



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

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Highlights

- In the period between 2003 and 2010, the regulated nursing workforce in Alberta grew by 24.6%, reaching a total of 37,392 regulated nurses. The greatest increase in the regulated nursing workforce during this time was in LPNs (47.5%).
- In 2010, 13.5% of the regulated nursing workforce in Alberta was located in rural areas of the province where 19.4% of the population lived.
- In urban areas, the nurse-to-population ratio was holding steady for RNs, increasing for LPNs, and decreasing for RPNs. In rural areas it was decreasing for RNs and RPNs, but increasing for LPNs.
- The rural nursing workforce was aging more quickly than the urban nursing workforce.
- Fewer rural than urban RNs worked full-time. In 2010, rural LPNs had the highest proportion holding casual positions.
- The numbers of RNs and RPNs in rural Alberta achieving baccalaureates increased from 2003 to 2010. The number of rural RNs achieving Master's degrees also increased during this time.
- Between 2003 and 2010, the proportion of rural nurses working in primary healthcare settings increased from 21.7% to 39.7%. The greatest increase was in rural LPNs (from 11.5% to 66.2%).
- Although over 80% of nurses educated in Alberta stay in Alberta, in 2010, 34% of RNs, 20% of LPNs and 36% 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 Alberta (AB). It provides an overview of the regulated nursing workforce in Alberta, 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, Alberta had a population of 3,645,271. The majority (69.0%) of Alberta's population resided in the two major metropolitan areas of Calgary and Edmonton (Alberta Office of Statistics and Information, 2012a), while the Calgary-Edmonton corridor accounted for over 74% of the total population (Alberta Office of Statistics and Information, 2012b). As of 2011, the rural population was 707,653, which accounted for 19.4% of the total and represented an increase of 4.1% since 2006 (Alberta Office of Statistics and Information, 2013). Table 1 lists population by health region.

Table 1. Population by health region, 2011, AB

Health Region	Population
South Zone	284,980
Calgary Zone	1,412,733
Central Zone	455,736
Edmonton Zone	1,193,198
North Zone	432,706

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

Nursing Database Analysis: Findings

1. Nursing Workforce Numbers in Alberta

In the period between 2003 and 2010, the overall regulated nursing workforce grew from 30,004 to 37,392, which represented a 24.6% increase. When this increase was examined in terms of nurse type, we found that the total number of RNs increased from 24,037 to 28,681 (up 19.3%), the total number of LPNs increased from 4,766 to 7,301 (up 47.5%), and the total number of RPNs increased slightly from 1,128 to 1,147 (up 1.7%). NPs more than tripled, increasing from 73 to 263 (up 260.3%).

The changes in the regulated nursing workforce were also examined in terms of urban and rural comparisons. The numbers of urban RNs, NPs, LPNs and RPNs all increased between 2003 and 2010. However, in rural locations, only the numbers of LPNs increased (up 20.4%) while the

numbers of rural RNs, NPs and RPNs all decreased. With the exception of the decrease in rural RNs and NPs, these changes reflected the wider trends found at the national scale.

Of the total regulated nursing workforce in Alberta in 2010, 11.0% of RNs, 6.8% of NPs, 21.1% of LPNs, and 29.7% of RPNs worked in rural communities. When we examined the rural regulated nursing workforce with respect to the rural population, we found that 13.5% of nurses served 19.4% of Alberta residents. The situation in urban locations was reversed; here we found that 86.5% of the regulated nursing workforce served 80.6% of the population.¹

2. Nurse-to-Population Ratios

Nurse-to-population ratios represent the number of nurses per 100,000 population. In Alberta, the nurse-to-population ratio for RNs was lower in rural than in urban locations for both data years (2003 and 2010). In contrast, nurse-to-population ratios for LPNs and RPNs were higher in rural than in urban locations for both data years. Table 2 illustrates that the nurse-to-population ratios have decreased for rural RNs (down 16.8%), as well as for urban and rural RPNs (down 15.3% and 2.1%, respectively). The nurse-to-population ratio for LPNs in rural Alberta increased during this time period (up 22.1%), but it was a smaller increase than in urban locations (up 34.1%).

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

Jurisdiction	RNs		LPNs		RPNs	
	Urban	Rural	Urban	Rural	Urban	Rural
AB	3.8	-16.8	34.1	22.1	-15.3	-2.1
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:

With the exception of RPNs, the regulated nursing workforce in rural Alberta was older and aging faster than in urban parts of the province. Table 3 provides information about the average age of all nurse types in urban and rural locations for 2003 and 2010. The average age for rural RNs and LPNs was higher than for their urban counterparts. The average age of RNs and RPNs working in both urban and rural locations continues to increase. However, the average ages of LPNs – in both urban and rural areas of the province – have decreased.

¹ Population data from 2011 census.

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

Jurisdiction	RNs				LPNs				RPNs			
	Urban		Rural		Urban		Rural		Urban		Rural	
	2003	2010	2003	2010	2003	2010	2003	2010	2003	2010	2003	2010
AB	44.5	44.7	45.9	47.4	43.6	41.3	46.6	45.7	46.4	47.6	45.3	47.6
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.

Gender:

The proportions of males in the regulated workforce remained low for all nurse types and in both rural and urban locations. The proportions of male RNs increased in both urban and rural locations, while the proportion of male LPNs increased slightly in urban but not rural areas. The proportion of male RPNs did not change in urban areas, but decreased in rural communities.

RPNs were the nurse type with the largest proportion of males. For example, in 2010 29.9% of RPNs in rural Alberta were male compared to 3.0% of RNs and 1.8% of LPNs (see Figure 1). In the same year, 23.2% of RPNs in urban Alberta were male, compared to 5.0% of urban RNs and 6.7% of urban LPNs (see Figure 2).

Figure 1. Proportion male nurses, rural AB

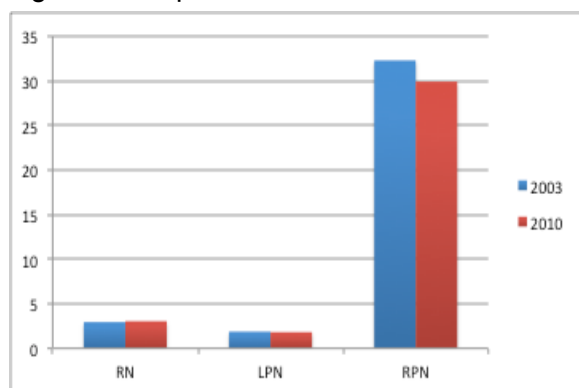
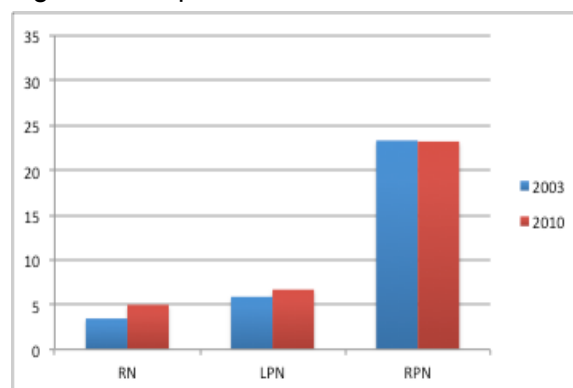


Figure 2. Proportion male nurses, urban AB



4. Education

In 2003 and 2010, more rural RNs (85.5% and 74.4%, respectively) than urban RNs (76.3% and 60.8%, respectively) in Alberta had a diploma as their initial nursing education. However, as Figure 3 indicates, these proportions decreased. This pattern was also seen 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, 36.5% of urban RNs had baccalaureate degrees compared to 25.0% of rural RNs. In the same year, nearly 3% of urban RNs had attained a Master's degree while less than 1% of rural RNs had done so.

However, by 2010 there was evidence of the education gap beginning to close. In this year, 48.2% of urban RNs had a baccalaureate degree, compared to 35.3% of rural RNs. The proportions of urban and rural RNs with Master's degrees was 3.6% and 1.1%, respectively. Figure 4 compares highest nursing education categories for rural and urban RNs in Alberta for 2003 and 2010.

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

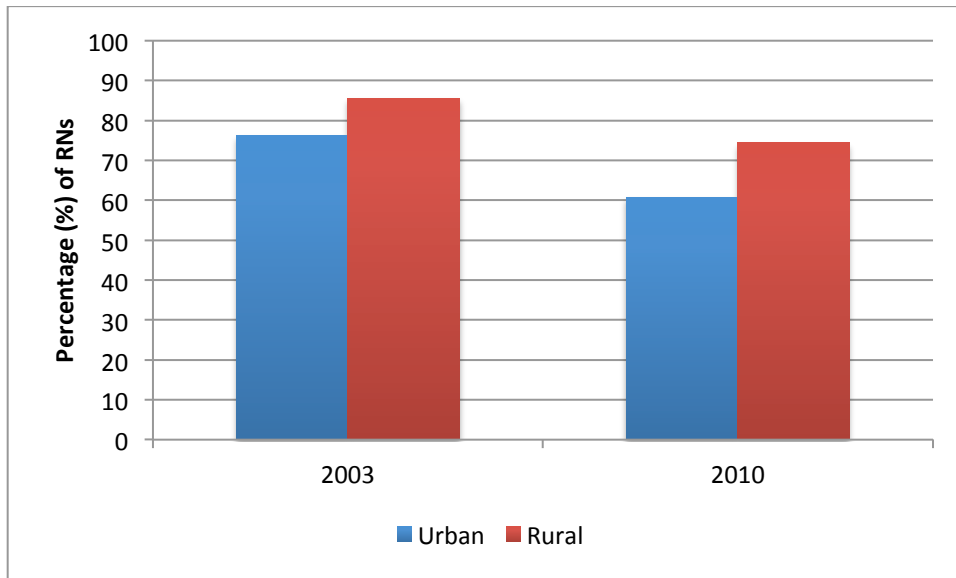
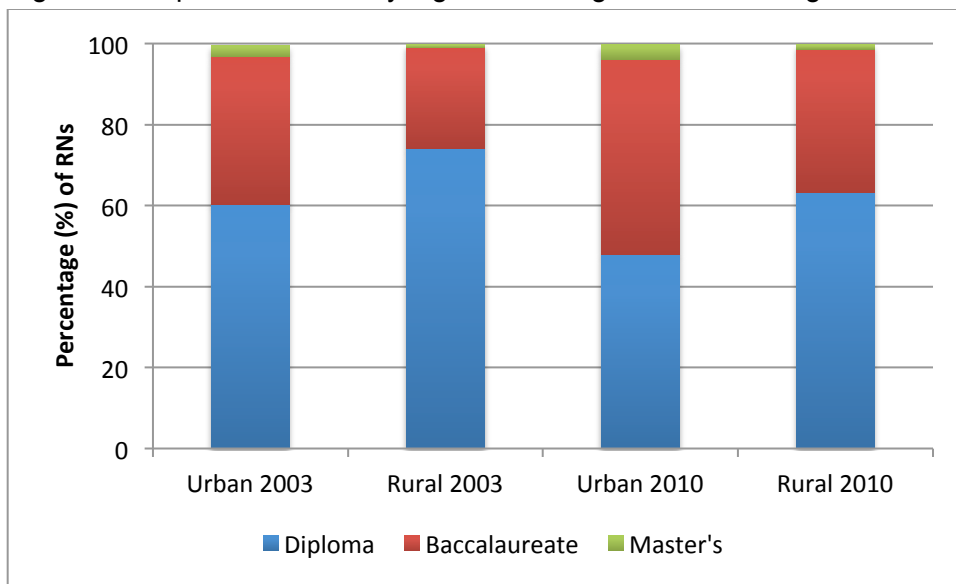


Figure 4. Proportion of RNs by highest nursing education categories, rural-urban, 2003-2010, AB



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, AB

	Urban			Rural		
	%FT	%PT	%Casual	%FT	%PT	%Casual
2003						
RNs	43.2	41.3	15.6	38.3	46.7	15.0
NPs	75.6	12.2	12.2	79.3	13.8	6.9
LPNs	42.0	45.1	13.0	32.0	52.9	15.1
RPNs	61.8	31.0	7.3	66.6	28.9	4.5
2010						
RNs	41.0	45.5	13.6	35.7	52.1	12.1
NPs	69.8	24.5	5.7	55.6	38.9	5.6
LPNs	48.3	39.4	12.3	34.2	47.6	18.2
RPNs	56.6	31.3	12.2	61.0	27.6	11.4

In 2003, more urban RNs were in full-time positions than their rural counterparts (43.2% compared to 38.3%). In the same year, the proportion of rural RNs in part-time positions was slightly higher than for urban RNs (46.7% compared to 41.3%), and the proportion in casual positions was nearly the same for both rural and urban RNs (15.0% and 15.6%). The proportion of RNs who worked full-time decreased 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 increased between 2003 and 2010 while the proportion in casual positions decreased. In 2010, the proportion of rural RNs in part-time positions was higher than it was for their urban counterparts while the opposite was true for casual positions.

The majority of both rural and urban NPs in 2003 reported full-time employment status. In 2010, the majority of urban NPs worked full-time (69.8%), followed by part-time (24.5%). In the same year, 55.6% of rural NPs reported full-time employment in 2010, with 38.9% working part-time.

More LPNs reported part-time than full-time employment status in 2003, with the proportion being higher in rural areas (52.9% compared to 45.1%). The proportion of LPNs in full-time positions in this data year was 32.0% and 42.0% for rural and urban locations, respectively. A slightly smaller proportion of urban LPNs were in casual positions in 2003 than their rural counterparts. Between 2003 and 2010, the proportion of urban and rural LPNs in full-time

positions increased, with the greater increase occurring in the urban group. Part-time employment decreased between 2003 and 2010 for both urban and rural LPNs, and casual employment increased for rural LPNs, but decreased slightly for the urban group.

In 2003, the majority of both urban and rural RPNs worked full-time, and this proportion was higher for rural RPNs than for urban (66.6% compared to 61.8%). Between 2003 and 2010, the proportion of RPNs who worked full-time decreased for both rural and urban locations. The proportion of rural RPNs in part-time positions decreased slightly between 2003 and 2010, while the proportion in casual positions grew from 4.5% to 11.4%.

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 RNs in Alberta who worked for more than one employer decreased from 20.0% to 16.3%. During the same time period, the proportion also decreased for urban RNs from 18.8% to 17.0%. In contrast to RNs, the proportion of rural NPs who reported multiple employer status increased between 2003 and 2010 from 7.4% to 44.4%. An increase was also evident for urban NPs during this time period (from 15.0% to 20.4%). In 2010, more urban than rural RNs, and more rural than urban NPs, reported multiple employers.

The proportion of rural LPNs who worked for more than one employer increased slightly between 2003 and 2010 from 18.1% to 19.4%. In contrast, the proportion of urban LPNs who worked for more than one employer decreased from 23.7% in 2003 to 21.5% in 2010. More urban than rural LPNs had more than one employer in 2010.

Between 2003 and 2010, the proportion of rural RPNs who worked for more than one employer remained at approximately 11%. During the same time period, urban RPNs working for more than one employer decreased slightly from 17.7% to 16.6%. In 2010, there were more urban than rural RPNs with multiple employers.

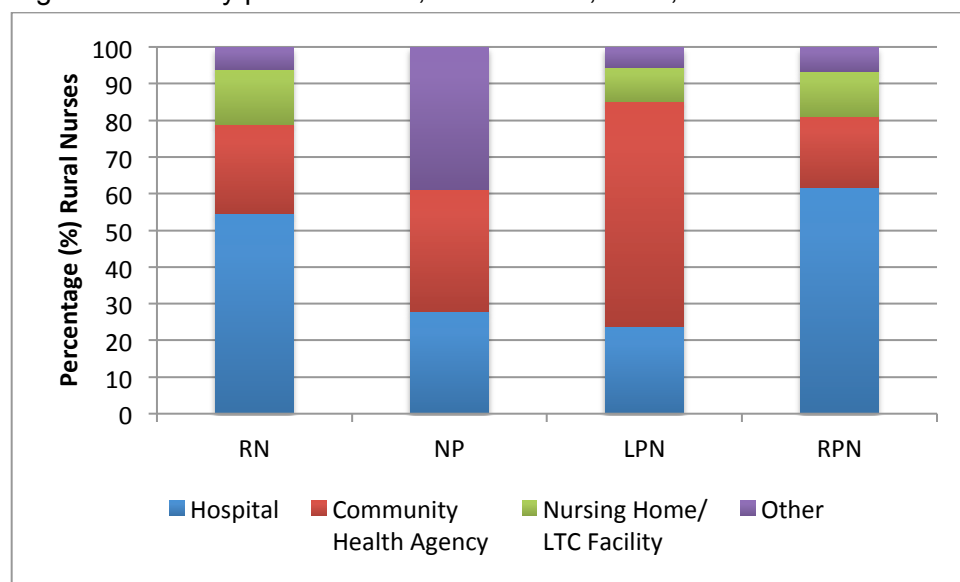
Place of Work:

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 Alberta hospitals, community agencies and nursing homes/LTC facilities in 2010. The proportion of rural RNs working in hospital settings did not change significantly between 2003 and 2010, decreasing one percent from 55.5% to 54.5%. Over the same time period, the proportion of rural RNs working in community health agencies increased from 21.4% to 24.4%, and held steady at 14.9% in nursing homes/LTC facilities. These trends were similar for urban RNs, although a greater proportion of urban than rural RNs worked in hospital settings.

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



Note: Percentages computed excluding 'not stated' category.

During the same time period (2003-2010), the proportion of rural NPs working in hospitals rose from 11.1% to 27.8%, but decreased for community health agencies from 81.5% to 33.3%. In both data years, no employment in nursing homes/LTC facilities was reported for rural NPs. In 2010, the majority of rural NPs were employed in the 'other' category (38.9%). In urban areas, the proportion of NPs working in hospital settings also increased (from 50.0% to 65.8%), and decreased for community health agencies (from 35.0% to 11.1%). The majority of urban RNs worked in hospital settings.

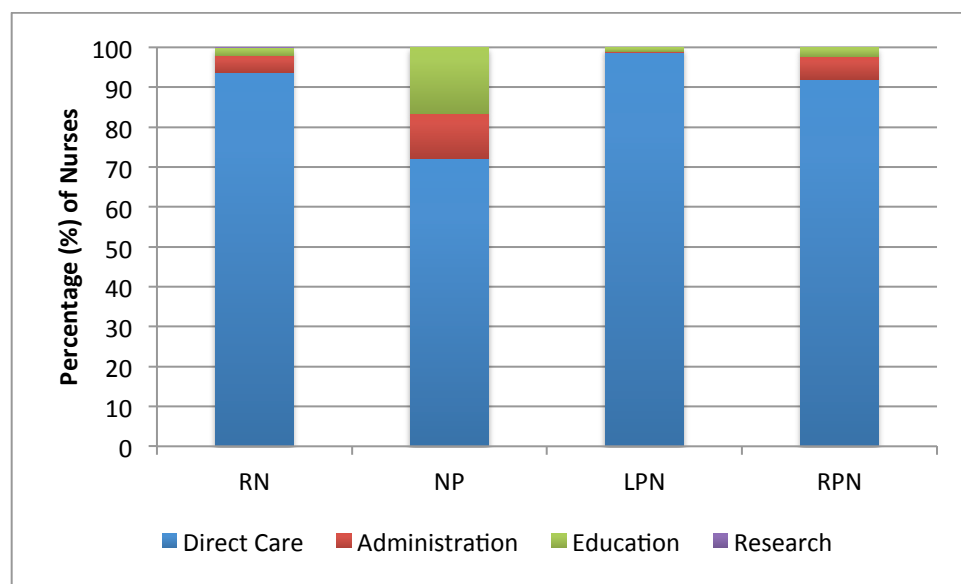
The proportion of rural LPNs working in hospitals decreased between 2003 and 2010 from 65.5% to 23.9%, respectively. At the same time, the proportion of rural LPNs working in community health agencies increased substantially, from 7.8% to 61.2%. This increase was mainly due to the reclassification of many Alberta hospitals to community health centres. While LPNs may report working in community health centres, they could also be providing acute care and LTC as well as community care. The proportion working in nursing homes/LTC facilities decreased from 22.1% to 9.2%. Similarly, the proportion decreased for urban LPNs working in hospitals (from 56.0% to 46.2%) and increased for urban LPNs working in community health agencies (from 8.8% to 16.4%). However, unlike in rural areas, the proportion of urban LPNs working in nursing homes/LTC facilities held steady at 27.2%.

Between 2003 and 2010, the proportion of rural RPNs working in hospitals and nursing homes/LTC facilities stayed essentially the same (within a percent of 61% and 12%, respectively). A small increase occurred in the proportion of rural RPNs working in community health agencies (18.2% to 19.4%). In urban areas, the proportion of RPNs working in hospitals decreased from 56.0% to 45.3% while the proportions for community health agencies and nursing homes/LTC facilities increased (19.9% to 24.3% and 10.7% to 16.9%, respectively).

Primary Area of Responsibility:

Figure 6 illustrates nurses’ primary areas of responsibility in rural Alberta in 2010. The proportion of rural RNs in direct care rose between 2003 and 2010 from 91.7% to 93.7%. Urban RNs in direct care also increased from 89.6% to 91.3%. In 2003 and 2010, there were slightly more rural than urban RNs in direct care. The proportions of rural RNs in administration and education did not change significantly between 2003 and 2010.

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



Note: Percentages computed excluding 'not stated' category.

In 2003 and 2010, the majority of both rural and urban NPs worked in direct care. The proportion of rural NPs working in direct care decreased from 92.6% to 72.2%. The proportion of urban NPs also decreased, but only slightly (from 94.7% to 93.3%). In 2010, 11.1% of rural NPs were in administration and 16.7% were in education (compared to 2.5% and 2.1% of urban NPs, respectively).

The proportion of rural LPNs in direct care stayed at 99% in 2003 and 2010. Urban LPNs in direct care decreased slightly from 98.2% to 97.3%. Very few rural and urban LPNs reported working in administrative and education roles; however, there was a small increase between 2003 and 2010 – from 1% to 2% – of urban LPNs working in education roles.

Between 2003 and 2010, the proportion of rural RPNs working in direct care decreased very

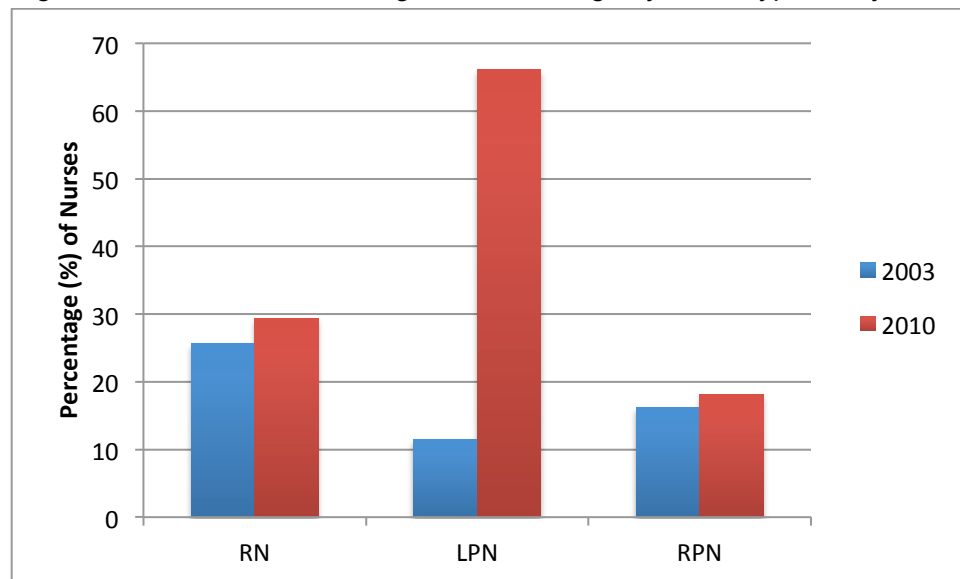
slightly from 93.6% and 92.1%, respectively. The proportion of urban RPNs working in direct care also decreased (from 93.2% to 90.8%). Therefore, in 2010, a slightly larger proportion of rural than urban RPNs worked in direct care roles. In urban settings, the proportion of RPNs working in administrative roles increased slightly, and the proportion reporting education as a primary responsibility increased for both urban and rural RPNs.

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 rose from 1191 (21.7%) in 2003 to 2007 (39.7%) in 2010. While the number of rural RNs working in PHC settings decreased slightly between 2003 and 2010 (from 987 to 926), the proportion increased from 25.7% to 29.4%. During the same time period the number of rural LPNs working in PHC settings increased dramatically from 147 to 1019, which equated to the proportion rising from 11.5% to 66.2%. This increase was mainly due to many hospitals in Alberta being reclassified as community health centres. The number of rural RPNs stayed nearly the same, with the proportion increasing slightly from 16.1% to 18.2%. Figure 7 illustrates the proportions of rural RNs, LPNs and RPNs working in PHC settings in Alberta in 2003 and 2010.

Figure 7. Rural nurses working in PHC settings by nurse type and year, AB



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 are ING.

Between 2003 and 2010, the proportion of urban RNs who were ING increased from 4.6% to 11.3%, and the proportion of rural RNs who were ING increased from 2.0% to 6.5%. Since 2003, the proportion of urban RPNs who were ING increased slightly (10.2% to 12.9%) and the proportion of rural RPNs who were ING decreased slightly (6.8% to 5.4%). In 2010, the proportion of urban RPNs who were ING was higher than for rural RPNs.

Interprovincial:

Canadian interprovincial migration is generally characterized as nurses moving to a neighbouring province/territory or to a relatively larger ‘magnet’ province. In 2003 and 2010, the main interprovincial migration destination for Alberta educated nurses – both rural and urban – was 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, AB

	RNs		LPNs		RPNs	
	2003	2010	2003	2010	2003	2010
Total number of nurses in AB	24,037	28,681	4,766	7,301	1,128	1,147
Received initial nursing education in AB	18,243	22,942	4592	6941	804	846
Proportion retained ³	81% (n=14,803)	82% (n=18,780)	87% (n=3,979)	84% (n=5,828)	86% (n=688)	85% (n=720)
Number not retained ⁴	3,440	4,162	613	1,113	116	126
Proportion working in urban areas of other jurisdictions ⁵	84%	83%	76%	75%	86%	92%
Proportion working in rural areas of other jurisdictions ⁶	16%	17%	23%	25%	13%	8%
Top two destinations	BC (60%) ON (14%)	BC (56%) SK (18%)	BC (50%) SK (22%)	BC (40%) SK (40%)	BC (77%) ⁷	BC (64%) ⁶
Proportion registered in AB who received initial nursing education elsewhere	34% (n=7,505)	34% (n=9,803)	16% (n=780)	20% (n=1,473)	39% (n=1,128)	36% (n=412)
Top three jurisdictions other than AB where initial nursing education was received	ON (24%) SK (24%) MB (13%)	ING (31%) ON (18%) SK (16%)	ON (20%) MB (13%) ING (13%)	ING (33%) ON (19%) BC (13%)	SK (41%) MB (26%) ING (23%)	SK (39%) ING (29%) MB (23%)

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

³ This is the proportion of those nurses who received their initial education in Alberta who were also registered to practice in Alberta.

⁴ This is the proportion of those nurses who received their initial education in Alberta who were registered to practice in jurisdictions other than Alberta.

⁵ This refers to a percentage of those nurses who were not retained (i.e., received initial education in Alberta but are registered in jurisdictions other than Alberta).

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

⁷ A second destination could not be reported due to suppression of small cell size.

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Further information about the full study is available from:

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APPENDIX 1 Alberta Synopsis

Year 2010	RNs		LPNs		RPNs	
	Urban	Rural	Urban	Rural	Urban	Rural
Number of nurses employed in nursing	25,530	3,151	5,761	1,540	806	341
Number of nurses per 100,000 population	869	445	196	218	27	48
Average age (years)	45	47	41	46	48	48
Gender (%)	Male 5	3	7	2	23	30
	Female 95	97	93	98	77	70
Place of work (%)	Hospital 67	55	46	24	45	62
	Community Health Agency 13	24	16	61	24	19
	Nursing Home/LTC Facility 6	15	27	9	17	12
Primary area of responsibility (%)	Direct Care 91	94	97	99	91	92
	Administration 4	4	1	0	6	6
	Education 4	2	2	1	3	2
	Research 1	0	1	0	0	0
Full-time/part-time status (%)	Full-Time 41	36	48	34	57	61
	Part-Time 46	52	39	48	31	28
Position (%)	Staff 78	85	91	96	82	83
	Managerial 7	8	0	0	7	9
	Other 15	8	9	4	11	8
Highest education in nursing (%)	Diploma 48	63	n/a	n/a	96	98
	Bachelor's 48	35			3	2
	Master's 4	1			0	0
Place of graduation (%)	Canada 89	93	92	99	87	95
	Foreign 11	7	8	1	13	5

APPENDIX 2

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

Health Region Code	Health Region Name	Pop Estimates	RNs		LPNs		RPNs		All Reg Nurses	
			Direct Care Counts	Per 100,000 Population	Direct Care Counts	Per 100,000 Population	Direct Care Counts	Per 100,000 Population	Direct Care Counts	Per 100,000 Population
4831	South Zone	284,980	1,651	579	720	253	50	18	2,421	850
4832	Calgary Zone	1,412,733	8,496	601	1,903	135	212	15	10,611	751
4833	Central Zone	455,736	2,415	530	1,178	258	311	68	3,094	857
4834	Edmonton Zone	1,193,198	10,000	838	2,800	235	401	34	13,201	1,106
4835	North Zone	432,706	1,765	408	889	205	50	12	2,704	625
	Alberta (Direct Care Total)	3,779,353	24,327	644	7,490	198	1,024	27	32,841	869
	Canada (Direct Care Total)	34,482,779	231,234	671	81,646	237	4,584	43	317,464	921

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.