Nursing Practice in Rural and Remote Canada II

Québec 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 provincial fact sheet presents initial results from the national survey about the nature of nursing practice in rural/remote Québec (hereafter rural QC), including how nurses experience accessibility and quality of PHC in their workplace.

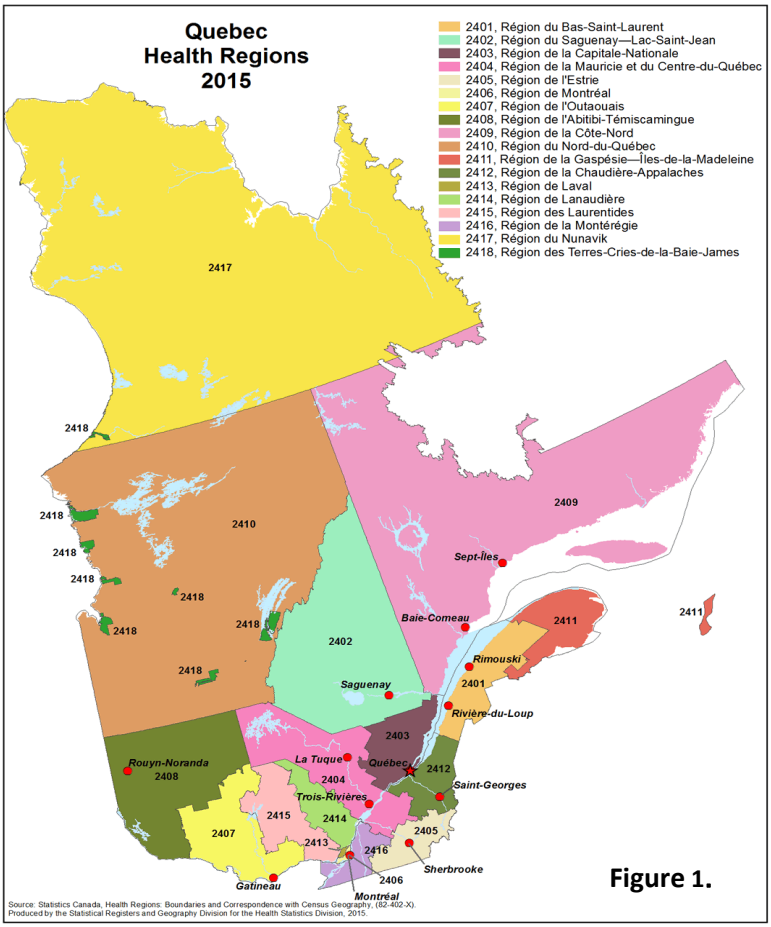


Figure 1.

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.

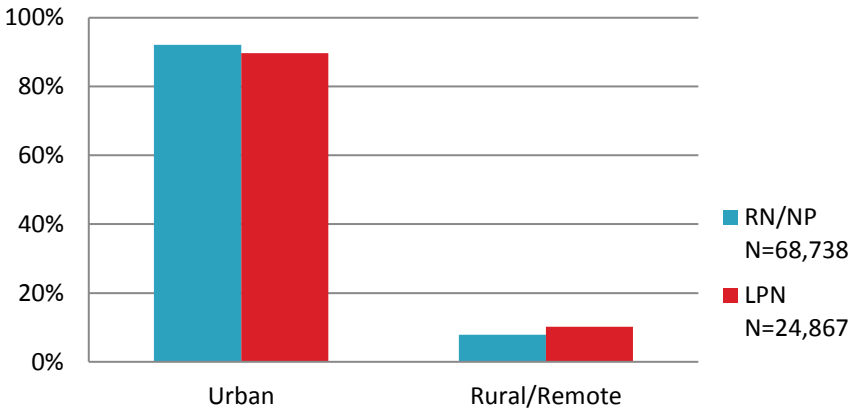
We received a total of 3,822 completed questionnaires by mail or on-line (2,082 RNs, 163 NPs, 1,370 LPNs, and 207 RPNs) from across Canada. The national response rate was 40% (margin of error 1.5%). **From Québec, a total of 314 nurses responded: 175 RNs, 24 NPs, and 115 LPNs**. The eligible sample for QC was 892 individuals and the response rate was 35% (n=314, margin of error 5.2%). We can say the following: with 90% confidence, the sample of rural RNs, NPs, and LPNs in QC is representative of rural QC nurses as a whole; say with 99% confidence, the sample of rural NPs is representative of rural QC NPs as a whole; and say with less than 85% confidence, the separate samples of rural RNs and LPNs in QC are representative. In this fact sheet, we compare three sets of data: rural QC nurse data from the *RRNII* survey, rural Canada nurse data from the *RRNII* survey, and data for all QC nurses from the Canadian Institute for Health Information analysis of the 2015 regulated nursing workforce database (CIHI, 2016a). The CIHI data helps to situate the *RRNII* study findings in the context of the overall QC nursing workforce.

Who are the rural nurses in Québec?

In 2015, the rural population of QC accounted for 19% of the total population, and 9.5% of the province's 93,605 regulated nurses (RNs, NPs, and LPNs) worked in rural settings (CIHI, 2016a). The geographic distribution of nurses in QC is illustrated in **Figure 2.**

The large majority of rural QC nurse respondents (64%) in the *RRNII* survey reported growing up in a community with a population of less than 10,000. Of those currently working in a rural community, 59% reported living in their primary work community. Rural QC nurses who lived outside of their primary work community traveled to work on a daily (66%) or weekly (25%) basis with travel time typically equal to, or under, 11 hours per week (96%). The large majority of rural QC nurses were married or living with a partner (79%); and 50% with dependent children.

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



(CIHI, 2016b & CIHI, 2016c)

Age and Gender

In the *RRNII* survey results, 17% of rural QC nurses were 55 years of age or older, compared to 32% of rural nurses in Canada overall; whereas 33% were under 35 years of age, compared to 19% of rural nurses in Canada overall. Overall, the rural QC nurses were slightly younger than rural nurses in Canada. See **Table 1** for the age distribution of rural RNs, NPs, and LPNs in QC and Canada.

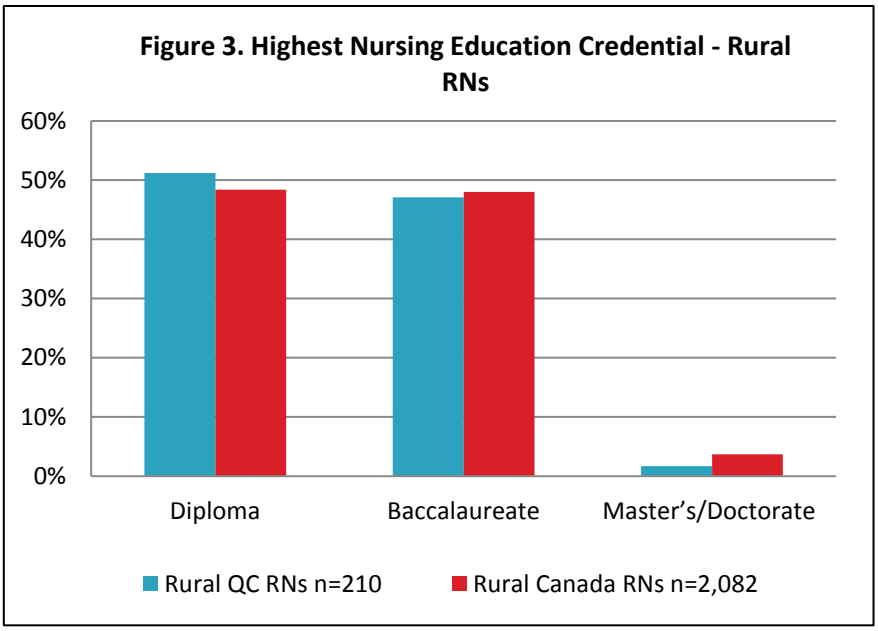
Table 1. Age Distribution of Rural RNs, NPs, and LPNs in QC and Canada

		<25 %	25-34 %	35-44 %	45-54 %	55-64 %	≥65 %
Rural QC NPs	(n=24)	8.3	20.8	37.5	25.0	8.3	0.0
Rural Canada NPs	(n=163)	1.3	11.5	25.6	36.5	23.1	1.9
Rural QC RNs	(n=138)	4.1	26.9	19.9	26.3	20.5	2.3
Rural Canada RNs	(n=2,082)	1.1	17.8	19.1	27.2	29.6	5.3
Rural QC LPNs	(n=110)	10.0	27.3	25.5	27.3	9.1	0.9
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 rural QC (6.2%) was similar to the proportion of rural male nurses in Canada overall (6.4%). Considering each nurse type, the proportion of rural male RNs in QC (9.4%) was higher and LPNs was lower (1.8%) than in rural Canada overall (RNs 6.2%; LPNs 5.6%).

Education

In the *RRNII* survey, the level of nursing education among RNs and LPNs in rural QC was similar to the education level of rural nurses in Canada overall. The highest obtained nursing education credential of rural QC nurses was a master´s degree (4.2%), while the most commonly obtained highest nursing education credential was a diploma in nursing (67%), followed by a bachelor's degree in nursing (29%). For rural nurses in Canada overall, a diploma in nursing (68%) was the most commonly earned highest nursing education credential, followed by a bachelor's degree in nursing (28%). All rural QC LPNs held a diploma in nursing, while rural QC RNs were likely to either hold a diploma (51%) or a bachelor's in nursing (47%) as their highest nursing 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%). Rural QC NPs most often held a master's degree as their highest nursing education credential (42%), whereas 58% of rural NPs in Canada overall held a master's degree as their highest nursing credential. **Figure 3** shows the highest nursing education credential of rural QC RNs and rural RNs in Canada overall in the *RRNII* survey.



Where do rural nurses in Québec work?

The large majority of rural QC nurses who responded to the survey were employed in nursing (93%), while the other 7.1% were either on leave (3.9%) or were retired and occasionally working in nursing on either a casual or short-term contract basis (3.2%). **Table 2** shows the population of the primary work community of rural QC nurses. Considering each group of nurse, only 8.7% of NPs, 4.8% of RNs, and 2.7% of LPNs in rural QC worked in a community with a population fewer than 1,000, which is a lower proportion compared to rural nurses in Canada overall (NPs 17%; RNs 15% ; LPNs 12%).

Table 2. Population of Primary Work Community, Rural Nurses in QC

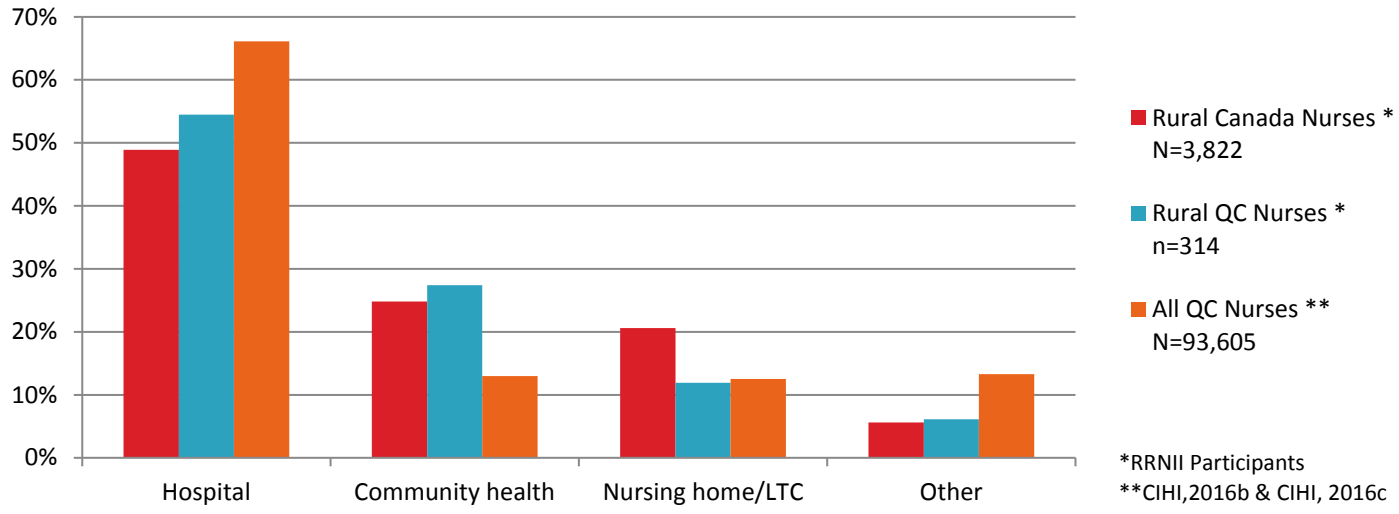
Community Population	% (n=314)
≤ 999	6.3
1,000 - 2,499	8.3
2,500 - 4,999	12.6
5,000 - 9,999	36.4
10,000 - 29,999	28.8
≥ 30,000	7.6

Nursing Employment Status

The large majority of rural QC nurses were employed in a permanent position (96%), either full-time (52%) or part-time (43%). In comparison, 54% of rural nurses in Canada overall were employed in a permanent full-time position. Only 4.8% of rural QC nurses were employed on a casual or contract/term basis, compared to 20% of rural nurses in Canada overall. The majority of rural QC nurses worked as a staff nurse (65%) and the small minority worked as a nurse practitioner (9.8%) or as a manager (7.4%). A higher proportion of rural QC RNs (26%) worked as a clinical nurse specialist compared to rural RNs in Canada overall (5.1%).

Figure 4 shows the primary place of employment for rural QC nurses compared to all nurses in QC and to rural nurses in Canada overall. As Figure 4 shows, rural QC nurses most often worked in a hospital setting (55%), and the proportion was higher compared to rural nurses in Canada overall (49%). While 6.9% of rural QC RNs reported working in a nursing home or long-term care facility, 22% of LPNs reported this as their primary place of employment.

Figure 4. Nursing Workforce in QC 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 rural nurses in Québec?

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 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**.

Although the majority of rural QC nurses (NPs 54%; RNs 70%; LPNs 75%) reported working within their licensed scope of practice, the proportions were smaller than those found for rural nurses in Canada overall (NPs 83%; RNs 84%; LPNs 77%). Important to note is that 33% of rural QC NPs and 18% of RNs reported working beyond their licensed scope of practice, compared to 7.8% of NPs and 11% of rural RNs in Canada overall.

Figure 5. Assessment: Rural NPs and RNs in QC and Canada

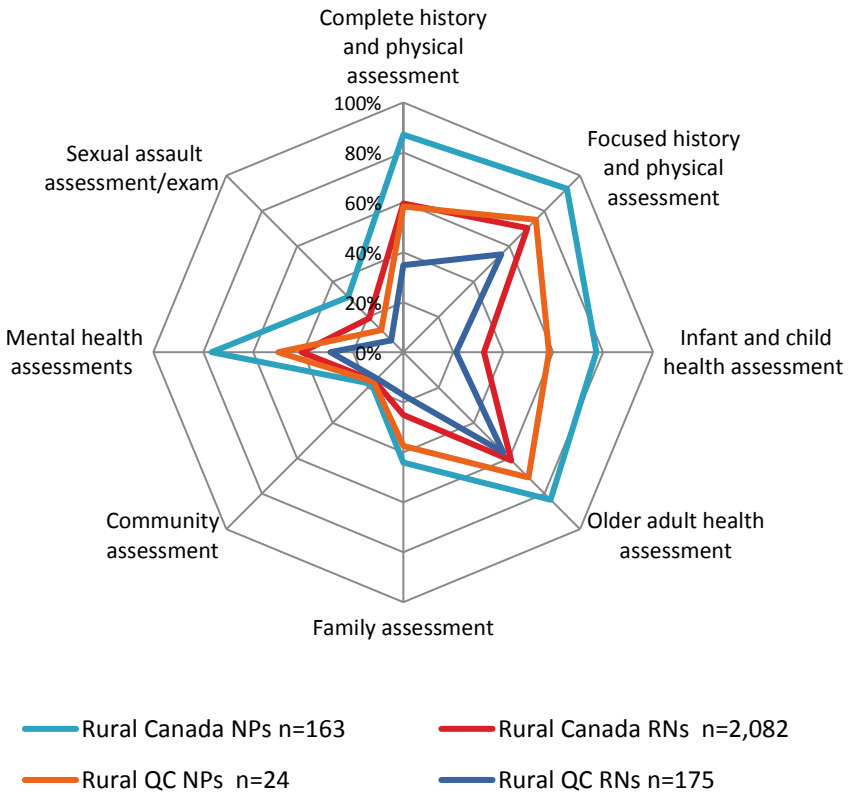
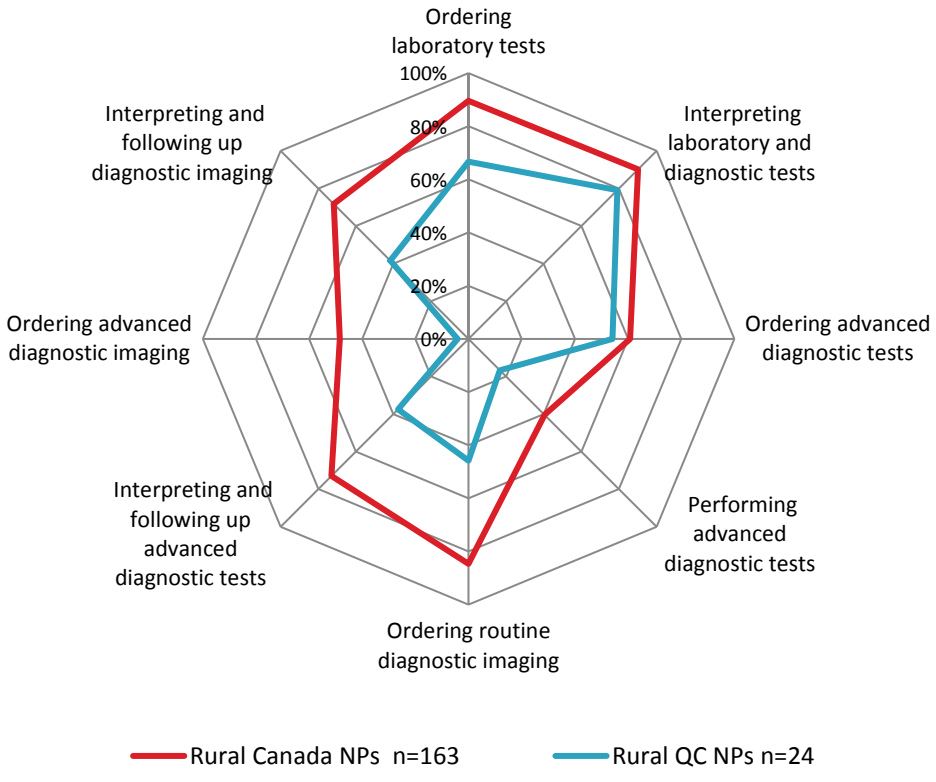


Figure 6 Diagnostics: Rural NPs in QC and Canada



In terms of *Promotion, Prevention and Population Health,* rural QC nurses reported being responsible for chronic disease management (64%), lifestyle modification programs (48%), and public and population health programs (45%). These percentages are similar to those found for rural nurses in Canada overall (68%; 52%; 40%).

Rural QC nurses reported lower engagement in health and wellness *Assessment* activities than their counterparts (**Figure 5**). The majority of rural QC nurses reported providing older adult health assessment (56%), whereas a minority indicated being responsible for focused history and physical assessment (40%), and complete history and physical assessment (30%).

In the category of *Diagnostics,* which included *Laboratory Tests, Diagnostic Tests,* and *Diagnostic Imaging,* rural QC nurses reported being less engaged on many items. For instance, a smaller proportion of rural QC nurses reported taking and processing orders for laboratory tests (49%), advanced diagnostic tests (16%), and diagnostic imaging (14%) than their counterparts (61%; 43%; 50%). Furthermore, a lower proportion of rural nurses in QC reported performing (21%) and interpreting laboratory tests (31%) and ordering routine diagnostic imaging (12%) compared to rural nurses in Canada overall (26%; 39%; 24%). Such differences are particularly evident for rural QC NPs (**Figure 6**).

Figure 7. Diagnosis and Referral: Rural NPs and RNs in QC and Canada

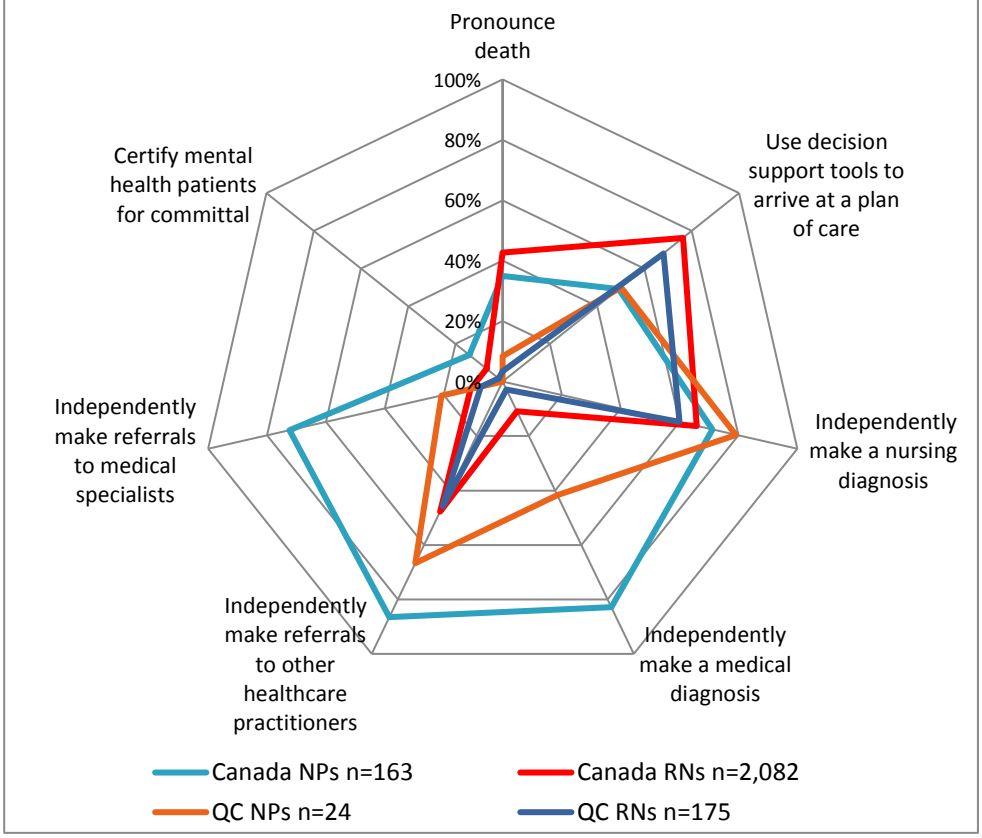
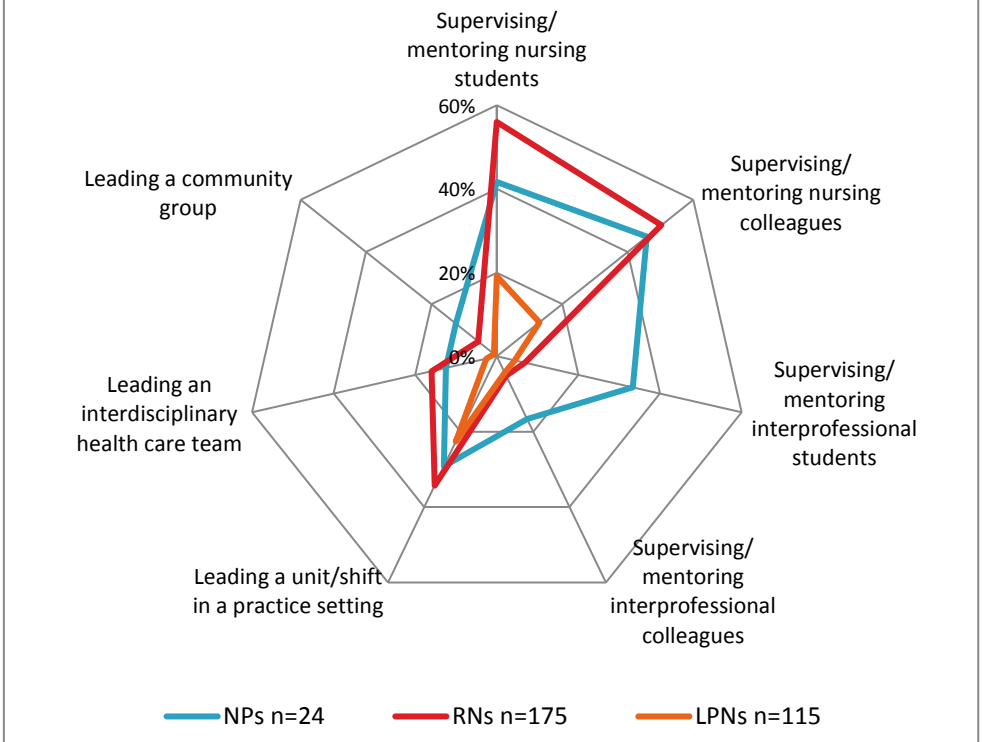


Figure 8. Leadership: Rural Nurses in QC



Within the category of *Therapeutic Management,* the majority of rural QC nurses reported being responsible for administering (74%) and dispensing (54%) medication. A larger proportion of rural QC nurses indicated that they prescribe medication using protocols or guidelines (42%), than rural nurses in Canada overall (22%).

In the category of *Diagnosis and Referral,* the majority of rural QC nurses (58%) reported following protocols or using decision support tools in their nursing practice, compared to 74% of rural nurses in Canada overall. Rural QC LPNs (44%) reported lower activity than their counterparts (74%) on this dimension. Also, the minority of rural QC NPs reported independently making a medical diagnosis based on assessment data (42%), whereas the large majority of NPs (83%) in rural Canada recognized this as a part of their responsibility. A comparison of diagnosis and referral activities of rural QC and Canada NPs and RNs is provided in **Figure 7**.

In the category of *Emergency Care and Transportation,* approximately one fourth of rural QC nurses indicated responsibility for organizing (25%) and providing care during (24%) urgent or emergent medical transportation. Only 9.1% of rural QC RNs reported that they respond to or lead emergency calls as first responders, compared to 18% of rural RNs in Canada overall.

When it comes to *Leadership*, rural QC nurses were generally less engaged than rural nurses across Canada. For instance, the minority of rural QC nurses reported supervising/mentoring nursing students (41%) and

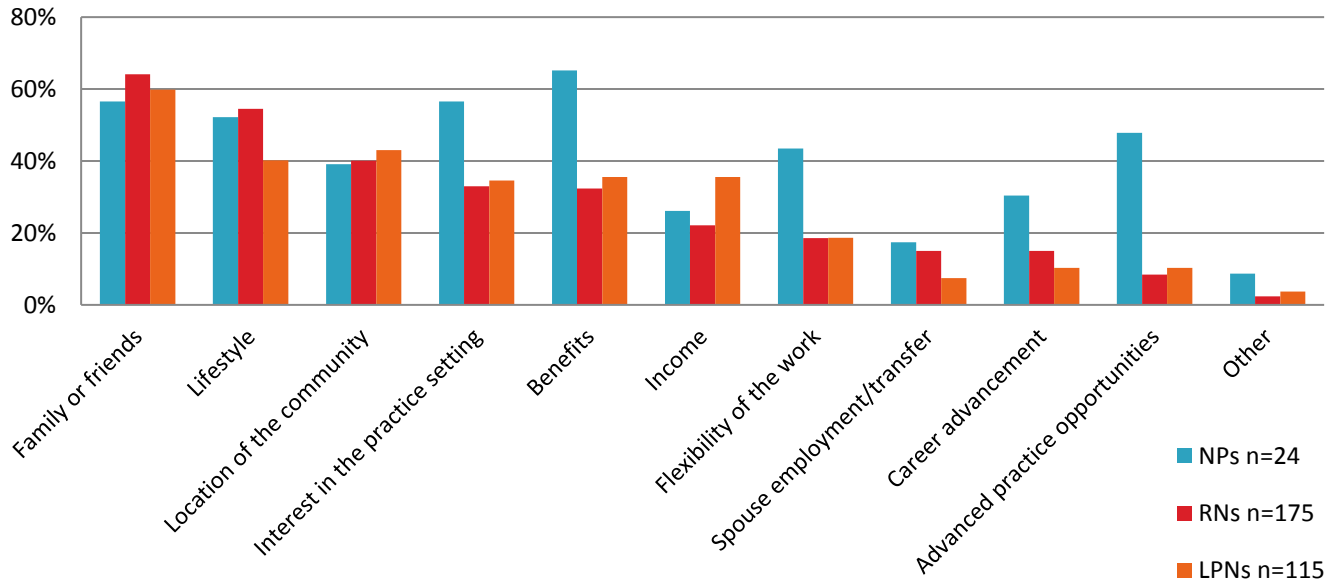
nursing colleagues (36%), compared to the majority of rural nurses in Canada overall (63%; 50%). Similarly, a lower proportion of rural QC LPNs were engaged in leadership activities such as supervising/mentoring nursing students (19%) and leading a unit/shift in a practice setting (23%) compared to their counterparts in rural Canada (57%; 31%). However, a greater proportion of rural QC NPs indicated that they lead a unit/shift in a practice settings (29%) compared to their colleagues (17%) (**Figure 8**).

Overall, rural QC nurses typically reported lower levels of activity in most practice areas than did rural nurses across Canada. It is unclear whether resources in the practice setting or other factors may influence these differences.

What are the career plans of rural nurses in Québec?

Recruiting and retaining nurses in rural nursing positions is an ongoing challenge (Kulig, Kilpatrick, Moffitt, & Zimmer, 2015). For all rural QC nurses, the most influential reasons they came to work in their primary work community were family or friends (62%), lifestyle (49%), and location of the community (41%). Only 42% of rural nurses in Canada overall reported family or friends as a recruitment factor. See **Figure 9** for a breakdown of recruitment factors by type of nurse.

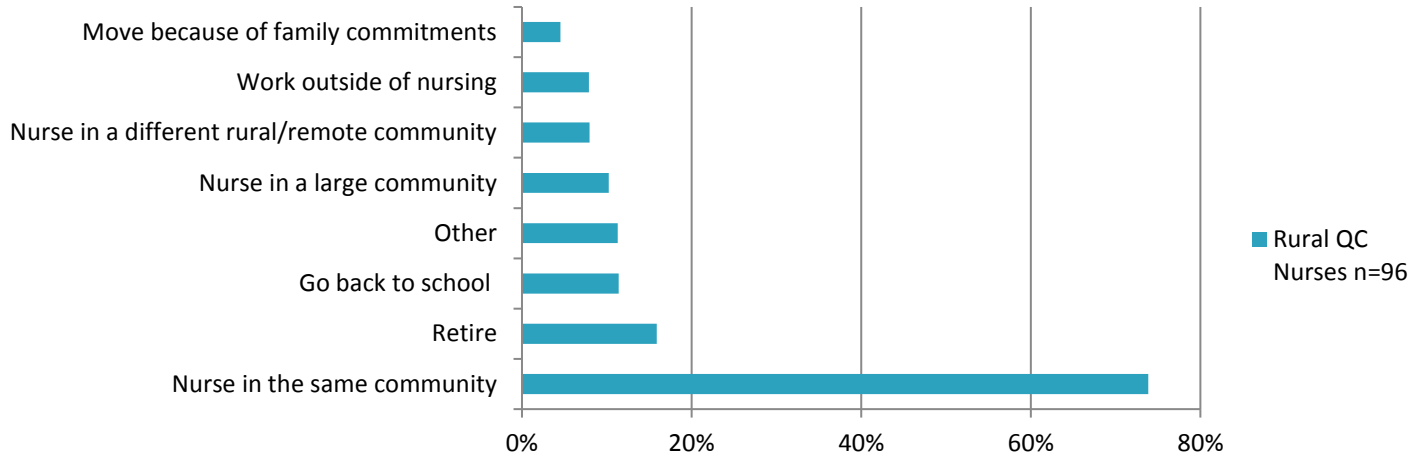
Figure 9. Reasons Why Rural QC Nurses Came to Work in their Community



Rural QC nurses were asked the reasons why they continue working in their primary work community. The strongest retention factors were family or friends (62%), lifestyle (52%), interest in the practice settings (46%), and location of the community (40%). Income (36%) and benefits (36%) were also viewed as strong retention factors. The large majority of rural QC nurses agreed that they were satisfied with their primary work community (86%); the remaining 14% were either neutral or were dissatisfied.

In the *RRNII* survey results, 32% of rural QC nurses indicated that they were planning to leave their present position within the next 12 months, which is a higher proportion than that found for rural nurses in Canada overall (26%). This included 33% of NPs, 31% of RNs, and 34% of LPNs. Rural QC nurses who intended to leave (n=96) reported a variety of career plans, which are illustrated in **Figure 10**. Most often, they intended to nurse in the same community (74%), but some of them intended to retire (16%) or go back to school (11%).

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



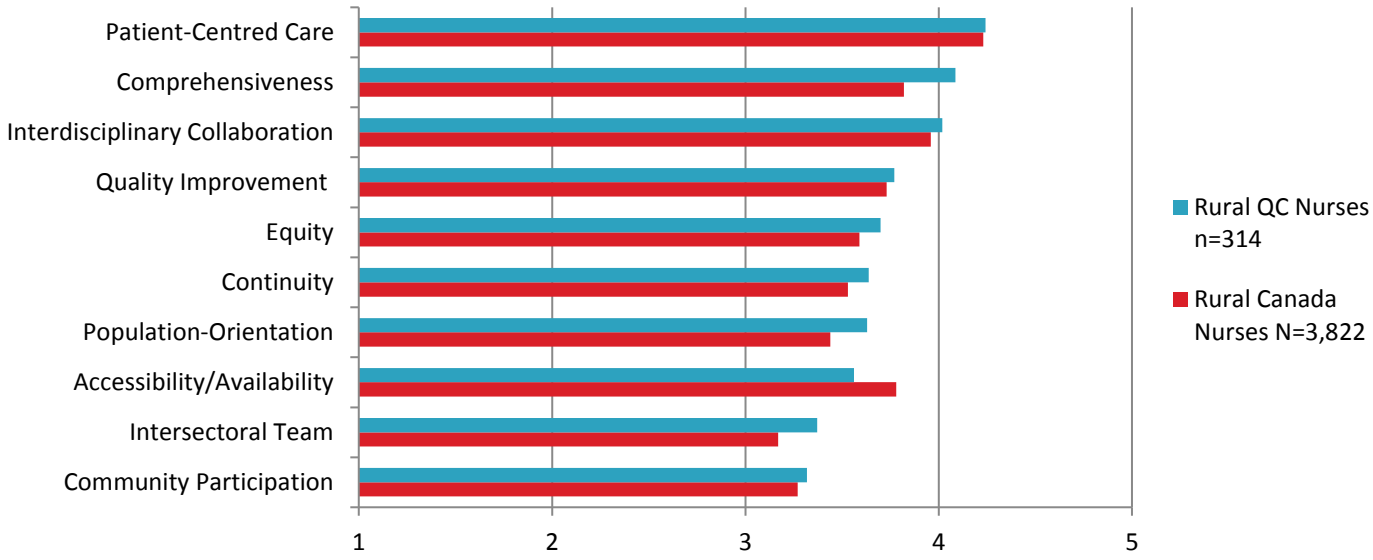
A minority of the rural QC nurses who stated they intended to leave said they would consider continuing to work in a rural/remote community if certain conditions were met, such as if they were to receive an annual cash incentive (42%), have opportunities to update their skills and knowledge (39%), and utilize more of their skills (32%).

What do rural Québec 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, 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 rural QC nurses were engaged in primary health care, often to a slightly greater extent than rural nurses in Canada overall, which is illustrated by slightly higher means in eight categories as compared to rural nurses in Canada overall.

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



In general, rural QC nurses rated *Patient-Centred Care* strongly positive. Rural QC nurses reported 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.

Rural QC nurses rated *Comprehensiveness* strongly positive. Included are nurses' perceptions 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. Furthermore, rural QC nurses were positive that their workplace addresses chronic conditions.

In terms of *Interdisciplinary Collaboration,* rural QC nurses were strongly positive that a collaborative atmosphere exists between healthcare providers from different disciplines within their workplace and that healthcare providers from other disciplines consult them regarding patient care. Rural QC nurses indicated to a lesser extent, but still positively, that it is understood who should take the lead with a patient when there is an overlap in responsibilities.

Rural QC nurses felt positively about *Quality Improvement*, having identified that there is a process in their workplace for responding to critical incidents, that their workplace regularly measures quality, and that their workplace uses patient health indicators to measure quality improvement. Importantly, rural QC nurses were strongly positive that their workplace keeps patient charts current.

Overall, *Equity* was regarded positively, wherein rural QC nurses reported that healthcare providers in their workplace understand the impact of social determinants of health, that their workplace is organized to address the needs of vulnerable or special needs populations, and that their workplace provides access to the same healthcare services regardless of geographic location and regardless of individual or social characteristics. Rural QC nurses reported to a lesser extent, but still positively, that patients in their workplace can afford to receive the healthcare services they need.

Rural QC nurses rated *Continuity of Care* positively, although an interesting pattern of results must be noted. These nurses were strongly positive that they have a good understanding of their patients' health history and that they have easy access to their patients' past care by healthcare providers 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 more difficult, and were perceived less positively.

Similarly, *Population-orientation* was viewed positively by rural QC nurses, with a good fit between services and community health care needs and monitoring patient outcome indicators, among other dimensions.

Accessibility to healthcare services was regarded positively. Included are nurses' perceptions that patients needing urgent care can see a healthcare provider the same day when their workplace is open and that services are organized to be as accessible as possible. Rural QC nurses also felt positively that patients can see a healthcare provider in person or can get medical advice by phone when their workplace is closed.

Rural QC nurses gave positive ratings of *Intersectoral Teams*. These nurses were positive 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.

Finally, *Community Participation* was rated positively by rural QC nurses. These nurses agreed that community members are treated as partners when deciding about healthcare service delivery changes and that their workplace seeks input from the community about which healthcare services are needed.

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

Limitations

The number of rural QC nurses was sufficient for analysis at the provincial level, but lower than the number expected. For this reason, we can say the following: with 90% confidence, the sample of rural RNs, NPs, and LPNs in QC is representative of rural QC nurses as a whole; say with 99% confidence, the sample of rural NPs is representative of rural QC NPs as a whole; and say with less than 85% confidence, the separate samples of rural RNs and LPNs in QC are representative. As we sampled only 30% (approximately) of the rural nurses in the province, we compared the age and gender characteristics of the study's sample with all rural nurses in the province to see how similar or different they were. The two samples were comparable, although our sample did underrepresent the males (CIHI, 2017). As such, findings should be interpreted with caution. As well, in this fact sheet, not all statistical measures are reported.

Summary

In 2015, 9.5% of the regulated nursing workforce in Québec was located in rural areas where 19% of the population lived (CIHI, 2016a). This is a slight decrease from 2010, when 12% of the nurses in Québec cared for 20% of the population (Pitblado, Koren, MacLeod, Place, Kulig, & Stewart, 2013). This may be a small change over the last five years, but it follows a pattern that has been evident over the last decade and a half, particularly for rural RNs (CIHI, 2002).

Compared to rural nurses in Canada generally, the QC nurses are younger and a greater proportion of these nurses work in hospitals than in other settings. This age distribution may reflect a problem of maintaining expertise in rural and remote areas. Also important to note is that a larger proportion of rural QC nurses were employed in a permanent positions, either full-time or part-time.

The large majority of rural QC nurses worked as a staff nurse. Approximately half of rural QC RNs held either a diploma or a bachelor's degree in nursing as their highest credential, similar to rural RNs in Canada overall, and all rural QC LPNs held a diploma, again similar to rural LPNs across Canada.

The three highest ranked recruitment factors among rural QC nurses were also the highest ranked retention factors, namely family or friends, lifestyle, and interest in the practice setting. Over one-third of rural QC nurses noted the factors that may contribute to their continuing to work in a rural community included an annual cash incentive, having opportunities to update their skills and knowledge, and opportunities to utilize more of their skills.

While the majority of rural QC nurses indicated that they work within their licensed scope of practice, a larger proportion of rural QC NPs and RNs reported working beyond their licensed scope of practice than in rural Canada overall.

Rural QC nurses expressed positive views about primary health care, their contributions to it, and the accessibility it provides for patients.

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Further information about the full study is available from:

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Appendix A: Scope of Practice: Rural Nurses in Québec and Canada

	Rural NPs		Rural RNs		Rural LPNs	
Promotion, Prevention, and Population Health	**QC % (n=24)**	**Canada % (n=163)**	**QC % (n=175)**	**Canada % (n=2,082)**	**QC % (n=115)**	**Canada% (n=1,370)**
Chronic disease management	83.3	90.8	61.1	62.7	63.5	74.9
Maternal/child/family health programs	66.7	70.6	42.3	35.2	26.1	18.0
Lifestyle modification programs	87.5	83.4	50.3	50.7	35.7	50.1
Public and population health programs	62.5	68.7	50.9	43.4	31.3	32.3
Mental health programs	45.8	44.2	31.4	30.4	33.0	32.4
Community development and individual health capacity building programs	25.0	31.9	13.7	17.7	15.7	12.6
Illness/injury prevention	50.0	45.4	33.7	38.4	40.9	47.4
None of the above	0.0	2.5	21.1	21.8	24.3	17.3

Assessment	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Complete history and physical assessment	58.3	87.1	34.9	59.6	15.7	68.5
Focused history and physical assessment	75.0	92.6	55.4	70.3	7.8	61.4
Infant and child health assessment	58.3	77.3	21.1	32.3	2.6	12.5
Older adult health assessment	70.8	83.4	56.6	61.2	51.3	79.7
Family assessment	37.5	44.2	17.1	25.0	3.5	16.9
Community assessment	16.7	17.8	14.9	16.2	1.7	10.6
Mental health assessment	50.0	76.7	29.1	40.7	11.3	34.3
Sexual assault assessment/exam	12.5	31.3	6.9	19.4	0.9	5.0
Third party assessment	29.2	69.3	6.3	18.7	1.7	8.6
Other assessment	4.2	3.1	4.6	2.5	1.7	0.9
None of the above	4.2	2.5	10.3	10.7	43.5	10.8

Therapeutic Management	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Administering oral/SC/IM/topical/inhaled medication	66.7	74.8	70.9	80.0	80.0	89.5
Dispensing medication	37.5	47.9	41.1	54.2	75.7	63.8
Pharmacy management	25.0	25.8	28.0	25.3	23.5	15.8
Prescribing medication independently	50.0	81.0	11.4	7.8	8.7	3.3
Prescribing medication using protocols or guidelines	45.8	37.4	54.3	29.5	22.6	11.5
Other medication related responsibilities	12.5	9.2	4.0	8.3	1.7	5.8
None of the above	4.2	3.1	17.1	14.8	17.4	8.6

Laboratory Tests	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Taking and processing orders for laboratory tests	37.5	27.0	58.3	64.5	38.3	61.2
Ordering laboratory tests	66.7	89.6	32.0	37.4	24.3	28.5
Obtaining samples for laboratory tests	62.5	55.2	57.1	57.3	59.1	57.0
Performing and analyzing on-site laboratory tests	37.5	40.5	20.0	29.8	19.1	19.7
Interpreting laboratory and diagnostic tests	79.2	90.2	40.6	46.2	7.0	24.5
None of the above	4.2	3.1	23.4	19.6	27.8	18.4

	Rural NPs		Rural RNs		Rural LPNs	
Diagnostic Tests	**QC % (n=24)**	**Canada % (n=163)**	**QC % (n=175)**	**Canada % (n=2,082)**	**QC % (n=115)**	**Canada % (n=1,370)**
Taking and processing orders for advanced diagnostic tests	16.7	19.0	21.7	46.4	7.0	41.1
Ordering advanced diagnostic tests	54.2	60.7	11.4	8.1	8.7	7.6
Performing advanced diagnostic tests	16.7	40.5	4.0	1.6	3.5	1.3
Interpreting and following up advanced diagnostic tests	37.5	73.0	10.9	13.3	4.3	6.1
None of the above	41.7	18.4	68.6	49.2	84.3	55.8

Diagnostic Imaging	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Taking and processing orders for diagnostic imaging	8.3	20.2	20.0	53.7	6.1	48.3
Ordering routine diagnostic imaging	45.8	84.7	10.9	25.7	6.1	16.9
Ordering advanced diagnostic imaging	4.2	48.5	2.9	5.9	3.5	7.4
Performing diagnostic imaging	4.2	10.4	4.0	8.8	.9	0.9
Interpreting and following up diagnostic imaging	41.7	71.8	5.1	14.3	1.7	3.3
None of the above	50.0	11.7	73.7	39.0	91.3	46.4

Diagnosis and Referral	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Follow protocols or use decision support tools to arrive at a plan of care	50.0	49.1	68.0	76.3	44.3	74.3
Independently make a nursing diagnosis based on assessment data	79.2	71.2	60.0	65.9	7.0	36.4
Independently make a medical diagnosis based on assessment data	41.7	82.8	2.9	11.0	2.6	2.8
Independently make referrals to other healthcare practitioners	66.7	86.5	45.7	47.7	12.2	28.5
Independently make referrals to medical specialists	20.8	72.4	7.4	11.0	5.2	4.7
Certify mental health patients for committal	0.0	14.1	1.7	6.8	2.6	0.9
Pronounce death	8.3	35.0	3.4	42.7	0.0	22.9
None of the above	16.7	4.9	20.6	12.6	51.3	20.2

Emergency Care and Transportation	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Organize urgent or emergent medical transport	20.8	39.9	36.0	52.0	9.6	35.5
Provide care during urgent/emergent medical transportation	25.0	33.1	25.7	35.4	21.7	19.6
Respond/lead emergency calls as a first responder	12.5	19.6	9.1	17.8	9.6	10.9
Respond/lead emergency search and rescue calls in rural, remote or wilderness settings	12.5	6.7	2.9	5.4	2.6	1.8
None of the above	58.3	50.3	55.4	41.3	66.1	52.8

Leadership	**QC %**	**Canada %**	**QC %**	**Canada %**	**QC %**	**Canada %**
Supervising/mentoring nursing students	41.7	68.7	56.0	66.6	19.1	56.6
Supervising/mentoring nursing colleagues	45.8	55.2	50.3	61.2	13.0	31.9
Supervising/mentoring interprofessional students	33.3	35.6	6.9	19.6	4.3	8.5
Supervising/mentoring interprofessional colleagues	16.7	20.9	5.1	15.2	4.3	6.3
Leading a unit/shift in a practice setting	29.2	16.6	34.3	47.2	22.6	30.7
Leading an interdisciplinary health care team	12.5	24.5	16.0	21.8	2.6	11.6
Leading a community group	12.5	15.3	5.7	10.1	0.9	2.0
None of the above	29.2	14.7	25.1	12.7	54.8	27.4