



Nursing Practice in Rural and Remote Canada II

Saskatchewan Survey Fact Sheet

Principal Investigators

Martha MacLeod
University of Northern British Columbia
Norma Stewart
U. Saskatchewan
Judith Kulig
U. Lethbridge

Co-Investigators

Ruth Martin-Misener
Dalhousie University, NS
Kelley Kilpatrick
Université de Montréal, QC
Irene Koren
Laurentian University, ON
Mary Ellen Andrews
U. Saskatchewan, SK
Chandima Karunanayake
U. Saskatchewan, SK
Julie Kosteniuk
U. Saskatchewan, SK
Kelly Penz
U. Saskatchewan, SK
Pertice Moffitt
Aurora College, NWT
Davina Banner
UNBC, BC
Neil Hanlon
UNBC, BC
Linda Van Pelt
UNBC, BC
Erin Wilson,
UNBC, BC
Lela Zimmer
UNBC, BC

Principal Knowledge

User

Penny Anguish
Northern Health (BC)

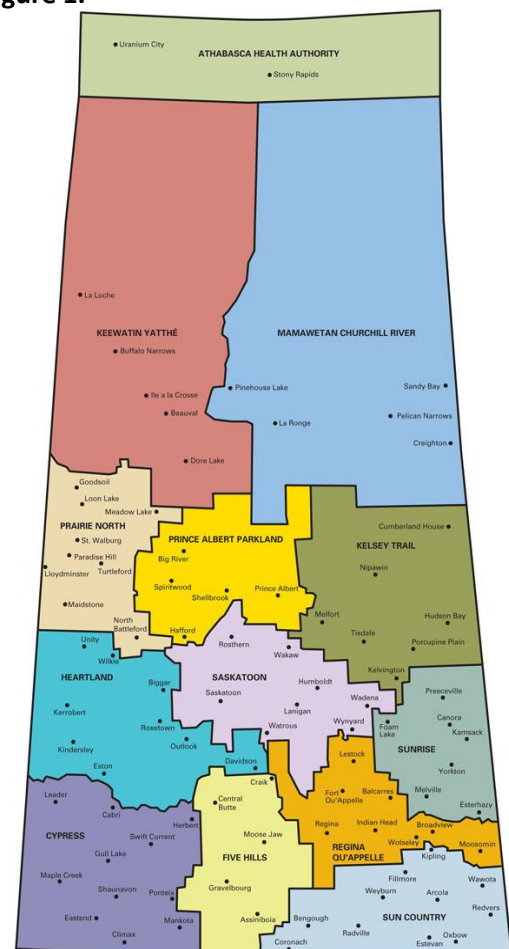
The multi-method study, *Nursing Practice in Rural and Remote Canada II (RRNII)*, aims to provide insights into the work lives and practice experiences of registered nurses (RNs), nurse practitioners (NPs), licensed/registered practical nurses (LPNs), and registered psychiatric nurses (RPNs) in rural 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 Saskatchewan (hereafter rural SK), 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

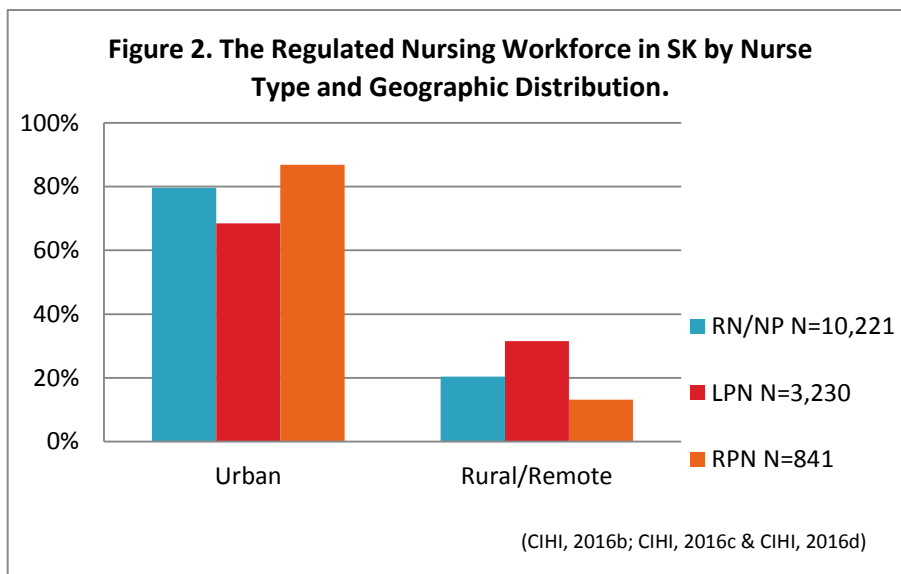
Figure 1.



error 1.5%). **From Saskatchewan, a total of 383 nurses responded: 183 RNs, 17 NPs, 133 LPNs, and 50 RPNs.** The eligible sample for SK was 888 individuals and the response rate was 43% (n=383, margin of error 4.6%). We can say the following: with 95% confidence, the sample of rural RNs, NPs, LPNs, and RPNs in SK is representative of rural SK nurses as a whole; and say with less than 85% confidence, the separate samples of rural RNs, NPs, LPNs, and RPNs are representative. In this fact sheet, we compare three sets of data: rural SK nurse data from the *RRNII* survey, rural Canada nurse data from the *RRNII* survey, and data for all SK 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 SK nursing workforce.

Who are the rural nurses in Saskatchewan?

In 2015, the rural population of SK accounted for 38% of the total provincial population, and 23% of the province’s 14,292 regulated nurses (RNs, NPs, LPNs, and RPNs) worked in rural settings (CIHI, 2016a). The geographic distribution of nurses in SK is illustrated in **Figure 2**.



The large majority of rural SK nurse respondents (82%) from the *RRNII* survey reported growing up in a community with a population of less than 10,000. Important to note is that 33% of rural SK nurses reported growing up outside of any city or town, as compared to 17% of rural nurses in Canada overall. Of those currently working in a rural community, only 44% reported living in their primary work community. Nurses who lived outside of their primary work community traveled to work on a daily (50%) or weekly (35%) basis with travel time

typically equal to, or under, 7 hours per week (82%). The large majority of rural SK nurses were married or living with a partner (87%); the minority with dependent children (37%).

Age and Gender

In the *RRNII* survey results, 36% of rural SK nurses were 55 years of age or older, compared to 32% of rural nurses in Canada overall; whereas only 17% were under 35 years of age, compared to 19% of rural nurses in Canada overall. This difference is particularly striking for rural SK RNs, 45% of whom were 55 years of age or older, compared to 35% of rural RNs in Canada overall. See **Table 1** for an age distribution of rural RNs and LPNs in SK and Canada.

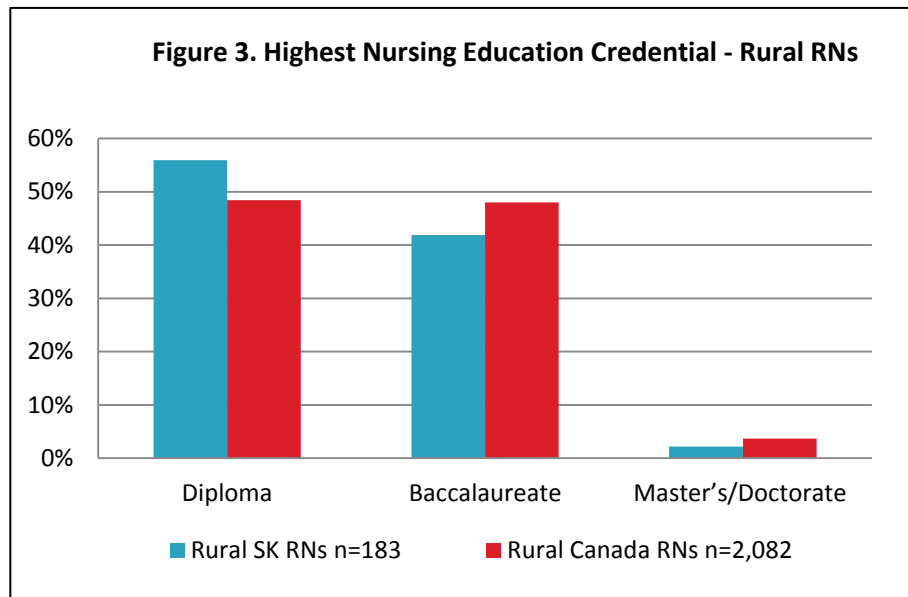
Table 1. Age Distribution of Rural RNs and Rural LPNs in SK and Canada

	<25 %	25-34 %	35-44 %	45-54 %	55-64 %	≥65 %
Rural SK RNs (n=183)	2.3	16.1	17.2	19.5	40.2	4.6
Rural Canada RNs (n=2,082)	1.1	17.8	19.1	27.2	29.6	5.3
Rural SK LPNs (n=133)	2.4	17.5	16.7	34.9	26.2	2.4
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 rural SK (3.5%) was lower than the proportion of rural male nurses in Canada overall (6.4%). Furthermore, 4.0% of rural RNs in SK were male, compared to 6.2% of rural RNs in Canada overall. Only 8.2% of rural RPNs in SK were male, compared to 15% of rural RPNs in Canada overall. Finally, 1.6% of rural LPNs in SK were male, compared to 5.6% of rural LPNs in rural Canada overall.

Education

In the *RRNII* survey, the level of nursing education among nurses in rural SK was slightly below the education level of rural nurses in Canada overall. The highest obtained nursing education credential of rural SK nurses was a master's degree (2.4%), while the most commonly obtained highest nursing education credential was a diploma in nursing (75%),



followed by a bachelor's degree in nursing (23%). 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 SK LPNs held a diploma in nursing, while rural SK RNs were likely to either hold a diploma (56%) or a bachelor's in nursing (42%) 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 SK NPs were likely to hold a diploma

(38%), a bachelor's (31%) or a master's (31%) degree in nursing as their highest credential, and rural SK RPNs predominantly held a diploma in nursing as their highest nursing credential (88%). **Figure 3** shows the highest nursing education credential of rural SK RNs and rural RNs in Canada overall in the *RRNII* survey.

Where do rural nurses in Saskatchewan work?

The large majority of rural SK nurses who responded to the survey were employed in nursing (90%), while the other 10.5% were either on leave (4.2%) or were retired and occasionally working in nursing on either a casual or short-term contract basis (6.3%). **Table 2** shows the population of primary work community of rural SK nurses. A greater proportion of rural SK nurses worked in a primary work community with a population of fewer than 1,000 (36%) compared to 14% of rural nurses in Canada overall. Considering each group of nurse, 65% of NPs, 40% of RNs, 21% of RPNs, and 31% of LPNs worked in a community with a population below 1,000. These are striking differences compared to rural nurses in Canada overall, wherein 17% of NPs, 15% of RNs, 10% of RPNs, and 12% of LPNs worked in a community of this size.

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

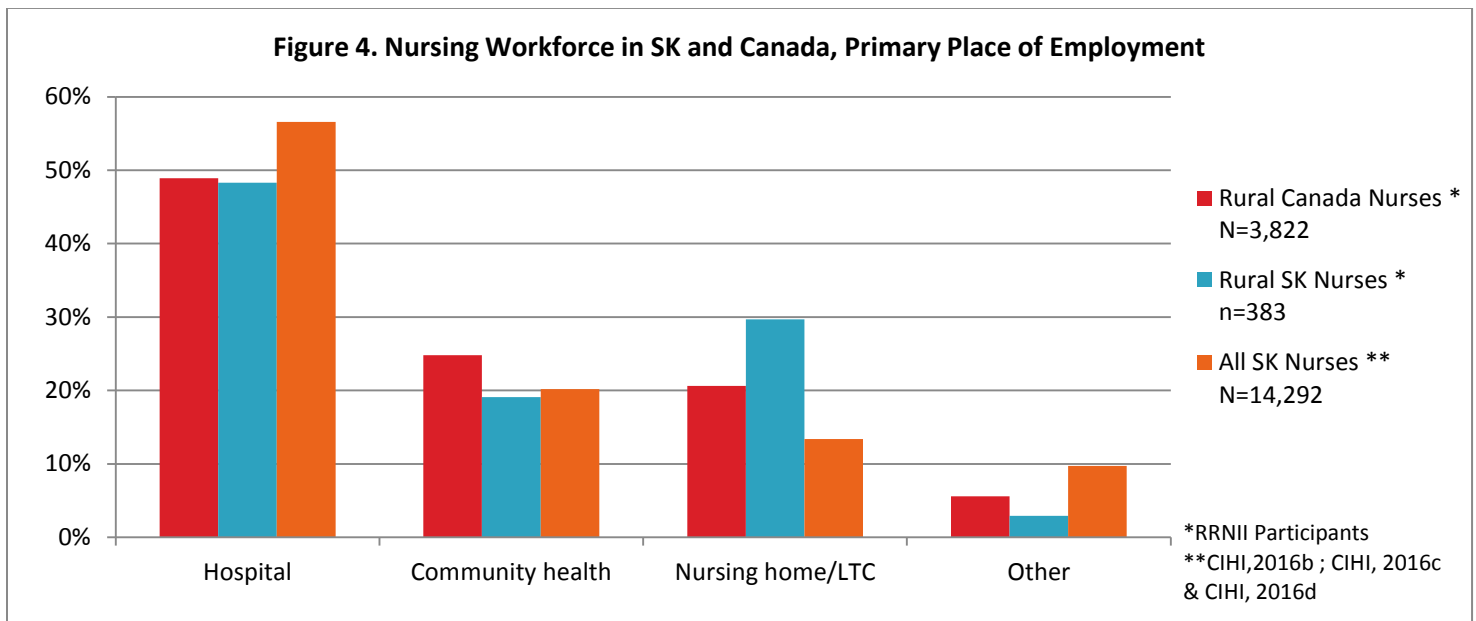
Community Population	% (n=383)
≤ 999	35.7
1,000 - 2,499	21.6
2,500 - 4,999	10.4
5,000 - 9,999	15.2
10,000 - 29,999	12.5
≥ 30,000	4.5

Nursing Employment Status

Rural SK nurses were more likely to be employed in a permanent full-time position (54%) than in a permanent part-time position (29%). In comparison, 54% of rural nurses in Canada overall were employed in a permanent full-time position.

Moreover, 21% of rural SK nurses worked in a casual position, which is a slightly greater proportion than is seen for rural nurses in Canada overall (16%). The large majority of rural SK nurses worked as staff nurses (86%) and a small minority as managers (6.2%). A larger proportion of rural SK RNs worked as staff nurses (83%) compared to rural RNs in Canada overall (76%), as well as a larger proportion of rural SK RPNs (86%) compared to rural RPNs in Canada overall (77%).

Figure 4 shows the primary place of employment for rural SK nurses compared to all nurses in SK and to rural nurses in Canada overall. As Figure 4 shows, rural SK nurses most often worked in a hospital setting (48%). A greater proportion of rural SK nurses worked in a nursing home or long-term care facility (30%) compared to rural nurses in Canada overall (21%). While 29% of both rural SK LPNs and RNs reported working in a nursing home or long-term care facility, 45% of RPNs reported this 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.

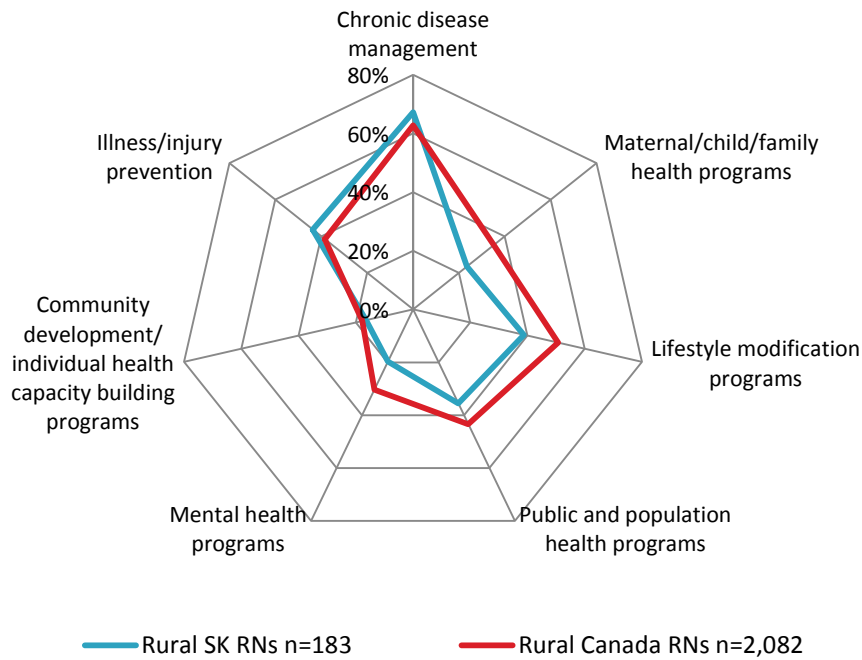
Nursing home/LTC includes nursing home/long-term care facility.

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 Saskatchewan?

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**.

Figure 5. Promotion, Prevention and Population Health: Rural RNs in SK and Canada



The large majority of rural SK RNs (88%), NPs (94%), LPNs (80%), and RPNs (86%) reported working within their licensed scope of practice. These numbers compare to 84% of rural RNs, 83% of rural NPs, 77% of rural LPNs, and 90% of rural RPNs in Canada overall.

In terms of *Promotion, Prevention and Population Health*, rural SK nurses reported being responsible for chronic disease management (73%), illness/injury prevention (46%), and lifestyle modification programs (44%). Compared to rural nurses across Canada (**Figure 5**), rural SK RNs showed a lower responsibility for many aspects of promotion, prevention, and population health.

Regarding *Assessment*, rural SK nurses reported providing health and wellness assessments such as older adult health assessment (78%), complete history and physical assessment (73%), focused history and physical assessment (70%), and mental health assessment (46%). These proportions are higher than those found for rural nurses in Canada overall. Rural SK LPNs had a generally wider assessment responsibility compared to rural LPNs in Canada overall (**Figure 6**).

Figure 6. Assessment: Rural LPNs in SK and Canada

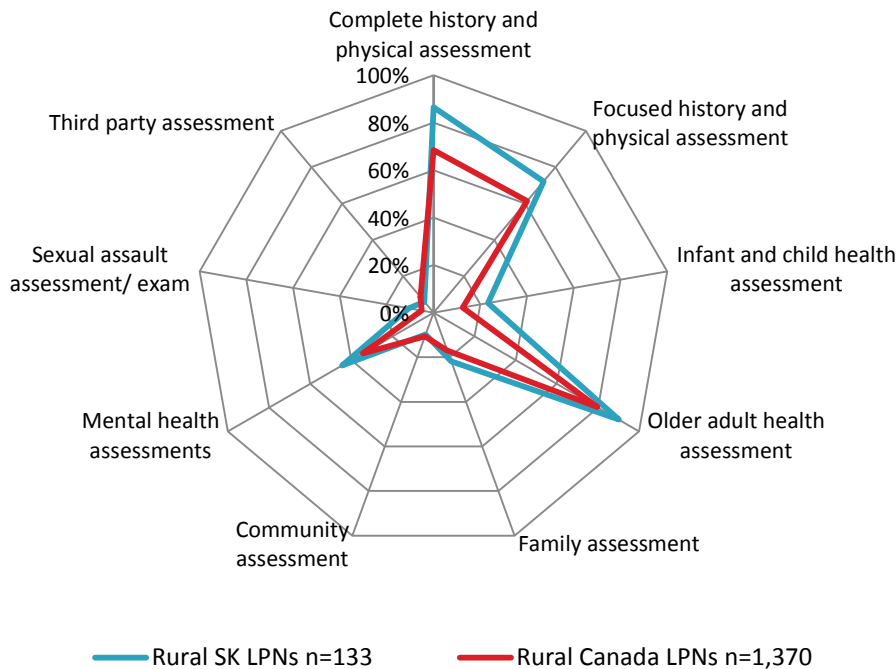
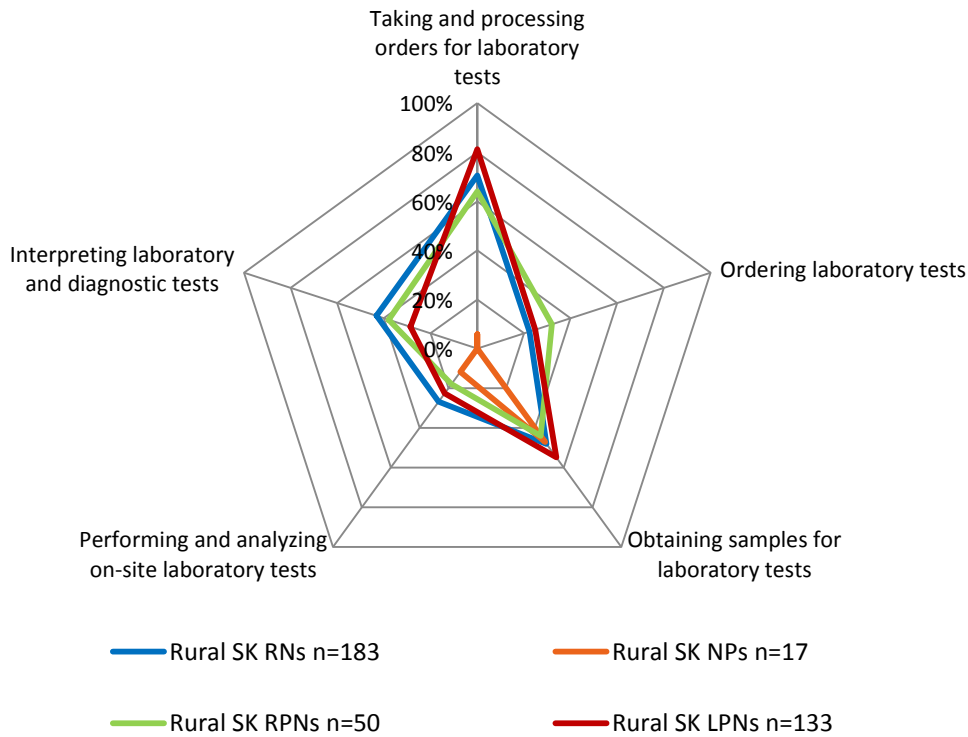
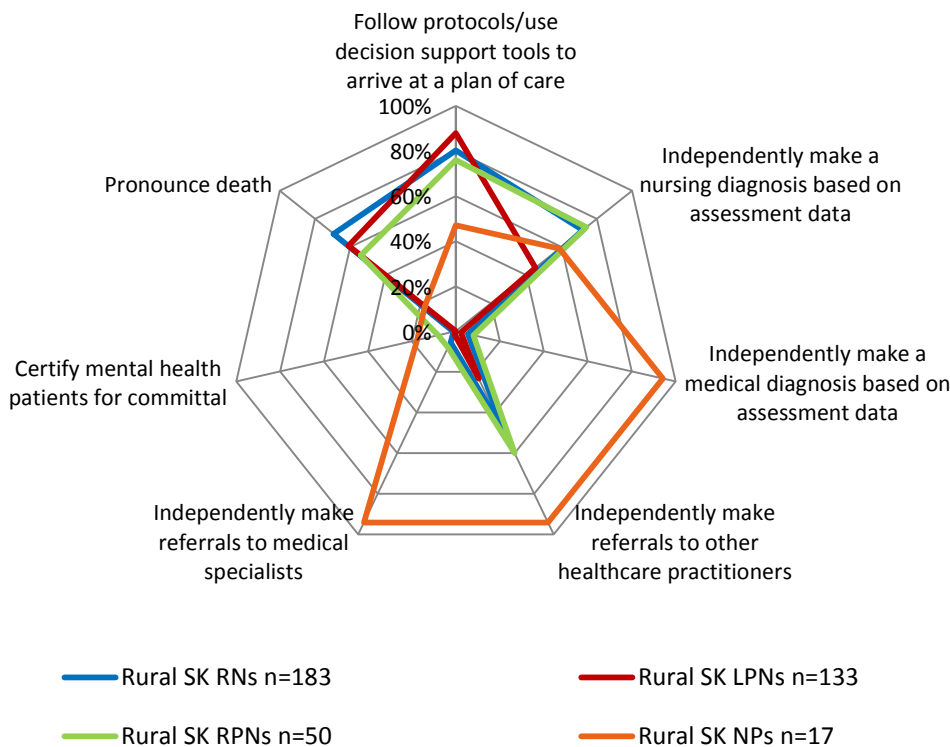


Figure 7. Laboratory Tests: Rural Nurses in SK



In the category of *Diagnostics*, which included *Laboratory Tests*, *Diagnostic Tests*, and *Diagnostic Imaging*, the majority of rural SK nurses indicated responsibility for taking and processing orders for laboratory tests (71%) and obtaining samples for laboratory tests (50%). **Figure 7** shows reported engagement in laboratory test activities for each type of rural SK nurse. Interestingly, 46% of all rural SK nurses reported that they were not responsible for any aspect of diagnostic tests, although 48% did report taking and processing orders for advanced diagnostic tests.

Figure 8. Diagnosis and Referral: Rural Nurses in SK



Finally, the majority (56%) of rural SK nurses said they were responsible for taking and processing orders for diagnostic imaging.

Within the category of *Therapeutic Management*, the large majority of rural SK nurses indicated responsibility for administering oral/SC/IM/topical/inhaled medication (90%), and the majority reported responsibility for dispensing medication (51%).

Figure 8 shows the category of *Diagnosis and Referral*. Rural SK nurses identified that they follow protocols or use decision support tools to arrive at a plan of care (81%) and that they independently make a nursing diagnosis based on assessment data (62%), among other responsibilities.

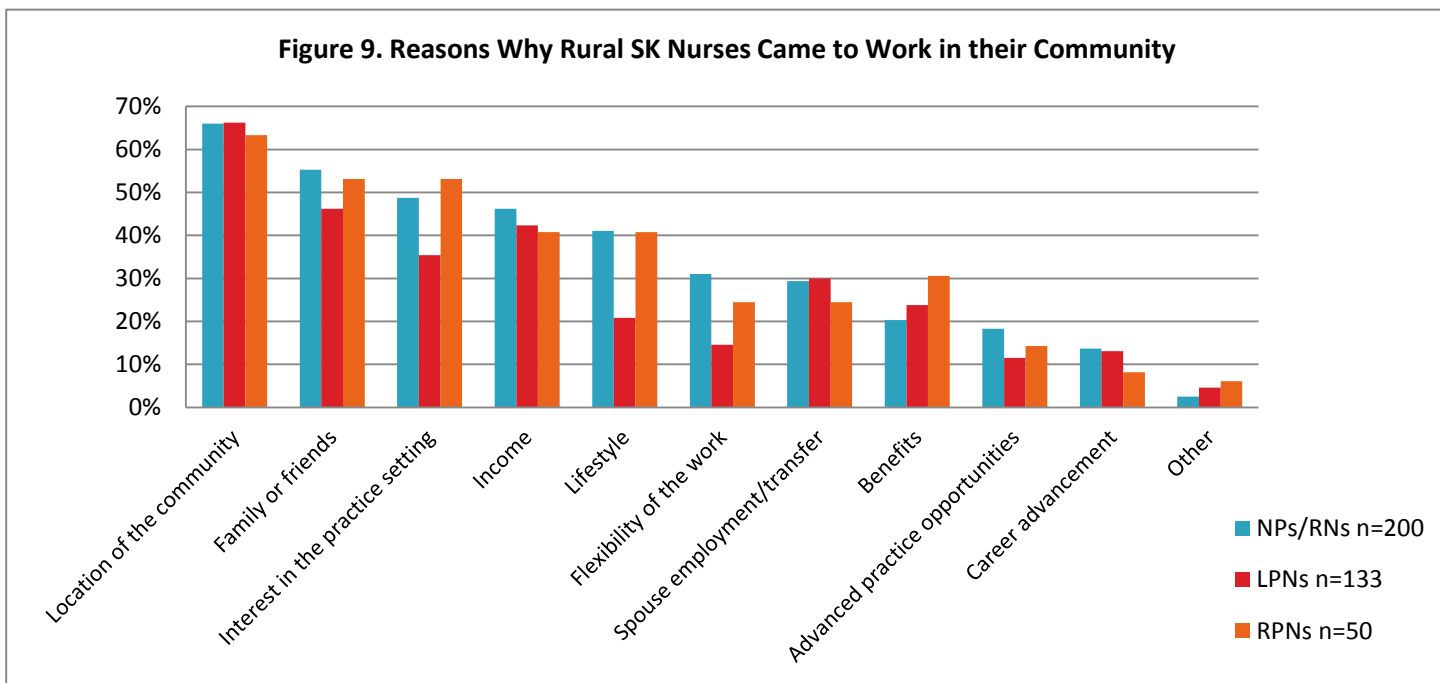
make a nursing diagnosis based on assessment data (62%), among other responsibilities.

In the category of *Emergency Care and Transportation*, 59% of rural SK nurses reported organizing urgent or emergent medical transport. This is a greater proportion than that found for rural Canada nurses overall (45%).

When it comes to *Leadership*, the majority of rural SK nurses reported supervising/mentoring nursing students (59%), and the large minority leading a unit/shift in a practice setting (45%) and supervising/mentoring nursing colleagues (44%).

What are the career plans of rural nurses in Saskatchewan?

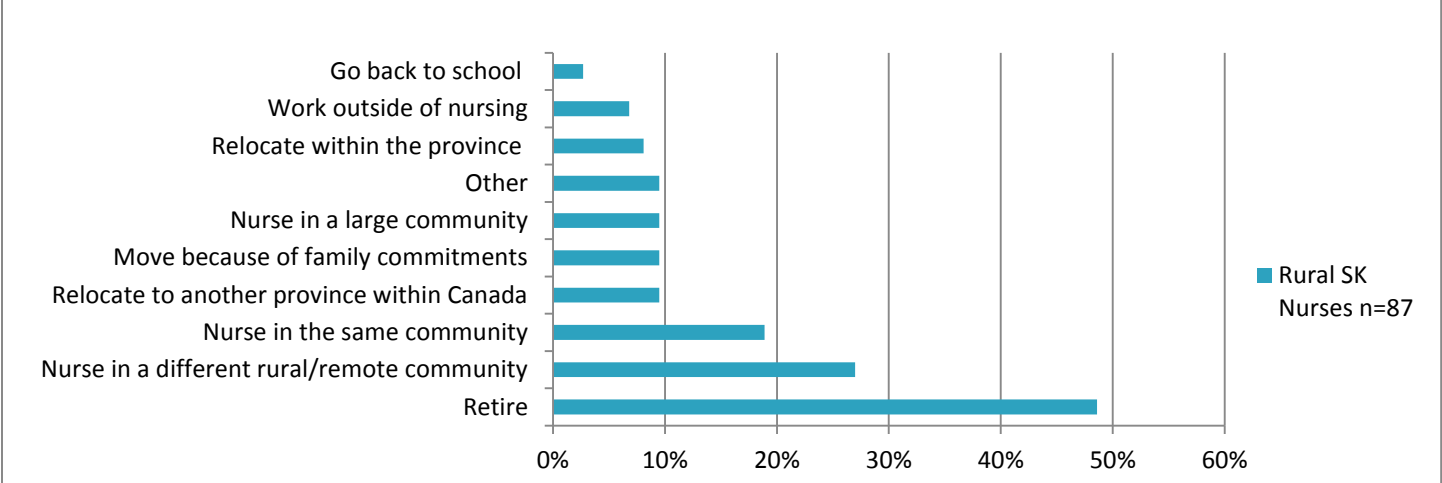
Recruiting and retaining nurses in rural nursing positions is an ongoing challenge (Kulig, Kilpatrick, Moffitt, & Zimmer, 2015). For all rural SK nurses, the most influential reasons they came to work in their primary work community were location of the community (66%), family or friends (52%), interest in the practice setting (45%), and income (44%). See **Figure 9** for a breakdown of recruitment factors by type of nurse.



Rural SK nurses were asked the reasons why they continue working in their primary work community. The strongest retention factors were location of the community (67%), income (59%), family or friends (54%), interest in the practice setting (50%), and lifestyle (42%). The large majority of rural SK nurses agreed that they were satisfied with their primary work community (84%); the remaining 16% were either neutral or were dissatisfied.

In the *RRNII* survey results, 23% of rural SK nurses indicated that they were planning to leave their present position within the next 12 months, which is a lower proportion than that found for rural nurses in Canada overall (26%). This included 26% of RNs, 5.9% of NPs, 27% of RPNs, and 20% of LPNs. Rural SK nurses who intended to leave (n=87) reported a variety of career plans, which are illustrated in **Figure 10**. Most often, they intended to retire (49%), nurse in a different rural/remote community (27%), or nurse in the same community (19%). The proportion of rural SK nurses who intended to retire in the next 12 months (49%) was higher than that found for any other province/territory and higher than that of rural nurses in Canada overall (30%). Moreover, the proportion of rural SK nurses who plan to retire in the next 5 years (39%) was greater than that of rural nurses in Canada overall (30%) and that of any other province/territory.

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

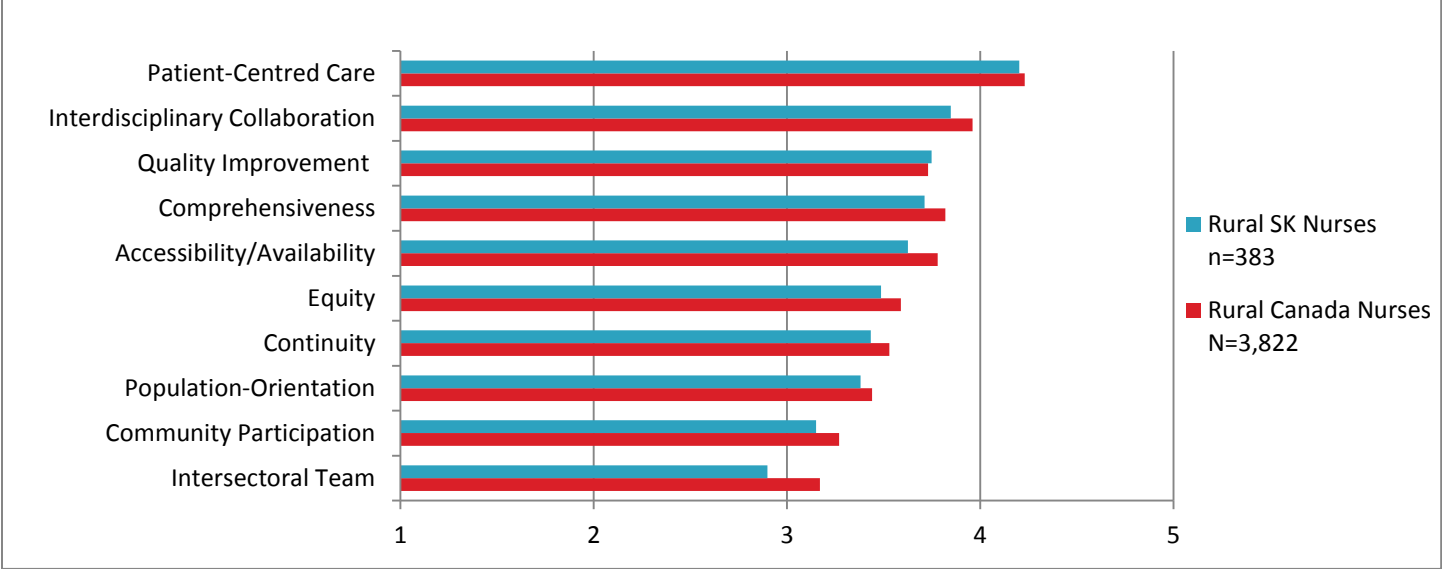


A minority of the rural SK nurses who stated they intended to leave said they would consider continuing to work in a rural/remote community if certain conditions were met, such as if they were to have increased flexibility in scheduling (38%), receive an annual cash incentive (37%), have opportunities to update their skills and knowledge (31%), utilize more of their skills (31%), work short-term contracts (29%), and work more collaboratively (25%).

What do rural Saskatchewan 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**.

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



It is evident that rural SK nurses were engaged in primary health care, often to a slightly lesser extent than rural nurses in Canada overall, which is illustrated by slightly lower means in eight categories as compared to rural nurses in Canada overall.

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

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

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

In terms of *Comprehensiveness*, rural SK nurses were positive 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.

Overall, *Accessibility* to healthcare services was regarded positively. Rural SK nurses felt positively 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.

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

Similarly, *Continuity of Care* was viewed positively by rural SK nurses, 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 were positive that they have easy access to their patients' past care provided 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 difficult for rural SK nurses. These two dimensions were perceived negatively.

Rural SK nurses felt positively that their workplace was *Population-oriented*, with a good fit between services and community health care needs, and monitoring patient outcome indicators, among other dimensions.

A similar pattern of results is seen for *Community Participation*, which was rated positively by rural SK nurses. These nurses agreed that their workplace supports healthcare providers in thinking of the community as a partner and that their workplace seeks input from the community about which healthcare services are needed.

Finally, there were negative ratings of *Intersectoral Teams*. Even though rural SK nurses were positive that other healthcare providers in their workplace work closely with community agencies, these nurses felt negatively that they personally work closely with community agencies, that community agencies meet regularly to discuss common issues

that affect health, and that there have been improvements in the way community services are delivered based on community agencies working together.

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 SK nurses was sufficient for analysis at the provincial level, which is reflected in the substantial response rate for this province (43%). For this reason, we can say the following: with 95% confidence, the sample of rural RNs, NPs, RPNs, and LPNs in SK is representative of rural SK nurses as a whole; and say with less than 85% confidence, the separate samples of rural RNs, NPs, RPNs, and LPNs 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 nurses aged 25-34, and overrepresented nurses aged 55-64 (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, 23% of the regulated nursing workforce in Saskatchewan was located in rural areas where 38% of the population lived (CIHI, 2016a). This is similar to 2010, when 24% of the nurses in Saskatchewan cared for 39% of the population (Pitblado, Koren, MacLeod, Place, Kulig, & Stewart, 2013).

Nearly double the proportion of rural nurses in SK reported growing up in the country outside of any city or town compared to in Canada overall. Important to note is that a greater proportion of rural SK nurses reported working in a primary work community with a population under 1,000 as compared to rural nurses in Canada overall. These findings may have implications for rural SK nurses working alone or in isolation.

Saskatchewan rural nurses, especially rural RNs, are older than rural nurses in Canada overall. An aging population is reflected in the high proportion of rural SK nurses who intend to retire in the next 12 months and in the next 5 years. Both proportions are higher than any other province/territory in Canada and higher than that of rural nurses in Canada overall. The potential of a large number of rural SK nurses retiring in the near future is high. These findings, paired with the high proportion of rural SK nurses working in the smallest communities, raises concern about the sustainability of the rural SK nursing workforce in less populated settings.

The reasons rural SK nurses came to work in their primary community were similar to the reasons they continue to work in their primary work community, namely the location of the community, family or friends, and interest in the practice setting. Income became a more important retention factor than it was a recruitment factor. Rural SK nurses listed factors that would contribute to them continuing to work in a rural community. Most often identified were increased flexibility in scheduling and receiving an annual cash incentive.

A slightly greater proportion of rural SK nurses held a casual position compared to rural nurses in Canada overall. Compared to rural nurses in Canada generally, a greater proportion of rural SK nurses worked in a nursing home/long-term care facility. A larger proportion of rural SK RNs and RPNs worked as staff nurses compared to rural RNs and RPNs in Canada overall.

The proportion of rural male nurses in SK was lower than the proportion of rural male nurses in Canada overall. The level of nursing education among rural SK nurses was slightly below the education level of rural nurses in Canada overall.

References

- Canadian Institute for Health Information [CIHI]. (2002). *The Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000*. <http://www.unbc.ca/rural-nursing>
- Canadian Institute for Health Information [CIHI]. (2016a). *Regulated Nurses, 2015: Canada and Jurisdictional Highlights*. Ottawa, ON: CIHI; 2016.
- Canadian Institute for Health Information [CIHI]. (2016b). *Regulated Nurses, 2015: LPN Data Tables*. Retrieved from: https://www.cihi.ca/sites/default/files/document/lpn_2015_data_tables_en.xlsx
- Canadian Institute for Health Information [CIHI]. (2016c). *Regulated Nurses, 2015: RN/NP Data Tables*. Retrieved from: https://www.cihi.ca/sites/default/files/document/rn_np_2015_data_tables_en.xlsx
- Canadian Institute for Health Information [CIHI]. (2016d). *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., 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>
- Place, J., MacLeod, M., Stewart, N. & Pitblado, R. (June, 2014). *Nursing Practice in Rural and Remote Saskatchewan: An Analysis of CIHI's Nursing Database*. Prince George, BC: Nursing Practice in Rural and Remote Canada II. RRN2-01-3. <http://www.unbc.ca/rural-nursing>

To cite this fact sheet:

- Andrews, M.E., Kosteniuk, J., Penz, K., Stewart, N., Olynick, J., Jonatansdottir, S., Mix, N., Garraway, L., & MacLeod, M. (April, 2017). *Saskatchewan Survey Fact Sheet: Nursing Practice in Rural and Remote Canada*. Prince George, BC: Nursing Practice in Rural and Remote Canada II. RRN2-04-03

Further information about the full study is available from:

Nursing Practice in Rural and Remote Canada II
University of Northern British Columbia
3333 University Way
Prince George, BC V2N 4Z9
Tel: 1-250-960-6405
Email: rrn@unbc.ca
<http://www.unbc.ca/rural-nursing>

Appendix A: Scope of Practice: Rural SK and Canada RNs, RPNs and LPNs

	Rural RNs		Rural LPNs		Rural RPNs	
	SK % (n=183)	Canada % (n=2,082)	SK % (n=133)	Canada % (n=1,370)	SK % (n=50)	Canada % (n=207)
Promotion, Prevention, and Population Health						
Chronic disease management	67.2	62.7	79.7	74.9	66.0	49.8
Maternal/child/family health programs	23.5	35.2	19.5	18.0	6.0	6.8
Lifestyle modification programs	38.8	50.7	43.6	50.1	48.0	58.9
Public and population health programs	35.5	43.4	30.8	32.3	30.0	32.4
Mental health programs	19.7	30.4	25.6	32.4	54.0	79.7
Community development/individual health capacity building programs	16.4	17.7	12.0	12.6	12.0	19.3
Illness/injury prevention	43.7	38.4	49.6	47.4	42.0	38.2
None of the above	20.2	21.8	15.8	17.3	10.0	7.2

Assessment	SK %	Canada %	SK %	Canada%	SK %	Canada %
Complete history and physical assessment	66.7	59.6	86.5	68.5	48.0	39.1
Focused history and physical assessment	66.1	70.3	72.2	61.4	66.0	52.7
Infant and child health assessment	23.0	32.3	23.3	12.5	0.0	0.5
Older adult health assessment	68.3	61.2	90.2	79.7	74.0	50.2
Family assessment	20.8	25.0	21.8	16.9	24.0	21.7
Community assessment	11.5	16.2	9.8	10.6	16.0	15.9
Mental health assessment	38.8	40.7	44.4	34.3	66.0	82.6
Sexual assault assessment/exam	13.7	19.4	10.5	5.0	8.0	5.3
Third party assessment	10.9	18.7	6.0	8.6	12.0	6.3
Other assessment	1.6	2.5	0.8	0.9	0.0	1.9
None of the above	10.4	10.7	3.8	10.8	6.0	5.3

Therapeutic Management	SK %	Canada %	SK %	Canada%	SK %	Canada %
Administering oral/SC/IM/topical/inhaled medications	86.3	80.0	96.2	89.5	86.0	72.9
Dispensing medication	47.5	54.2	54.1	63.8	56.0	50.2
Pharmacy management	25.7	25.3	18.8	15.8	26.0	14.0
Prescribing medication independently	2.7	7.8	2.3	3.3	4.0	1.9
Prescribing medication using protocols or guidelines	16.9	29.5	10.5	11.5	10.0	7.2
Other medication related responsibilities	7.1	8.3	2.3	5.8	14.0	13.5
None of the above	10.4	14.8	3.0	8.6	14.0	19.8

Laboratory Tests	SK %	Canada %	SK %	Canada%	SK %	Canada %
Taking and processing orders for laboratory tests	70.5	64.5	81.2	61.2	64.0	49.8
Ordering laboratory tests	22.4	37.4	24.8	28.5	32.0	23.7
Obtaining samples for laboratory tests	48.1	57.3	54.9	57.0	44.0	34.3
Performing and analyzing on-site laboratory tests	26.8	29.8	22.6	19.7	18.0	10.6
Interpreting laboratory and diagnostic tests	43.2	46.2	28.6	24.5	38.0	25.6
None of the above	17.5	19.6	11.3	18.4	28.0	35.7

	Rural RNs		Rural LPNs		Rural RPNs	
	SK % (n=183)	Canada % (n=2,082)	SK % (n=133)	Canada% (n=1,370)	SK % (n=50)	Canada % (n=207)
Diagnostic Tests						
Taking and processing orders for advanced diagnostic tests	54.6	46.4	48.9	41.1	38.0	33.8
Ordering advanced diagnostic tests	3.3	8.1	5.3	7.6	4.0	5.3
Performing advanced diagnostic tests	0.5	1.6	1.5	1.3	2.0	1.0
Interpreting and following up advanced diagnostic tests	11.5	13.3	5.3	6.1	10.0	7.7
None of the above	44.3	49.2	48.9	55.8	60.0	63.3

Diagnostic Imaging	SK %	Canada %	SK %	Canada%	SK %	Canada %
Taking and processing orders for diagnostic imaging	61.2	53.7	60.9	48.3	44.0	43.5
Ordering routine diagnostic imaging	12.0	25.7	18.0	16.9	14.0	13.5
Ordering advanced diagnostic imaging	2.2	5.9	2.3	7.4	10.0	9.7
Performing diagnostic imaging	0.5	8.8	0.0	0.9	0.0	0.0
Interpreting and following up diagnostic imaging	6.6	14.3	2.3	3.3	4.0	4.3
None of the above	37.2	39.0	31.6	46.4	54.0	52.2

Diagnosis and Referral	SK %	Canada %	SK %	Canada%	SK %	Canada %
Follow protocols/use decision support tools to arrive at a plan of care	80.3	76.3	88.0	74.3	76.0	74.4
Independently make a nursing diagnosis based on assessment data	72.1	65.9	45.1	36.4	74.0	67.1
Independently make a medical diagnosis based on assessment data	5.5	11.0	2.3	2.8	8.0	5.8
Independently make referrals to other healthcare practitioners	49.7	47.7	23.3	28.5	60.0	47.3
Independently make referrals to medical specialists	5.5	11.0	1.5	4.7	8.0	8.7
Certify mental health patients for committal	1.1	6.8	0.0	0.9	8.0	10.6
Pronounce death	69.4	42.7	60.9	22.9	54.0	28.0
None of the above	9.3	12.6	5.3	20.2	8.0	7.7

Emergency Care and Transportation	SK %	Canada %	SK %	Canada%	SK %	Canada %
Organize urgent or emergent medical transport	64.5	52.0	60.9	35.5	36.0	35.3
Provide care during urgent/emergent medical transportation	36.1	35.4	18.8	19.6	16.0	12.6
Respond/lead emergency calls as a first responder	8.2	17.8	8.3	10.9	10.0	15.0
Respond/lead emergency search and rescue calls in rural, remote or wilderness settings	2.2	5.4	3.0	1.8	2.0	3.4
None of the above	29.5	41.3	30.8	52.8	58.0	60.9

Leadership	SK %	Canada %	SK %	Canada%	SK %	Canada %
Supervising/mentoring nursing students	61.2	66.6	54.1	56.6	58.0	71.0
Supervising/mentoring nursing colleagues	54.1	61.2	27.1	31.9	50.0	55.6
Supervising/mentoring interprofessional students	16.9	19.6	6.0	8.5	20.0	24.6
Supervising/mentoring interprofessional colleagues	14.2	15.2	2.3	6.3	18.0	24.6
Leading a unit/shift in a practice setting	55.7	47.2	30.8	30.7	54.0	50.2
Leading an interdisciplinary health care team	27.3	21.8	9.0	11.6	44.0	33.8
Leading a community group	7.7	10.1	3.0	2.0	12.0	12.1
None of the above	10.9	12.7	27.8	27.4	14.0	9.2