

Nursing Practice In Rural and Remote Manitoba: An Analysis of CIHI's Nursing Database

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Highlights

- In the period between 2003 and 2010, the regulated nursing workforce in Manitoba grew by 14.9%, reaching a total of 15,406 regulated nurses. The greatest increase in the regulated nursing workforce during this time was in RNs (15.9%).
- In 2010, 24.1% of the regulated nursing workforce in Manitoba was located in rural areas of the province where 31.9% of the population lived.
- In urban areas, the nurse-to-population ratio increased for RNs and LPNs, and decreased for RPNs. In rural areas it decreased for RNs and RPNs, but increased for LPNs.
- Fewer rural than urban RNs held full-time positions. In 2010, rural LPNs had the highest proportion holding casual positions, followed by rural RNs.
- The numbers of RNs and RPNs in rural Manitoba achieving baccalaureates increased from 2003 to 2010. The number of rural RNs achieving Master's degrees has also increased during this time.
- Between 2003 and 2010, the overall proportion of rural nurses working in primary healthcare settings decreased from 24.3% to 20.8%. Rural RPNs working in primary healthcare settings had the greatest decrease (75.3% to 26.6%).
- Although the majority of nurses educated in Manitoba stayed in Manitoba, in 2010,17% of RNs, 10% of LPNs and 5% of RPNs received their initial education elsewhere.

Introduction

People who live in rural and remote parts of Canada (including the North) tend to have more health challenges than people living in urban areas. Rural and remote communities also experience limited numbers and chronic shortages of health care workers, including nurses.

In order to keep improving health services and support nurses in rural and remote communities, planners and policy makers need up-to-date information. *Nursing Practice in Rural and Remote Canada II* provides some of that information.

Nursing Practice in Rural and Remote Canada II is a study conducted in partnership with planners and policy makers who will make sure that the findings can be used to improve nursing services and access to care in rural and remote Canada.

A key activity of the *Nursing Practice in Rural and Remote Canada II* study was the analysis of the Canadian Institute for Health Information's (CIHI) Nursing Database (NDB). This analysis was undertaken in order to identify key characteristics of the regulated nursing workforce in rural and remote Canada, as well as changes in the workforce over the last decade.

- Data for the years 2003 and 2010 were analyzed.
- Data for registered nurses (RNs), nurse practitioners (NPs), licensed practical nurses

(LPNs), and registered psychiatric nurses (RPNs) were included.

This document reports key findings from the NDB analysis for Manitoba (MB). It provides an overview of the regulated nursing workforce in Manitoba, with a special focus on rural and remote locations.

Definition of Rural

We use the Statistics Canada definition of Rural and Small Town Canada (du Plessis et al., 2001, p. 6). Rural refers to communities with a core population of less than 10,000 people, where less than 50% of the population commutes to larger urban centres for work. This Statistics Canada definition of rural includes northern communities, as well as remote areas with little or no metropolitan influence as measured, in a labour market context, by the size of commuting flows to any larger urban centre.

According to the 2011 Census, Manitoba had a population of 1,208,276. As of 2011, the rural population was 385,669, which accounted for 31.9% of the total and represented an increase of 3.8% since 2006. Table 1 lists population by health region.

Table 1. Population by regional health region, 2011, MB

| Health Region | Population |
|---------------------|------------|
| Winnipeg | 706,097 |
| Brandon | 51,854 |
| North Eastman | 44,047 |
| South Eastman | 69,669 |
| Interlake | 83,958 |
| Central | 109,972 |
| Assiniboine | 70,092 |
| Parkland | 40,312 |
| Norman | 23,933 |
| Burntwood/Churchill | 50,640 |

Source: CIHI. (2013). Regulated Nurses: Canadian Trends, 2007 to 2011. Ottawa, ON: CIHI.

Nursing Database Analysis: Findings

1. Nursing Workforce Numbers in Manitoba

In the period between 2003 and 2010, the overall regulated nursing workforce grew from 13,406 to 15,406, which represents a 14.9% increase. When this increase was examined in terms of nurse type, we found that the total number of RNs increased from 10,034 to 11,630 (up 15.9%), the total number of LPNs increased from 2,417 to 2,732 (up 13.0%), and the total number of RPNs decreased from 955 to 949 (down 0.6%). No data were available for NPs in 2003, but in 2010 there were 95 NPs working in Manitoba.

The changes in the regulated nursing workforce have also been examined in terms of urban and rural comparisons. The number of urban RNs and LPNs increased between 2003 and 2010 (up 16.5% and 15.2%, respectively), while the numbers of urban RPNs decreased slightly (down 1.2%). In rural locations, RNs decreased by 15.9%, while LPNs and RPNs increased (up 10.9% and 0.3%, respectively). With the exception of the decrease in rural RNs and the trends for RPNs these changes generally reflect the wider trends found at the national scale.

Of the total regulated nursing workforce in Manitoba in 2010, 18.2% of RNs, 23.5% of NPs, 45.0% of LPNs, and 31.3% of RPNs worked in rural communities. When we examined the rural regulated nursing workforce with respect to the rural population, we found that 24.1% of nurses served 31.9% of Manitoba residents. The situation in urban locations is reversed; here we found that 75.9% of the regulated nursing workforce served 68.1% of the population.¹

2. Nurse-to-Population Ratios

Nurse-to-population ratios represent the number of nurses per 100,000 population. In Manitoba, the nurse-to-population ratio for RNs and RPNs was lower in rural than in urban locations for both data years (2003 and 2010). In contrast, the nurse-to-population ratios for LPNs were higher in rural than in urban locations for both data years (2003 and 2010). Table 2 illustrates that the nurse-to-population ratios have decreased for rural RNs (down 18.8%), as well as for urban and rural RPNs (down 8.9% and 3.1%, respectively). The nurse-to-population ratio for LPNs in urban and rural Manitoba increased during this time period (up 6.2% and 7.2%, respectively).

Table 2. Percentage (%) changes in 2003-2010 nurse-to-population ratios, MB and Canada

| | RI | Ns | LP | Ns | RP | Ns |
|--------------|-------|-------|-------|-------|-------|-------|
| Jurisdiction | Urban | Rural | Urban | Rural | Urban | Rural |
| MB | 7.4 | -18.8 | 6.2 | 7.2 | -8.9 | -3.1 |
| Canada | †† | †† | 20.7 | 6.8 | -10.6 | -5.0 |

Note: †† - no urban/rural allocations of RNs were available for RNs in Quebec in 2003. Data were suppressed for the territories due to small cell sizes. The national jurisdiction for RNs and LPNs refers to Canada and Western Canada for RPNs.

3.Demographics

Age:

Table 3 provides information about the average ages of all nurse types in urban and rural locations for 2003 and, with the exception of RNs, 2010. With the exception of LPNs, the average age of rural nurses was higher than their urban counterparts. The average ages of LPNs and RPNs working in both urban and rural locations increased.

Table 3. Average age (in years) of the regulated nursing workforce, 2003-2010, MB and Canada

| | | RI | Ns | | | LP | Ns | | | RP | Ns | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Urb | an | Ru | ral | Urb | an | Ru | ral | Urb | an | Ru | ral |
| Jurisdiction | 2003 | 2010 | 2003 | 2010 | 2003 | 2010 | 2003 | 2010 | 2003 | 2010 | 2003 | 2010 |
| MB | 44.6 | ††† | 45.5 | ††† | 45.2 | 46.1 | 44.8 | 46.1 | 45.9 | 47.1 | 46.4 | 48.9 |
| Canada | †† | ††† | †† | ††† | 44.4 | 42.8 | 44.6 | 44.8 | 46.3 | 47.6 | 46.1 | 48.6 |

Note: †† no urban/rural allocation was made of 2003 Quebec NDB records for RNs. ††† data to compute average ages were not submitted by Manitoba for the 2010 NDB data year.

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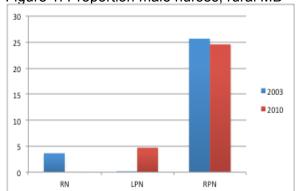
¹ Population data from 2011 census.

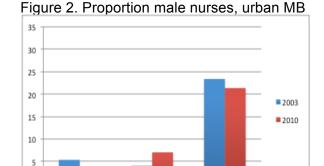
Gender:

The proportions of males in the regulated workforce remained low for all nurse types and in both rural and urban locations. Data regarding male/female designations for RNs in Manitoba were not available for 2010. The proportions of male LPNs increased in both urban and rural locations. The proportion of male RPNs decreased in both urban and rural locations.

RPNs were the nurse type with the largest proportion of males. For example, in 2010 24.6% of RPNs in rural Manitoba were male compared to 4.7% of LPNs (see Figure 1). In the same year, 21.4% of RPNs in urban Manitoba were male compared to 7.0% of urban LPNs (see Figure 2).

Figure 1. Proportion male nurses, rural MB





LPN

RPN

Note: No Female/Male designations provided for 2010 Manitoba NDB records for RNs

4. Education

In 2003 and 2010, more rural RNs (88.6% and 75.6%, respectively) than urban RNs (79.5% and 66.1%, respectively) in Manitoba had a diploma as their initial nursing education. As Figure 3 indicates, these proportions decreased, a pattern which has also been observed for rural and urban RNs across Canada (exception: no information for Quebec).

Typically, RNs working in urban areas had higher levels of education than their rural counterparts. For example in 2003, 29.9% of urban RNs had baccalaureate degrees compared to 20.7% of rural RNs. In the same year, 2.5% of urban RNs had attained a Master's degree while only 0.3% of rural RNs had done so.

However, by 2010 there was evidence of the education gap beginning to close. In this year, 41.9% of urban RNs had a baccalaureate degree, compared to 31.8% of rural RNs. The proportions of urban and rural RNs with Master's degrees was 3.0% and 1.6% respectively. Figure 4 compares highest nursing education categories for rural and urban RNs in Manitoba for 2003 and 2010.

Figure 3. Proportion of RNs with diploma as initial nursing education, rural-urban, 2003-2010, MB

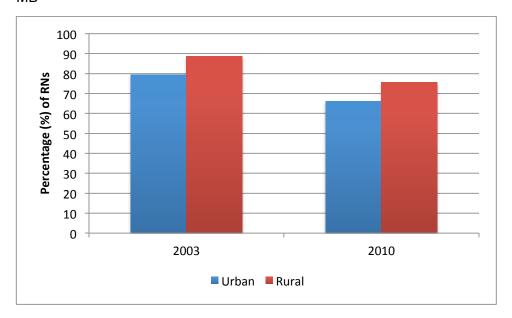
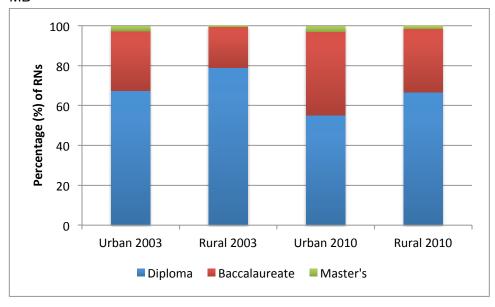


Figure 4. Proportion of RNs by highest nursing education categories, rural-urban, 2003-2010, MB



5. Employment

Employment Status:

The NDB categories for employment status are: full-time, part-time, casual and not stated. The nursing colleges and CIHI define regular nursing employment as guaranteeing "a fixed number of hours of work per pay period. May be defined by the employer as full-time or part-time, but reflects permanent employment even though it may be time limited" (CIHI 2012, p. 8). Casual

nursing employment "does not guarantee a fixed number of hours of work per pay period" (CIHI 2012, p. 8). Table 4 provides employment status proportions by nurse type, rural/urban, and year.

Table 4. Employment status proportions by nurse type, rural and urban, 2003 and 2010, MB

| | | Urban | | | Rural | |
|------|------|-------|---------|------|-------|---------|
| | %FT | %PT | %Casual | %FT | %PT | %Casual |
| 2003 | | | | | | |
| RNs | 47.8 | 46.2 | 6.0 | 40.9 | 52.5 | 6.6 |
| NPs | | | | | | |
| LPNs | 37.4 | 55.0 | 7.6 | 31.7 | 57.4 | 11.1 |
| RPNs | 62.4 | 33.7 | 4.0 | 67.2 | 27.0 | 5.7 |
| 2010 | | | | | | |
| RNs | 46.7 | 44.5 | 8.8 | 41.3 | 48.0 | 10.7 |
| NPs | 63.1 | 29.2 | 7.7 | 30.0 | 55.0 | 15.0 |
| LPNs | 36.5 | 54.2 | 9.3 | 32.9 | 55.6 | 11.5 |
| RPNs | 58.6 | 33.2 | 8.3 | 63.5 | 27.3 | 9.2 |

In 2003, more urban RNs were in full-time positions than their rural counterparts (47.8% compared to 40.9%). In the same year, the proportion of rural RNs in part-time positions was higher than for urban RNs (52.5% compared to 46.2%), and the proportion in casual positions was nearly the same for both rural and urban RNs (6.6% and 6.0%). The proportion of RNs working full-time changed very little between 2003 and 2010 in both urban and rural locations, although this proportion remained lower for rural than for urban RNs. For both urban and rural RNs, the proportion in part-time positions decreased between 2003 and 2010 while the proportion in casual positions increased. In 2010, the proportions of rural RNs in part-time and casual positions were higher than for their urban counterparts.

There were no data for NPs in 2003. In 2010, the majority of urban NPs worked full-time (63.1%), followed by part-time (29.2%). In the same year, 30.0% of rural NPs reported full-time employment in 2010, with 55.0% working part-time and 15.0% working casual.

More LPNs reported part-time than full-time or casual employment status in 2003, with the proportion being slightly higher in urban areas (57.4% compared to 55.0%). The proportion of LPNs in full-time positions in this data year was 31.7% and 37.4% for rural and urban locations, respectively. A slightly larger proportion of rural LPNs were in casual positions in 2003 than their urban counterparts. Between 2003 and 2010, the proportion of urban and rural LPNs in full-time positions changed very little, but the larger proportion remained for the urban group. Part-time employment decreased slightly between 2003 and 2010 for both urban and rural LPNs, and casual employment increased for urban LPNs, and stayed nearly the same for rural LPNs. More rural than urban LPNs were in casual positions.

In 2003, the majority of both urban and rural RPNs worked full-time, and this proportion was higher for rural RPNs than for urban (67.2% compared to 62.4%). Between 2003 and 2010, the proportion of RPNs working full-time decreased in urban and rural locations. The proportion of rural and urban RPNs in part-time positions stayed nearly the same between 2003 and 2010,

while the proportion in casual positions grew.

Multiple Employers:

'Multiple employers' refers only to whether nurses have one or more employers. The actual number of employers was not available for this study.

Between 2003 and 2010, the proportion of rural and urban RNs in Manitoba who worked for more than one employer decreased from 8.4% and 7.4% to 0.0%. No multiple employer status data were available for NPs for this time period.

The proportion of rural LPNs working for more than one employer decreased between 2003 and 2010 from 29.8% to 26.9%. The proportion of urban LPNs working for more than one employer decreased from 24.0% in 2003 to 21.6% in 2010. More rural than urban LPNs had more than one employer in 2010.

Between 2003 and 2010, the proportion of rural RPNs who worked for more than one employer decreased from 15.9% to 12.1%. During the same time period, urban RPNs working for more than one employer increased from 16.5% to 19.8%. In 2010, there were more urban than rural RPNs with multiple employers.

Place of Work:

The 'place of work' NDB data element consists of approximately fifteen sub-elements. Enumeration of these sub-elements by urban-rural nurses and jurisdiction produces a large number of small cell sizes. As the numbers in these small cell sizes were suppressed, it was necessary to employ the CIHI grouping as indicated below:

- Hospital: Hospital, Mental Health Centre, Rehabilitation/Convalescent Centre
- **Community Health Agency**: Nursing Station (outpost or clinic), Home Care Agency, Community Health Centre, Public Health Department/Unit
- Nursing Home/Long Term Care Facility
- Other Place of Work: Business/Industry/Occupational Health Office, Private Nursing Agency/Private Duty, Self-Employed, Physician's Office/Family Practice Unit, Educational Institution, Nursing Association/Government, Other
- Not Stated

Figure 5 shows who worked in rural Manitoba hospitals, community agencies and nursing homes/LTC facilities in 2010. The proportion of rural RNs working in hospital settings changed very little between 2003 and 2010, staying around 55%. Over the same time period, the proportion of rural RNs working in community health agencies also stayed nearly the same (~21%). There was a slight increase in the proportion of rural RNs who worked in nursing homes/LTC facilities, from 15.5% to 18.1%. In urban locations, the proportion of RNs in hospital settings and nursing homes/LTC facilities held steady around 64% and 10%, respectively. The proportion of urban RNs working in community health agencies increased from 13.0% to 16.3%. In 2010, 63.7% of urban RNs worked in hospital settings compared to 56.3% of their rural counterparts.

No 2003 data were available for NPs. In 2010, the majority of rural NPs were employed in the 'other' (42.1%) and community health agency categories (36.8%). In urban areas, 38.5% of NPs worked in hospitals, 35.4% in community health agencies, and 18.5% in 'other'. The proportion of NPs working in hospital settings in 2010 was greater in urban than in rural areas.

The proportion of rural LPNs working in hospitals decreased between 2003 and 2010 from 60.7% to 55.4%, respectively. The proportion of rural LPNs working in community health agencies increased from 6.9% to 10.3%, and the proportion working in nursing homes/LTC facilities increased from 28.2% to 30.6%. In urban areas, the majority of LPNs worked in nursing homes/LTC facilities.

Between 2003 and 2010, the proportion of rural RPNs working in hospitals increased from 4.8% to 50.2%, and decreased for community health agencies from 75.9% to 27.6%. The proportion of rural RPNs working in nursing homes/LTC facilities changed very little, staying within a percent of 16%. In urban areas, the proportion of RPNs working in hospitals increased (29.7% to 33.5%) and decreased slightly for both community health agencies and nursing homes/LTC facilities (24.7% to 23.8% and 35.5% to 27.4%, respectively.

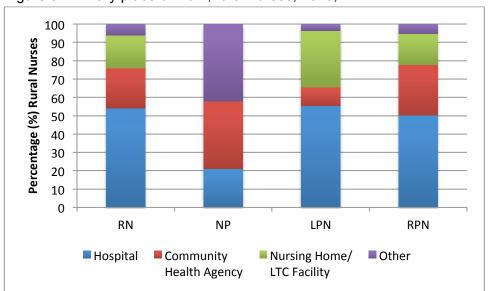


Figure 5. Primary place of work, rural nurses, 2010, MB

Note: Percentages computed excluding 'not stated' category.

Primary Area of Responsibility:

Figure 6 illustrates nurses' primary areas of responsibility in rural Manitoba in 2010. Between 2003 and 2010, there was little change in the proportions of rural RNs in direct care (88.8% to 89.6%), administration (7.7% to 8.0%), education (3.1% to 2.4%), and research (0.4% to 0.0%). These proportions were very similar to those found for urban RNs. In 2003 and 2010, there were slightly more rural than urban RNs in direct care (89.6% compared to 87.8%).

No 2003 data were available for NPs. In 2010, the majority of both rural and urban NPs worked in direct care, with more urban than rural NPs reporting this primary area of responsibility. In 2010,

30.0% of rural NPs were in administration and none were in education (compared to 6.2% and 10.8% of urban NPs, respectively).

The proportion of rural LPNs in direct care increased slightly between 2003 and 2010 from 98.3% to 99.6%, and the proportion of urban LPNs in direct care stayed at 98%. In 2010, very few rural and urban LPNs reported working in administrative and education roles (~1%).

Between 2003 and 2010, the proportion of rural RPNs working in direct care decreased slightly from 86.9% to 85.4%. The proportion of urban RPNs working in direct care stayed at 84%. Therefore, in 2010, a slightly larger proportion of rural than urban RPNs worked in direct care roles. In urban and rural settings, the proportion of RPNs working in administrative roles stayed between 11-13%, and the proportion in education remained under 4%. A slightly higher proportion of urban than rural RPNs report education as their primary area of responsibility.

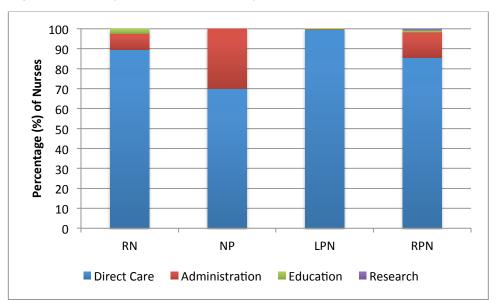


Figure 6. Primary area of responsibility, rural nurses, 2010, MB

Note: Percentages computed excluding 'not stated' category.

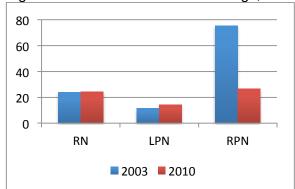
6. Work in Primary Healthcare Settings

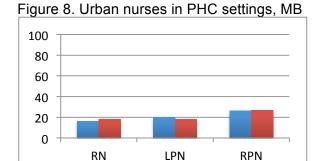
Primary healthcare (PHC) settings include the following places of work: nursing station/outpost/nurse clinic; private nursing agency/private duty; business/industry/occupational health; self-employed/private practice; mental health centre; physician's office; home care agency; and, public health agency/community health centre (Wong et al., 2009).

The total number of rural nurses working in PHC settings decreased from 915 (24.3%) in 2003 to 736 (20.8%) in 2010. The number of rural RNs working in PHC settings decreased between 2003 and 2010 from 565 to 481, but the proportion remained constant at 24%. During the same time period the proportion of rural LPNs working in PHC settings increased from 11.5% to 14.3%. The number of rural RPNs decreased from 915 to 736, which equates with a notable drop in the proportion: from 75.3% to 26.6%. In contrast, the number of urban RPNs working in PHC settings increased from 1685 to 2067, though the proportion remained within a percent of 26%.

Figure 7 illustrates the proportions of rural RNs, LPNs and RPNs working in PHC settings in Manitoba in 2003 and 2010. Figure 8 shows the same information for urban nurses. Figure 9 compares the total nursing workforce working in PHC settings in urban and rural areas, in 2003 and 2010.

Figure 7. Rural nurses in PHC settings, MB

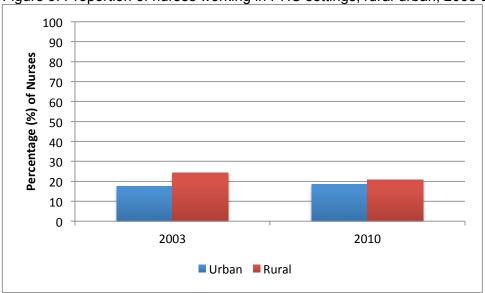




■2003 **■**2010

Note: Percentages are estimates due to suppressed cells in some categories.

Figure 9. Proportion of nurses working in PHC settings, rural-urban, 2003-2010, MB



Note: Percentages are estimates due to suppressed cells in some categories

7. Migration

International:

Nurses who obtained their entry-to-practice education in a country other than Canada are considered to be 'international nursing graduates' (INGs). ² Generally, in Canada, larger proportions of urban than rural nurses were INGs.

Between 2003 and 2010, the proportion of urban RNs who were INGs increased from 6.6% to 7.5%, and the proportion of rural RNs who were INGs increased from 3.2% to 4.4%. No NPs reported being INGs. The proportion of LPNs who are INGs increased from 2.7 to 5.6 in urban settings, and from 0.1% to 1.5% in rural settings. Since 2003, the proportion of urban RPNs who were INGs decreased slightly (1.5% to 0.9%), and the proportion of rural RPNs who were INGs also changed very little (1.0% to 1.7%). In 2010, the proportion of rural RPNs who were INGs was higher than for urban RPNs.

Interprovincial:

Canadian interprovincial migration is generally characterized as nurses moving to a neighbouring province/territory or a relatively large 'magnet' province. In 2003 and 2010, the main interprovincial migration destinations for Manitoba-educated nurses – both rural and urban – were Alberta and BC. Table 5 provides details of interprovincial migration for RNs, LPNs and RPNs in 2003 and 2010. NPs are not included, as too many cells were suppressed to calculate any meaningful data.

² Also known as 'internationally educated nurses' (IENs).

Table 5. Interprovincial migration for RNs, LPNs and RPNs, 2003-2010, MB

| | RNs | | LPNs | | RPNs | |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------|-----------------------|
| | 2003 | 2010 | 2003 | 2010 | 2003 | 2010 |
| Total number of nurses in MB | 10,034 | 11,630 | 2,417 | 2,732 | 955 | 949 |
| Received initial nursing education in MB | 11,584 | 12,667 | 2,621 | 2,825 | 1,167 | 1,151 |
| Proportion retained ³ | 73% (n=8,405) | 76% (n=9,642) | 86% (n=2,254) | 88% (n=2,473) | 78% (n=908) | 79.32% (n=913) |
| Number not retained ⁴ | 3,179 | 3,025 | 367 | 352 | 259 | 238 |
| Proportion working in urban areas of other jurisdictions ⁵ | 85% | 87% | 75% | 74% | 85% | 82% |
| Proportion working in rural areas of other jurisdictions ⁶ | 13% | 13% | 25% | 26% | 15% | 18% |
| Top two destinations | BC (33%) AB (30%) | BC (32%) AB (30%) | AB (28%) BC (35%) | AB (30%) SK (29%) | AB (40%) BC (40%) | AB (45%) BC (40%) |
| Proportion registered in MB who received initial nursing education elsewhere | 16% (n=1629) | 17% (n=1988) | 7% (n=163) | 10% (n=259) | 4% (N=36) | 5% (n=47) |
| Top three jurisdictions other than MB where initial nursing education was received | ING (36%) ON (27%) SK (15%) | ING (40%) ON (25%) SK (11%) | ON (31%) ING (25%) SK (14%) | ING (39%) ON (27%) AB (11%) | SK (39%) ING (31%) | SK (53%) ING (30%) |

Note: The numbers and proportions reported in this table should be considered estimates due to suppression of small cells.

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This is the proportion of those nurses who received their initial education in Manitoba who are also registered in Manitoba.

⁴ This is the proportion of those nurses who received their initial education in Manitoba who are registered in jurisdictions other than Manitoba.

⁵ This refers to a percentage of those nurses who were not retained (i.e., received initial education in

Manitoba but are registered in jurisdictions other than Manitoba).

6 Percentages for urban and rural may not add up to 100 due to some suppressed cells.

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Further information about the full study is available from:

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APPENDIX 1

Manitoba Synopsis

| | 3010 | R | RNs | an I | LPNs | RP | RPNs |
|-----------------------|---------------------------|----------|-------|-------|-------|-------|-------|
| | 16al 2010 | Urban | Rural | Urban | Rural | Urban | Rural |
| Number of | | 8,919 | 1,983 | 1,501 | 1,230 | 651 | 297 |
| nurses employed in | | | | | | | |
| nursing | | | | | | | |
| Number of | | 1,084 | 514 | 182 | 319 | 62 | 77 |
| nurses per | | | | | | | |
| population | | | | | | | |
| Average age | | <u> </u> | # | 46 | 46 | 47 | 49 |
| (years) | | | | | | | |
| Gender (%) | Male | 111 | 111 | 2 | 2 | 21 | 25 |
| | Female | ± | ++ | 93 | 92 | 79 | 75 |
| Place of work | Hospital | 64 | 54 | 29 | 55 | 33 | 90 |
| (%) | Community Health Agency | 16 | 22 | 10 | 10 | 24 | 28 |
| | Nursing Home/LTC Facility | 10 | 18 | 53 | 31 | 27 | 17 |
| Primary area of | Direct Care | 88 | 06 | 86 | 66 | 84 | 98 |
| responsibility | Administration | 7 | 8 | _ | 0 | 11 | 13 |
| (%) | Education | 4 | 2 | _ | 0 | 4 | _ |
| | Research | 1 | 0 | 0 | 0 | 0 | 1 |
| Full-time/part- | Full-Time | 47 | 14 | 37 | 33 | 29 | 63 |
| time status (%) | Part-Time | 45 | 48 | 54 | 56 | 33 | 27 |
| Position (%) | Staff 76 | 92 | 80 | 92 | 96 | 72 | 08 |
| | Managerial 7 | 2 | 10 | 0 | 0 | 6 | 10 |
| | Other 18 | 18 | 11 | 8 | 2 | 19 | 10 |
| Highest | Diploma | 55 | 29 | n/a | n/a | 73 | 62 |
| education in | | 42 | 32 | | | 27 | 21 |
| nursing (%) | Master's | 3 | 2 | | | 0 | 0 |
| Place of | Canada | 92 | 96 | 94 | 66 | 66 | 86 |
| graduation (%) | Foreign | 8 | 4 | 9 | 1 | 1 | 2 |

††† Data to compute average ages were not submitted by Manitoba for the 2010 NDB data year. No Female/Male designations provided for 2010 Manitoba NDB records for RNs.

APPENDIX 2

The Regulated Nursing Workforce Employed in Direct Care, By Health Region, 2011

| | | | RNs | | LPNs | | RPNs | | All Reg Nurses | ses. |
|--------|-------------------------------|---------------|----------|------------|--------|------------|--------|------------|----------------|------------|
| Health | Health Region Name | Pop | Direct | Per | Direct | Per | Direct | Per | Direct | Per |
| Region | | Estimates | Care | 100,000 | Care | 100,000 | Care | 100,000 | Care | 100,000 |
| Code | | | Counts | Population | Counts | Population | Counts | Population | Counts | Population |
| 4610 | Winnipeg | 706,097 | 6,884 | 975 | 1,123 | 159 | 288 | 41 | 8,295 | 1,175 |
| 4615 | Brandon | 51,854 | 522 | 1,007 | 222 | 428 | 176 | 339 | 920 | 1,774 |
| 4620 | North Eastman | 44,047 | 86 | 222 | 72 | 163 | 18 | 41 | 188 | 427 |
| 4625 | South Eastman | 69,69 | 188 | 270 | 111 | 159 | 8 | 11 | 307 | 441 |
| 4630 | Interlake | 83,958 | 268 | 319 | 197 | 235 | 126 | 150 | 591 | 704 |
| 4640 | Central | 109,972 | 425 | 386 | 341 | 310 | 86 | 89 | 864 | 786 |
| 4645 | Assiniboine | 70,092 | 298 | 425 | 354 | 505 | 27 | 39 | 629 | 696 |
| 4660 | Parkland | 40,312 | 227 | 563 | 193 | 479 | 32 | 87 | 455 | 1,129 |
| 4670 | Norman | 23,933 | 149 | 623 | 84 | 351 | 6 | 38 | 242 | 1,011 |
| 4685 | Burntwood/Churchill | 50,640 | 151 | 298 | 84 | 166 | 2 | 14 | 242 | 478 |
| | Manitoba (Direct Care Total) | 1,250,574 | 9,210 | 736 | 2,781 | 222 | 792 | 63 | 12,783 | 1,022 |
| | Canada (Direct Care Total) | 34,482,779 | 231,234 | 671 | 81,646 | 237 | 4,584 | 43 | 317,464 | 921 |
|] | |] - - | <u> </u> |]. | 001000 | | | | | |

Source: CIHI. (n.d.). Regulated Nurses: Canadian Trends, 2007-2011. Ottawa, ON: CIHI.

Note: The urban-rural breakdown of these data and comparable 2010 data are not available. Data were suppressed in accordance with CIHI's privacy policy; small cell size.