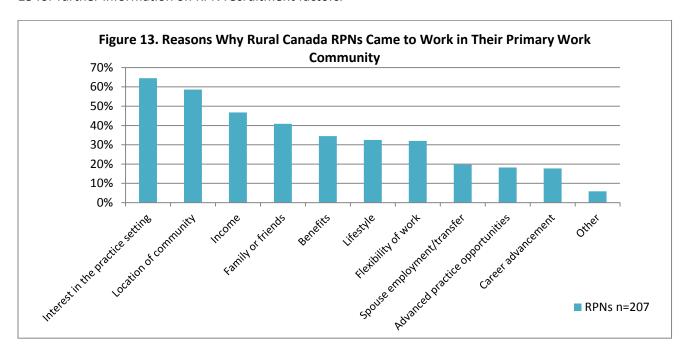
Finally, there were positive ratings of *Intersectoral Teams*, although some important findings must be noted. Rural Canada RPNs reported positively that their workplace works closely with community agencies, that they personally work closely with community agencies, and that there have been improvements in the way community services are delivered based on community agencies working together. However, RPNs generally disagreed that community agencies meet regularly to discuss common issues that affect health. This dimension was perceived negatively.

Further details on the Primary Health Care Engagement Scale can be found in the Kosteniuk et al. (2017) article titled Exploratory Factor Analysis and Reliability of the Primary Health Care Engagement (PHCE) Scale in Rural and Remote Nurses: Findings from a National Survey.

What are the career plans of RPNs in rural Canada?

Recruitment and retention

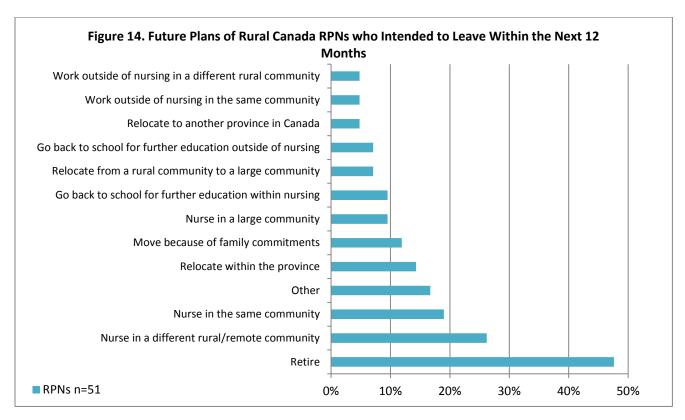
Recruiting and retaining nurses in rural nursing positions is an ongoing challenge (Kulig, Kilpatrick, Moffitt, & Zimmer, 2015). The most frequent reasons rural Canada RPNs came to work in their primary work community were interest in the practice setting (65%), location of the community (59%), and income (47%). See **Figure 13** for further information on RPN recruitment factors.



The reasons why rural Canada RPNs continued working in their primary work community were similar to the reasons why they came in the first place. The retention factors included income (60%), interest in the practice setting (57%), location of the community (53%), and family or friends (50%).

Career plans over the next 12 months

In the *RRNII* survey, nurses were asked about their career plans over the next 12 months and again for the next 5 years. A quarter (25%) of RPNs were planning to leave their present nursing position within the next 12 months, compared to 29% of RNs, 21% of NPs, and 27% of LPNs in the four western provinces and territories. Rural RPNs who intended to leave (n=51) reported a variety of career plans, namely to retire (48%) or nurse in a different rural/remote community (26%). The average age of RPNs planning to retire was 61 years. Of the RPNs who intended to leave within the next 12 months, the greatest proportion who intended to retire resided in Manitoba (55%). Interestingly, a much larger proportion of RPNs intended to retire (48%) compared to western RNs (31%), NPs (17%), and LPNs (25%). See **Figure 14** for a detailed breakdown of future career plans of rural Canada RPNs.



Rural Canada RPNs who stated they intended to leave said they would consider continuing to nurse in a rural/remote community if certain conditions were met, such as if they were to receive an annual cash incentive (47%), have increased flexibility in scheduling (41%), and work short-term contracts (33%).

Regarding career plans for the next 5 years, the majority of rural Canada RPNs were planning to nurse in the same community (64%), while 34% were planning to retire. A larger proportion of rural Canada RPNs were planning to retire in the next 5 years compared to rural RNs (33%), NPs (21%), and LPNs (27%) in western Canada.

Limitations

The *RRNII* findings provide a rare insight into the working lives of RPNs serving some of the most under-resourced rural and remote communities in western Canada. Moreover, *RRNII* is the first-ever comprehensive study of the rural and remote RPN workforce.

The number of rural Canada RPNs who responded to the *RRNII* survey was sufficient for statistical reporting, but lower than the number expected as reflected in the rate of response overall (36%). We can say with 90% confidence that the rural RPN respondents in the four western provinces and the three territories are representative of rural RPNs in these regions as a whole. Recall that RPNs are only regulated in BC, AB, SK, MB and the Yukon. RPNs who practice in NWT and NU will be working in an RPN role under a license from another jurisdiction. We are unable to compare findings by province/territory due to the lower response rates in some provinces/territories. We compared the age and gender characteristics of the *RRNII* study's sample of RPNs with all rural Canada RPNs to determine how similar or different they were. The two samples were comparable for age, although the *RRNII* survey under-represented male RPNs (CIHI, 2017). Because of this, findings should be interpreted with caution. As well, in this fact sheet, statistical associations are not reported.

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 also have 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.

It should also be noted that further analyses are being conducted on the *RRNII* data, which focus on primary health care and work settings, scopes of practice, career plans, and the qualitative comments made by nurses who responded to the survey. When completed, the publications and presentations that arise from these analyses will be noted in the *RRNII* website: http://www.unbc.ca/rural-nursing

Summary

In 2010, approximately 20% of the general population lived in rural western Canada, which is where an estimated 16% of RPNs worked (Pitblado et al., 2013). In 2015, above 15% of western Canada's RPNs worked in a rural or remote community (CIHI, 2016a).

The large majority of rural Canada RPNs who responded to the *RRNII* survey were female, although there was a larger proportion of male RPNs who responded compared to other nurse types. On average, rural Canada RPNs were older than other nurses in western Canada, and a small number of RPNs were under 35 years of age. The respondents' answers suggest that a large number of RPNs may retire in upcoming years. A

diploma, nearly always in psychiatric nursing, was the most common highest nursing education credential of rural RPNs.

The large majority of rural Canada RPNs were employed in a permanent position either full-time or part-time, with day shifts being the most common. Under a quarter of RPNs were required to be on-call for their work and the majority of RPNs were living in their primary work community. The majority of RPNs identified their current area of practice to be mental health, and the majority worked in a hospital setting, although community health and long-term care settings were also identified. RPNs identified working in interprofessional teams with a support network of colleagues. Although RPNs worked in teams with other RPNs and RNs, the minority of RPNs worked with LPNs and only 5.8% worked with NPs. These findings suggest that RPNs may work in different settings than LPNs and NPs.

RPNs reported that they were in good general and mental health.

RPNs cited various reasons for coming to their primary work community, including interest in the practice setting, location of the community, and income. It was the same factors that contributed to RPNs continuing to work in their primary work community. A quarter of RPNs were planning to leave their present nursing position within the next 12 months, with nearly 50% of these RPNs planning to retire. This proportion is substantially higher than that of RNs, NPs, and LPNs in western Canada. Of concern is the high proportion of Manitoba RPNs who plan to retire in the next 12 months. Some provinces, such as Manitoba, may experience a higher impact than others when it comes to succession planning. A minority of RPNs who intended to leave their present nursing position reported they would consider continuing to nurse in a rural or remote community if they were to receive an annual cash incentive, have increased flexibility in scheduling, and work short-term contracts. These incentives and others may have policy implications for RPN retention, especially given the increasing number of retirements that are expected in upcoming years. A greater proportion of rural Canada RPNs were planning to retire within the next 5 years compared to their counterparts (rural RNs, NPs, and LPNs in western Canada).

Notably, rural Canada RPNs reported they were satisfied with both where they work and where they live, which may suggest resiliency against the unique challenges of living and working in rural areas. However, it is important to note that 13% of RPNs were dissatisfied with their current nursing practice. Moreover, rural Canada RPNs both experienced and witnessed violence in their workplace. These findings call to the need for supports such as conflict resolution and debriefing in the workplace.

The large majority of rural Canada RPNs reported working within their licensed scope of practice. Although RPNs reported nursing responsibilities that overlap with the scope of other nurse designations, rural RPNs do make a unique contribution to mental health programming. RPNs reported a generally wide leadership responsibility, which may relate to work settings or other characteristics of RPN practice. It is evident that rural Canada RPNs were engaged in primary health care, as these nurses reported positively on all dimensions. However, some concerns were raised regarding intersectoral teamwork and continuity of care across settings. These findings suggests a need for mechanisms to improve collaboration and communication between health and community/social care agencies who are caring for people across various settings and sectors. Notably, RPNs reported more positively on intersectoral teamwork than their counterparts, which may be related to the workplaces and nature of work of RPNs compared to their counterparts.

The *RRNII* survey raises the need to further explore the nature of RPN practice in rural and remote Canada, while also considering population trends and needs. *RRNII* data merits consideration within the context of evolving nursing roles within the context of other health providers, shifting scopes of practice, new ways of interdisciplinary collaboration, and new technologies. Doing so will support the overall goal of providing best health services for rural and remote Canada.

References

- Canadian Institute for Health Information [CIHI] (2016a). Regulated Nurses, 2015. Ottawa, ON: CIHI; 2016. Retrieved from: https://secure.cihi.ca/free_products/Nursing_Report_2015_en.pdf
- Canadian Institute for Health Information [CIHI]. (2016b). Regulated Nurses, 2015: RPN Data Tables. Retrieved from: https://www.cihi.ca/sites/default/files/document/rpn 2015 data tables en.xlsx
- Canadian Institute for Health Information [CIHI]. (2017). Health Workforce Database [Custom Data Request].
- Kosteniuk, J.G., Stewart, N. J., Karunanayake, C.P., Wilson, E.C., Penz, K.L., Kulig, J.C., Kilpatrick, K. Martin-Misener, R., Morgan, D.G., MacLeod, M.L.P. (2017). Exploratory factor analysis and reliability of the Primary Health Care Engagement (PHCE) Scale in rural and remote nurses: findings from a national survey. *Primary Health Care Research & Development,* 1-15. doi:10.1017/S146342361700038X
- Kosteniuk, J.G., Wilson, E.C., Penz, K.L., MacLeod, M.L.P., Stewart, N.J., Kulig, J.C., Karunanayake, C.P., & Kilpatrick, K. (2016). Development and psychometric evaluation of the Primary Health Care Engagement (PHCE) Scale: A pilot survey of rural and remote nurses. *Primary Health Care Research & Development*, 17, 72-86.
- Kulig, J., Kilpatrick, K., Moffitt, P., & Zimmer, L. (2015). Recruitment and retention in rural nursing: It's still an issue! *Canadian Journal of Nursing Leadership*, 28(2), 40-50.
- MacLeod, M.L.P., Kulig, J.C., Stewart, N.J., Pitblado, J.R., & Knock, M. (2004). The nature of nursing practice in rural and remote Canada. *Canadian Nurse*, 100(6), 27-31.
- Pitblado, R., Koren, I., MacLeod, M., Place, J., Kulig, J., & Stewart, N. (2013). *Characteristics and Distribution of the Regulated Nursing Workforce in Rural and Small Town Canada, 2003 and 2010.* Prince George, BC: Nursing Practice in Rural and Remote Canada II. RRN2-01. http://www.unbc.ca/rural-nursing

Additional references:

- Kulig, J., Kilpatrick, K., Moffitt, P., & Zimmer, L., (2013). *Rural and Remote Nursing Practice: An Updated Documentary Analysis*. Lethbridge: University of Lethbridge. RRN2-02. http://www.unbc.ca/rural-nursing
- MacLeod, L.P. M., Stewart, J, N., Kulig, J.C., Anguish, P., Andrews, ME., Banner, D., Garraway, L., Hanlon, N., Karunanayake, C., Kilpatrick, K., Koren, I., Kosteniuk, J., Martin-Misener, R., Mix, N., Moffitt, P., Olynick, J., Penz, K., Sluggett, L., Van Pelt, L., Wilson, E., & Zimmer, L. (2017). Nurses who work in rural and remote communities in Canada: A national survey. *Human Resources for Health*, 15(34). Retrieved from http://rdcu.be/sOoD

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Further information about the full study is available from:

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

Appendix A. Scope of Practice: Rural Western Canada Nurses

Promotion, Prevention and Population Health	RNs % (n=1,200)	NPs % (n=77)	LPNs % (n=633)	RPNs % (n=207)
Chronic disease management	61.5	92.2	73.6	49.8
Maternal/child/family health programs	35.9	67.5	17.5	6.8
Lifestyle modification programs	47.8	81.8	45.2	58.9
Public and population health programs	44.1	70.1	29.4	32.4
Mental health programs	29.7	41.6	28.8	79.7
Community development/individual health capacity	17.8	39.0	11.1	19.3
building programs				
Illness/injury prevention	36.0	48.1	45.3	38.2
None of the above	22.7	2.6	18.8	7.2

Assessment	RNs %	NPs %	LPNs %	RPNs %
Complete history and physical assessment	65.3	93.5	79.9	39.1
Focused history and physical assessment	72.8	94.8	72.0	52.7
Infant and child health assessment	38.2	81.8	18.3	0.5
Older adult health assessment	61.2	88.3	85.8	50.2
Family assessment	26.8	50.6	19.6	21.7
Community assessment	17.2	20.8	11.4	15.9
Mental health assessment	45.6	80.5	41.4	82.6
Sexual assault assessment/exam	25.2	42.9	6.8	5.3
Third party assessment	24.2	77.9	9.8	6.3
Other assessment	2.5	3.9	0.6	1.9
None of the above	10.8	2.6	5.8	5.3

Therapeutic Management	RNs %	NPs %	LPNs %	RPNs %
Administering oral/SC/IM/topical/inhaled	82.2	75.3	92.7	72.9
medication				
Dispensing medication	59.1	45.5	64.6	50.2
Pharmacy management	29.7	27.3	18.6	14.0
Prescribing medication independently	9.2	84.4	2.7	1.9
Prescribing medication using protocols or guidelines	30.3	44.2	11.1	7.2
Other medication related responsibilities	8.6	5.2	6.5	13.5
None of the above	13.6	3.9	5.7	19.8

Laboratory Tests	RNs %	NPs %	LPNs %	RPNs %
Taking and processing orders for laboratory tests	67.3	23.4	75.2	49.8
Ordering laboratory tests	41.5	93.5	30.8	23.7
Obtaining samples for laboratory tests	58.8	55.8	59.6	34.3
Performing and analyzing on-site laboratory tests	32.6	41.6	21.5	10.6
Interpreting laboratory and diagnostic tests	50.9	94.8	31.1	25.6
None of the above	17.6	2.6	13.0	35.7

Rural Nurses in the Four Western Provinces and Territories

Diagnostic Tests	RNs % (n=1,200)	NPs % (n=77)	LPNs % (n=633)	RPNs % (n=207)
	-	` '	_ `	•
Taking and processing orders for advanced	50.8	18.2	52.1	33.8
diagnostic tests				
Ordering advanced diagnostic tests	8.8	57.1	8.1	5.3
Performing advanced diagnostic tests	1.4	54.5	1.1	1.0
Interpreting and following up advanced diagnostic	16.3	80.5	7.4	7.7
tests				
None of the above	45.6	14.3	45.7	63.3

Diagnostic Imaging	RNs %	NPs %	LPNs %	RPNs %
Taking and processing orders for diagnostic imaging	59.8	22.1	63.5	43.5
Ordering routine diagnostic imaging	31.3	90.9	21.3	13.5
Ordering advanced diagnostic imaging	6.3	64.9	7.9	9.7
Performing diagnostic imaging	13.8	16.9	0.6	0.0
Interpreting and following up diagnostic imaging	19.3	81.8	3.0	4.3
None of the above	32.1	3.9	31.6	52.2

Diagnosis and Referral	RNs %	NPs %	LPNs %	RPNs %
Follow protocols/use decision support tools to	77.8	48.1	84.0	74.4
arrive at a plan of care				
Independently make a nursing diagnosis based on	68.8	63.6	49.0	67.1
assessment data				
Independently make a medical diagnosis based on	15.8	89.6	2.5	5.8
assessment data				
Independently make referrals to other healthcare	49.8	89.6	31.8	47.3
practitioners				
Independently make referrals to medical specialists	13.6	81.8	4.4	8.7
Certify mental health patients for committal	9.8	16.9	0.6	10.6
Pronounce death	49.5	39.0	38.4	28.0
None of the above	11.2	5.2	8.8	7.7

Emergency Care and Transportation	RNs %	NPs %	LPNs %	RPNs %
Organize urgent or emergent medical transport	57.5	49.4	52.0	35.3
Provide care during urgent/emergent medical	35.8	41.6	18.5	12.6
transportation				
Respond/lead emergency calls as a first responder	21.1	24.7	12.2	15.0
Respond/lead emergency search and rescue calls in rural, remote or wilderness settings	7.5	7.8	1.9	3.4
None of the above	36.8	45.5	39.3	60.9

Leadership	RNs %	NPs %	LPNs %	RPNs %
Supervising/mentoring nursing students	64.9	75.3	61.1	71.0
Supervising/mentoring nursing colleagues	63.6	59.7	37.8	55.6
Supervising/mentoring interprofessional students	21.0	32.5	10.0	24.6
Supervising/mentoring interprofessional colleagues	17.5	16.9	7.7	24.6
Leading a unit/shift in a practice setting	48.2	18.2	39.0	50.2
Leading an interdisciplinary health care team	23.3	28.6	17.5	33.8
Leading a community group	11.3	18.2	3.0	12.1
None of the above	11.5	10.4	20.9	9.2

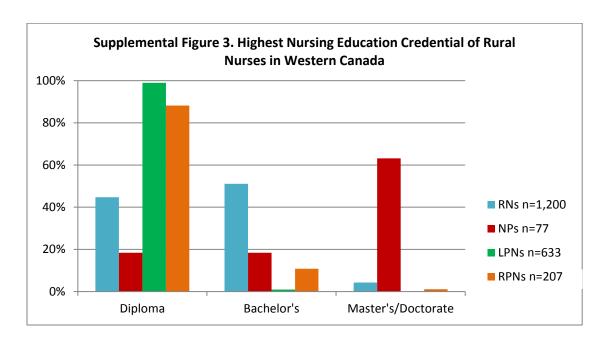
Appendix B. Comparisons: Rural RNs, NPs, LPNs, and RPNs in Western Canada

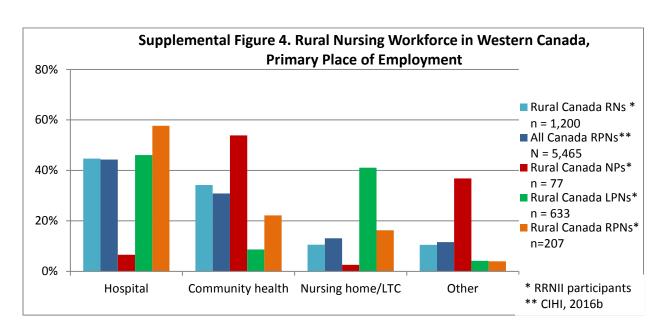
Supplemental Table 1. Age Distribution of Rural Nurses in Western Canada

		< 25	25-34	35-44	45-54	55-64	≥ 65
		%	%	%	%	%	%
RNs	(n = 1,200)	0.7	19.1	20.0	24.7	30.0	5.5
NPs	(n = 77)	0.0	8.3	25.0	37.5	26.4	2.8
LPNs	(n = 633)	3.4	19.7	16.8	28.4	28.4	3.2
RPNs	(n = 207)	2.5	11.2	19.3	34.0	26.4	6.6

Supplemental Table 2. Population of Primary Work Community, Rural Nurses in Western Canada

Community Population	RNs % (n = 1,200)	NPs % (n = 77)	LPNs % (n = 633)	RPNs % (n = 207)
≤ 999	20.1	25.4	16.5	10.0
1,000 - 2,499	17.0	22.5	15.5	10.5
2,500 - 4,999	13.4	14.1	14.7	8.0
5,000 - 9,999	17.4	15.5	28.1	26.0
10,000 - 29,999	27.3	21.1	20.2	33.0
≥ 30,000	4.8	1.4	5.0	12.5



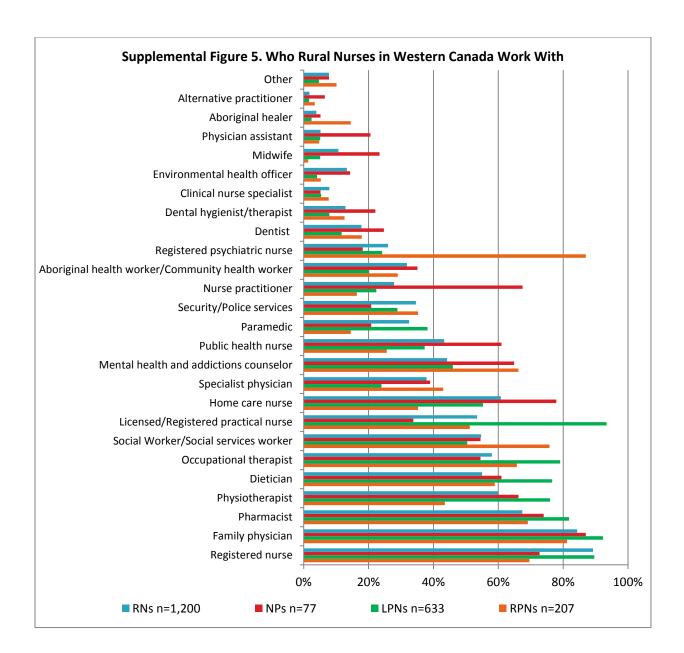


Notes:

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 and public health department/unit.

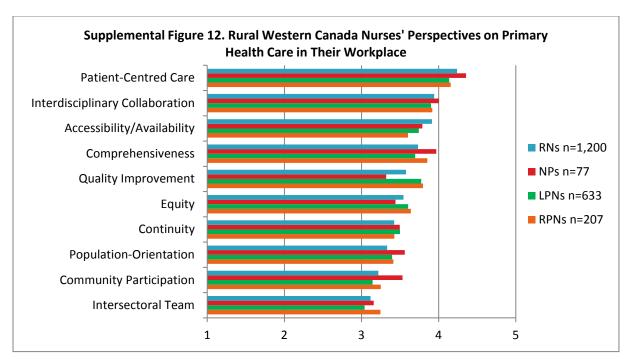
Nursing home/LTC includes nursing home/long-term care facility.

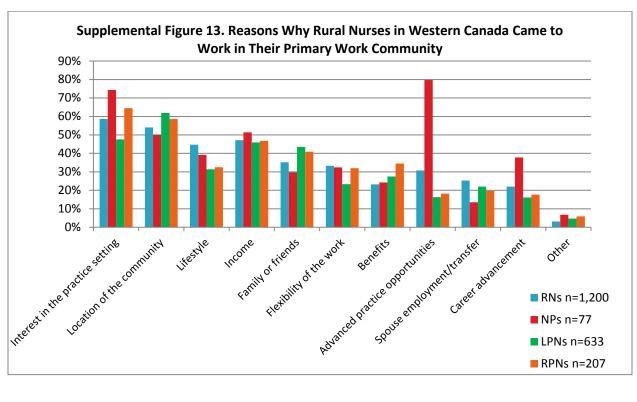
Other place of work includes professional association/government, occupational health, private nursing agency/self-employed, educational institution, physician's office/family practice unit or team and other place of work.

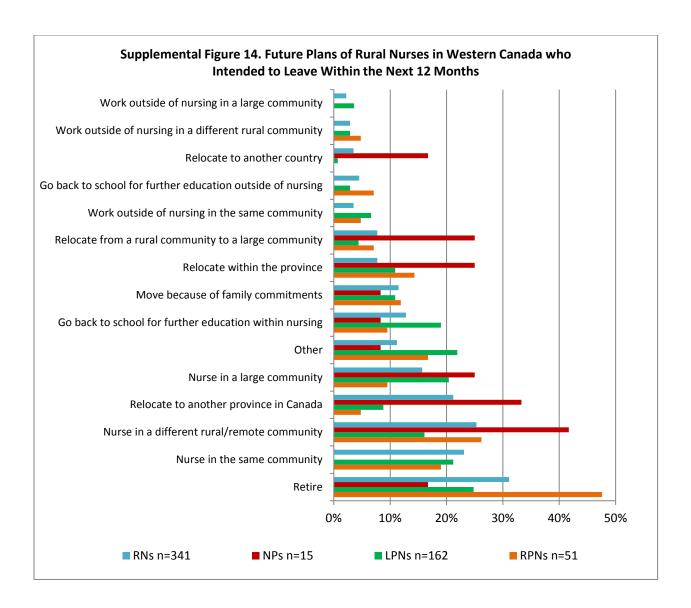


Supplemental Table 5. Who Rural Nurses in Western Canada Work With

	RNs % (n = 1,200)	NPs % (n = 77)	LPNs % (n = 633)	RPNs % (n = 207)
Registered nurse	89.2	72.7	89.6	69.6
Family physician	84.3	87.0	92.3	81.2
Pharmacist	67.4	74.0	81.8	69.1
Physiotherapist	60.0	66.2	76.0	43.5
Dietician	55.0	61.0	76.6	58.9
Occupational therapist	58.0	54.5	79.1	65.7
Social Worker/Social services worker	54.7	54.5	50.4	75.8
Licensed/Registered practical nurse	53.5	33.8	93.4	51.2
Home care nurse	60.8	77.9	55.3	35.3
Specialist physician	37.9	39.0	24.0	43.0
Mental health and addictions counselor	44.2	64.9	46.0	66.2
Public health nurse	43.3	61.0	37.3	25.6
Paramedic	32.5	20.8	38.2	14.5
Security/Police services	34.6	20.8	28.9	35.3
Nurse practitioner	27.9	67.5	22.4	16.4
Aboriginal health worker/Community health worker	31.8	35.1	20.2	29.0
Registered psychiatric nurse	26.0	18.2	24.2	87.0
Dentist	17.8	24.7	11.7	17.9
Dental hygienist/therapist	12.9	22.1	7.9	12.6
Clinical nurse specialist	7.9	5.2	5.4	7.7
Environmental health officer	13.3	14.3	4.1	5.3
Midwife	10.7	23.4	5.1	1.4
Physician assistant	5.2	20.6	5.1	4.8
Aboriginal healer	3.9	5.2	2.4	14.5
Alternative practitioner	1.8	6.5	1.7	3.4
Other	7.8	7.8	4.7	10.1







Supplemental Table 14. Future Plans of Rural Canada Nurses who Intended to Leave Within the next 12 Months

	RNs % (n = 341)	NPs % (n = 15)	LPNs % (n = 162)	RPNs % (n = 51)
Retire	31.1	16.7	24.8	47.6
Nurse in the same community	23.1	0.0	21.2	19.0
Nurse in a different rural/remote community	25.3	41.7	16.1	26.2
Relocate to another province in Canada	21.2	33.3	8.8	4.8
Nurse in a large community	15.7	25.0	20.4	9.5
Other	11.2	8.3	21.9	16.7
Go back to school for further education within nursing	12.8	8.3	19.0	9.5
Move because of family commitments	11.5	8.3	10.9	11.9
Relocate within the province	7.7	25.0	10.9	14.3
Relocate from a rural community to a large community	7.7	25.0	4.4	7.1
Work outside of nursing in the same community	3.5	0.0	6.6	4.8
Go back to school for further education outside of				7.1
nursing	4.5	0.0	2.9	
Relocate to another country	3.5	16.7	0.7	0.0
Work outside of nursing in a different rural community	2.9	0.0	2.9	4.8
Work outside of nursing in a large community	2.2	0.0	3.6	0.0

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¹ For further comparisons by nurse types and across regions, please view the following article:

MacLeod, L.P. M., Stewart, J, N., Kulig, J.C., Anguish, P., Andrews, ME., Banner, D., Garraway, L., Hanlon, N., Karunanayake, C., Kilpatrick, K., Koren, I., Kosteniuk, J., Martin-Misener, R., Mix, N., Moffitt, P., Olynick, J., Penz, K., Sluggett, L., Van Pelt, L., Wilson, E., & Zimmer, L. (2017). Nurses who work in rural and remote communities in Canada: A national survey. *Human Resources for Health*, 15(34). Retrieved from http://rdcu.be/sOod