

**Licensed Practical Nurse
Supply Report 2002/03
Newfoundland and Labrador**

March 2004



Licensed Practical Nurse Supply Report 2002/03 Newfoundland and Labrador prepared
by:
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March 2004

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Acknowledgements

Members of the Health and Community Services Human Resource Planning Unit wish to acknowledge the tremendous assistance and continued co-operation of the following organizations, without which this report would not have been possible:

- Association of Registered Nurses of Newfoundland and Labrador
- Centre for Nursing Studies, operated by the Health Care Corporation of St. John's
- Council for Licensed Practical Nurses
- Canadian Practical Nurses Association
- Canadian Institute for Health Information
- Government of Newfoundland and Labrador, Department of Finance, Pensions Administration Division
- Government of Newfoundland and Labrador, Department of Health and Community Services
- Memorial University School of Nursing
- Newfoundland and Labrador Health Boards Association
- Provincial Health Boards
- Western Regional School of Nursing, operated by Western Health Care Corporation

Executive Summary

The Licensed Practical Nurse (LPN) workforce in Newfoundland and Labrador (NL) is comprised of approximately 2940 individuals. The total number of LPNs has slowly increased over the last 15 years. NL has the highest ratio of LPNs per population in Canada (5.2 LPNs per 1000 population) and the highest ratio of LPNs per Registered Nurse (RN) (5.1 LPNs per 10 RNs) in Canada.

Since 1992, there has been a dramatic increase in the number of LPNs 40 years old or older. At present, 65.9 per cent of the LPN population are at least 40 years old. Retirement trends project the number of LPNs reaching age 58 annually to rise from 53 in 2003 to 111 in 2013. Cumulatively, 937 LPNs are expected to retire within the next 10 years, or approximately 34.4 per cent of the current workforce. Certain LPN groups, including Operating Room Technicians and Urology Technicians, are expected to lose approximately 79.5 per cent and 53.8 per cent of their workforce respectively by 2012.

The Practical Nursing (PN) Program in NL is a 12-month diploma program. In 2002/03, the program was offered at the Centre for Nursing Studies (CNS) operated by the Health Care Corporation of St. John's (HCCSJ), and the College of the North Atlantic (CNA) sites in Corner Brook, Grand Falls-Windsor, Gander, and Goose Bay. The CNS is the designated parent institution for the delivery of the PN Program, and brokered satellite sites are located throughout the province based on human resource need and approval from the Council for Licensed Practical Nurses (CLPN). In 2004, the program will be expanded by one month to include proficiency in medication administration. A reorganization of program content and subsequent expansion will produce new graduates with the ability to practice according to national standards.

The number of graduates per year varies in accordance to the number of brokered sites. In 2002/03, 154 students graduated from the PN Program. The average number of graduates in the last five years is 110 per year, but graduate variability trends suggest a variation of plus or minus 34 graduates per year can be expected.

There has been a steady rise in the temporary and casual workforce, from 26.4 per cent in 1988/89 to 34.9 per cent in 2002/03, an increase of 8.5 per cent. The majority of LPNs, 52.6 per cent, work in a long term care or nursing home setting. Forty-four per cent report employment in hospital settings.

Work patterns for LPNs show higher rates of absenteeism than other health professionals. In 2000/01, sick leave accounted for 7.2 per cent of all paid hours. Lost time due to workplace injury accounted for a further 5.9 per cent.

The net change in practicing LPNs depends on several factors including new graduate retention, out-of-province LPNs registering for the first time in NL, and LPNs completing the Re-Entry Program. As well, LPNs leave the workforce for different reasons. The number of verifications provides some indication of the number of LPNs leaving the

province, but the number is extremely variable. In 2002/03, 141 LPNs did not renew their licenses.

It is difficult to predict, with any certainty, future shortfalls (or surpluses) in the supply of LPNs due to the variability in the annual number of graduates and the net change in practicing licenses. The nature of the brokering process and the relatively short training period means LPNs can be educated within a short timeframe as required to suit needs at a local level. Changes in the demand for LPNs, stemming from population needs and strategic plans for the delivery of health services, have not been considered in this report, but it is recognized that they may be substantial. Additionally, the role of unregulated workers in the delivery of health services has not been considered in this report.

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1.0 Introduction

1.1 Background

This report is the second instalment of a report that was initially released in December 2001. This document provides data for fiscal year 2001/02 and 2002/03, derived from the Council for Licensed Practical Nurses (CLPN), the Canadian Institute for Health Information (CIHI), health board and employer data, Workplace Health, Safety and Compensation Commission of Newfoundland and Labrador (WHSCC), and other regulating bodies and relevant reports.

1.2 Limitations of the Report

Although the scope of information collected through the registration process with the CLPN is comprehensive, and the data is very consistent over the last 12 years, the analysis in this report is limited by the available information.

In October 2003, CIHI released the first national report on Licensed Practical Nurses (LPNs), a summary of registration data provided by LPN regulatory bodies in Canada. The target population is total LPNs having active-practicing registration in a Canadian jurisdiction. The data are collected at the six-month mark of each jurisdiction's registration year, which varies among Canadian jurisdictions. Jurisdictions may follow either a January to December, April to March, or November to October registration year.¹ Data analysis from the first six months of registration suggests that CIHI receives approximately 95 to 99 per cent of all records. Although the impact of collecting data at the six-month mark is minor (one to five per cent), the figures released by CIHI will be less than provincial/territorial figures, which may cause some confusion and/or controversy. Furthermore, Nunavut did not participate in the data collection process.

Readers are cautioned that certain tables in the Retirements, Section 2.4, Continuing Education, Section 3.2 and The Wellness of Licensed Practical Nurses, Section 4.3 of this document reflect varying data collection periods.

Finally, there are limitations associated with interpreting professionals per population ratios in Licensed Practical Nurses to Population Ratios, Section 2.2. The population (denominator) only reflects gross numbers and not the age/gender distribution. Additionally, overall population numbers do not reflect health status of the population, population density, or patterns of utilization of health services. The number of professionals (numerator) does not reflect scope of practice, utilization, skill mix, casualization, distribution of personnel, or other issues. Core staffing requirements in rural and remote locations are also a factor in determining the required appropriate number of health professionals.²⁷ Professional per population ratios should only be used at the provincial level, and then with great caution. Other methods should also be used to augment findings.

2.0 Workforce Attributes

2.1 Total Number of Licensed Practical Nurses

There were 2940 LPNs registered in the province in 2002/03. The total has remained above 2900 for three years. The total number of LPNs in the province from 1988/89 to 2002/03 is given in Table 1:

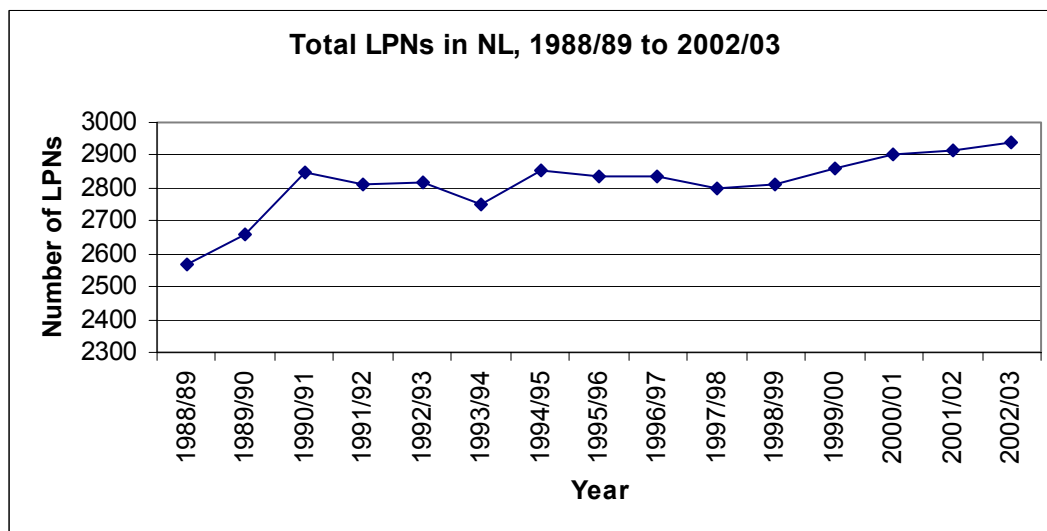
Table 1. Total LPNs in NL, 1988/89 to 2002/03.

Fiscal Year	Number of LPNs
1988/89	2566
1989/90	2659
1990/91	2848
1991/92	2810
1992/93	2817
1993/94	2751
1994/95	2853
1995/96	2833
1996/97	2838
1997/98	2797
1998/99	2809
1999/00	2859
2000/01	2905
2001/02	2912
2002/03	2940

Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

Trends are shown graphically in Figure 1:

Figure 1. Total LPNs in NL, 1988/89 to 2002/03.



Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

The total number of LPNs has slowly increased over the last 15 years by approximately 15 per cent.

2.2 Licensed Practical Nurse to Population Ratios

An increase in the number of LPNs coupled with a declining provincial population has resulted in higher LPN to population ratios over the last decade. Comparative data is not available for other jurisdictions. The number of LPNs per 1000 population compared to Registered Nurses (RNs) per 1000 population for all Canadian jurisdictions is given in Table 2:

Table 2. Practicing LPNs and RNs per 1000 Population Ratios, 2002.

Jurisdiction	Number of Practicing LPNs	LPNs per 1000 Population	Number of Practicing RNs	RNs per 1000 Population	LPNs per 10 RNs
NL	2,759	5.2	5,442	10.2	5.1
PE	593	4.3	1,293	9.3	4.6
NS	2,950	3.1	8,419	8.9	3.5
NB	2,333	3.1	7,364	9.7	3.2
YK	64	2.1	272	9.0	2.4
ON	23,827	2.0	78,737	6.6	3.0
SK	2,011	2.0	8,257	8.1	2.4
MB	2,250	2.0	9,942	8.7	2.3
QC	14,560	2.0	59,193	8.0	2.5
NT	79	1.9	487	11.8	1.6
AB	4,435	1.4	23,377	7.6	1.9
BC	4,262	1.0	27,901	6.8	1.5
Total	60,123	1.9	230,684	7.4	2.6

Sources: Canadian Institute for Health Information [CIHI] [Workforce Trends of Licensed Practical Nurses in Canada 2002](#), 2003., Canadian Institute for Health Information [CIHI] [Workforce Trends of Registered Nurses in Canada 2002](#), 2003

There is a large range in the ratios, with NL having the most LPNs per 1000 population, over twice the figure for Ontario and Quebec. One possible explanation is that other provinces have a higher utilization of unregulated workers.

2.3 Demographics

Current Newfoundland and Labrador (NL) LPN workforce estimates indicate 86 per cent of LPNs are female and 14 per cent are male.¹⁵ National demographics show 93 per cent are female and seven per cent are male.¹

Table 3 shows a dramatic increase in the number of LPNs over the age of 40 since 1988/89:

Table 3. LPN Count by Age Group for NL, 1988/89 to 2002/03.

Fiscal Year	<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Per cent 40 or older
1988/89	154	434	465	549	567	217	116	49	10	5	37.6%
1989/90	144	440	464	496	651	268	136	50	7	3	41.9
1990/91	226	405	494	483	688	339	144	58	11	0	43.5
1991/92	246	360	477	458	650	383	164	58	13	1	45.2
1992/93	215	351	466	474	623	454	156	59	19	0	46.5
1993/94	150	356	447	474	530	518	186	71	16	3	48.1
1994/95	115	334	482	491	503	598	228	83	17	2	50.2
1995/96	85	334	435	514	489	596	280	81	18	1	51.7
1996/97	65	334	407	530	478	579	335	89	18	3	52.9
1997/98	62	288	394	505	480	553	393	100	21	1	55.3
1998/99	66	232	405	506	496	495	466	115	27	1	57.0
1999/00	84	198	370	530	500	478	509	156	33	1	58.7
2000/01	94	187	364	477	536	483	538	192	29	5	61.4
2001/02	77	167	313	431	524	495	507	345	48	5	66.1
2002/03	81	177	287	432	516	509	476	388	71	3	66.8

Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

Since 1992/93, the number of practicing LPNs over the age of 40 increased by over 20 per cent, from 46.5 per cent to 66.8 per cent in 2002/03. The average age of LPNs in NL and Canada in 2002/03 was 44 years.

The national figures for the age distribution of LPNs in Canada and NL are given in Table 4:

Table 4. Age Distribution of LPNs in Canada and NL, 2002.

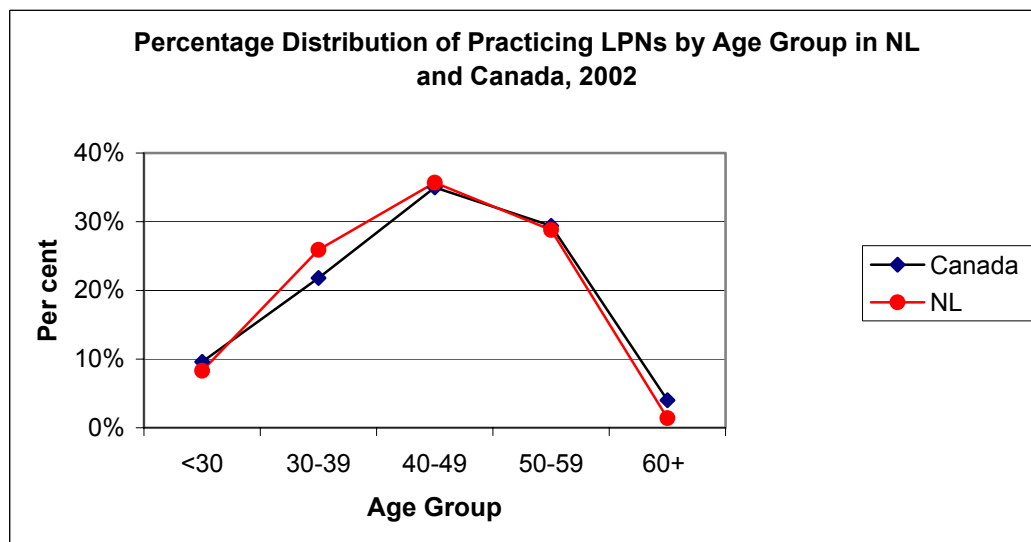
Age Range	Canada (Number)	Canada (Per cent)	NL (Number)	NL (Per cent)
<30	5763	9.6%	228	8.3%
30-39	13,125	21.8	714	25.9
40-49	21,033	35.0	985	35.7
50-59	17,666	29.4	794	28.8
60+	2,417	4.0	38	1.4
Not Stated	119	0.2	0	0.0

Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

In 2002, the percentage of LPNs in Canada over the age of 40 (68.4 per cent) was 2.5 per cent higher than the percentage of LPNs in NL over the age of 40 (65.9 per cent).

Graphically, trends for NL and Canada, are shown in Figure 2:

Figure 2. Percentage Distribution of Practicing LPNs by Age Group in NL and Canada, 2002.



Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

The number and percentage of practicing LPNs over the age of 40, by practice setting in 2002 is given in Table 5:

Table 5. Practicing LPNs Age 40+ by Practice Setting in NL, 2002.

Practice Setting	LPNs Age 40+ in 2002	Per cent of LPNs Age 40+ in 2002
Hospital	868	69.7%
Other ¹	32	68.0
Long Term Care / Nursing Home	874	62.8
Community Health	24	19.7

Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

Notes:

¹ Other includes data from Business/Industry/Occupational Health Office, Private Nursing Agencies, Physician's Office/family Practice unit, Self-employed/Private Practice, Educational Institution, Association/Government, Other.

In 2002, 69.7 per cent of LPNs in NL working in hospital settings were age 40 years or older, while 62.8 per cent of LPNs working in long-term care or nursing home settings were age 40 years or older. Additionally, LPNs employed in other settings show a high percentage of the workforce over the age of 40 years.

2.4 Retirements

This section contains estimates of LPN retirements based on retirement at age 58. The age 58 assumption is based on anecdotal evidence, past calculations, pension eligibility, and age distribution. Table 6 shows the number of LPNs who reached age 58 years

before 2003 and still have a license, will reach age 58 years in each of the next 12 years, and will reach age 58 years after 2013, based on the current workforce:

Table 6. Count of LPNs Reaching Age 58 by Calendar Year in NL, November 2003.

Year Turning 58	No Employer Listed	AHCIB ¹	CEHCIB	CWHC	GRHS	HCS-SJ	HCCSJ	HLC	PHCC	PSCH	SJNHB	WHCC + HCS-W	Private Employers and Others	Total ³
<2003	3	10	6	7	2		12	2	8	1	30	8	1	90 ²
2003	1	2	4	8	5		8	1	3	2	8	11		53
2004	2	5	6	11	3		12		4		21	7		71
2005	6	9	12	4	3	1	15	1	7		16	15		89
2006	1	8	6	19	2		15	3	7	1	22	13	1	98
2007		9	10	13	1		22	3	5	1	22	13	2	101
2008	3	12	10	14	3		13	2	3	1	17	15	2	95
2009	1	10	8	15	4		14	2	6	4	15	12		91
2010		2	10	15	5		12	3	4	2	13	21	1	88
2011	1	4	4	13	5		6		6		13	23	2	77
2012	2	10	6	21	3		18	1	4	1	14	15	1	96
2013	2	11	13	19	3		16	3	5	1	14	20	4	111
>2013	93	139	147	194	47	1	309	41	103	13	414	296	10	1807
Total	115	231	242	353	86	2	472	62	165	27	619	469	24	2867

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (As of November 6, 2003)

Notes:

¹The following abbreviations are used for Health Boards:

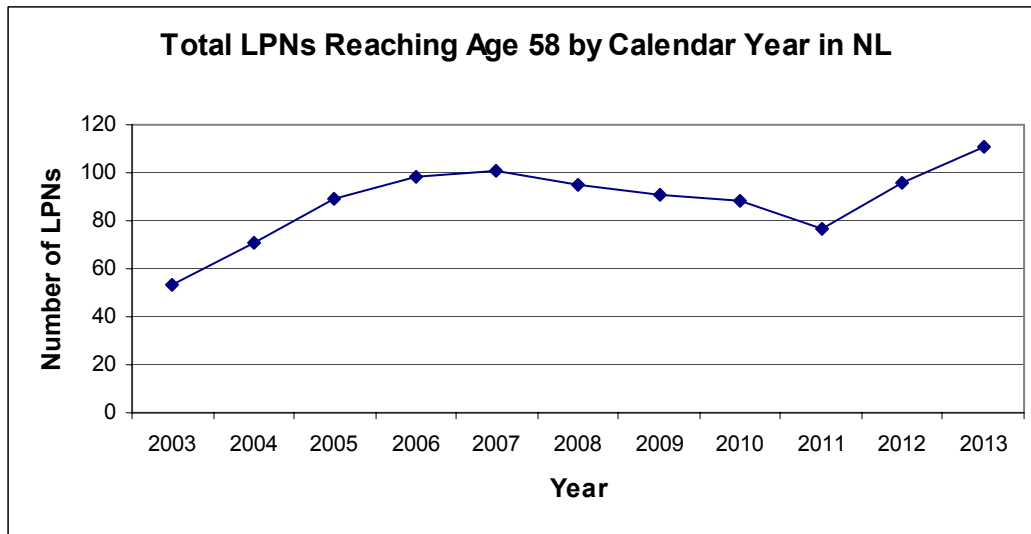
- AHCIB = Avalon Health Care Institutions Board
- CEHCIB = Central East Health Care Institutions Board
- CWHC = Central West Health Corporation
- GRHS = Grenfell Regional Health Services
- HCCSJ = Health Care Corporation of St. John's
- HCS-SJ = Health and Community Services St. John's
- HLC = Health Labrador Corporation
- PHCC = Peninsulas Health Care Corporation
- PSCH = Pentecostal Senior Citizens Home
- SJNHB = St. John's Nursing Home Board
- WHCC = Western Health Care Corporation
- HCS-W = Health and Community Services Western

²There are 90 LPNs that exceeded the age of 58 years before 2003 but still hold practicing licenses.

³Health and Community Services Eastern (HCS-E) and Health and Community Services Central (HCS-C) do not employ LPNs.

The number of LPNs reaching age 58 annually almost doubles between 2003 and 2007, and then decreases slightly, before peaking at 111 in 2013. The number of expected retirements, based on the age 58 criteria, is shown graphically in Figure 3:

Figure 3. Total LPNs Reaching Age 58 By Calendar Year in NL, November 2003.



Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (As of November 6, 2003)

In the NL Public Service Pension Plan (PSPP), normal retirement with an unreduced pension occurs at age 65 with a minimum of five years pensionable service. Early retirement with an unreduced pension can occur at age 55 with a minimum of 30 years pensionable service or age 60 with a minimum of five years pensionable service.²⁷ Using dates for normal and early retirements may underestimate total retirement estimates; many LPNs may retire with a reduced pension. Note that casual employees participate in the Government Money Purchase Pension Plan (GMPP) as they are ineligible for participation in the PSPP. These employees do not accumulate pensionable service and are excluded from the retirement figures shown in Table 7.²⁷

Table 7 compares retirements based on age analysis to the patterns of early and normal retirement:

Table 7. Comparison of Age Analysis to Pensions Eligibility, 2003 to 2013.

Year	Age 58¹	Early Retirement²	Normal Retirement³
2003	53	41	0
2004	71	59	2
2005	89	51	3
2006	98	71	9
2007	101	68	12
2008	95	79	23
2009	91	85	30
2010	88	63	32
2011	77	63	54
2012	96	73	66
2013	111	60	88

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (As of November 6, 2003), and Human Resource Planning Unit Retirement Analysis, 2003

Notes:

¹ The number of LPNs reaching age 58 in a given year.

² The number of LPNs eligible for early retirement in a given year. Early retirement with an unreduced pension can occur at age 55 with a minimum of 30 years pensionable service or age 60 with a minimum of five years of pensionable service.²⁷

³ The number of LPNs eligible for normal retirement in a given year. Normal retirement with an unreduced pension occurs at age 65 with a minimum of five years pensionable service.²⁷

An analysis of data on eligibility for an unreduced pension shows significant numbers of LPNs will turn age 58 without having been eligible for an unreduced pension. To avoid potential underestimating of LPN exits from the health system due to retirement, figures calculated using the age 58 criteria are used for forecasting purposes.

The projected LPN retirements using the age analysis, between 2003 and 2013, as a percentage of the LPN workforce is shown in Table 8:

Table 8. Total LPNs Turning 58 Between 2003 and 2013 as a Per cent of Total LPNs in NL, November 2003.

Health Board ¹	Number of LPNs	Number of LPNs Turning 58	As a Per cent of Health Board LPNs
PSCH	27	13	48.1%
CWHC	353	152	43.1
GRHB	86	37	43.0
CEHCIB	242	89	36.8
AHCIB	231	82	35.5
WHCC + HCS-W	469	165	35.2
PHCC	165	54	32.7
HCCSJ	472	151	32.0
HLC	62	19	30.6
SJNHB	619	175	28.3
Total (Boards listed only)	2726	937	34.4

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (As of November 6, 2003)

Notes:

¹ Table does not include information for HCS-SJ, LPNs with private employers, or LPNs with no employers.

Cumulatively, 937 LPNs are expected to retire within the next 10 years, or approximately 34.4 per cent of the current workforce. PSCH have the highest percentage of its LPN workforce retiring, at 48.1 per cent, but have the smallest number of LPNs employed. SJNHB, the largest employer of LPNs in the province, have the lowest percentage of LPNs reaching age 58 years by 2013. Certain LPN groups with specialized skill training show unique retirement patterns, cumulative over the next 10 years:

Table 9. Total LPNs Expected to Retire Between 2003 and 2012 with Specialized Skill Training in NL.

Groups	Workforce Size in 2000	Projected Retirements 2003 to 2012 ¹	Percentage of Group Retiring
Operating Room Technician	44	35	79.5%
Urology	13	7	53.8
Mental Health	102	45	44.1
Gerontology	143	58	40.6
Medication Administration ²	172	35	20.3
IV Therapy	117	21	17.9

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2001/02 (As of November 26, 2001)

Notes:

¹ Projected retirements based on age 58 criteria, as of November 26, 2001.

² The majority of LPNs retiring between 2003 and 2012 with medication administration received this education as a post-basic continuing education course from the Centre for Nursing Studies (CNS). This course was piloted in 2000 and few graduates from that course are expected to retire in the next 10 years. Medication administration, as a core component, was not introduced to the PN Program until 1996, and few graduates from that program and later programs are expected to retire before 2013. LPNs who obtained education in medication administration as part of their core curriculum or as a post-basic course in an out-of-province setting are minimal.

Approximately 80 per cent of Operating Room Technicians and 54 per cent of Urology Technicians will turn age 58 years by the year 2012. It is important to recognize that some LPNs have more than one certificate and would be represented in more than one category in Table 9.

3.0 Education

“The mission of the Practical Nursing (PN) Program is to prepare caring and professional practical nurses to practice in a wellness-oriented, client-focused and consumer sensitive health care system.”¹³ The PN Program is a 12-month program offered through the Centre for Nursing Studies (CNS) and, in 2002/03, was brokered by the CNS to the College of the North Atlantic (CNA) sites in Corner Brook, Grand Falls-Windsor, Gander, and Goose Bay.

Government transferred authority of the PN Program to the CNS in Spring 1996 at the request of the CLPN. The CNS is the designated parent institution for the delivery of the PN Program, and brokered satellite sites are located throughout the province based on demonstrated human resource need and approval from the CLPN. Once the human resource need has been determined, the CNS completes an assessment of the request to determine if the Standards and Criteria for Approval and Evaluation of Practical Nursing Programs (1999) can be met by the facility requesting the PN Program. Once approval is granted for the establishment of a satellite site, the CNS enters into a formal written brokering contract with the facility. The CNS is responsible to monitor offerings of the PN Program to ensure delivery is in accordance with established standards and criteria of the CLPN.

In 2002/03, each brokered CNA site had an intake of approximately 30 students, except Goose Bay, which had an intake of 16 students. Brokered sites for 2003/04 and 2004/05 include Corner Brook and Grand Falls-Windsor, and each expects an intake of 30 students. In 2004/05, the program will be expanded by one month to include proficiency in medication administration. The CNS operates within the Health Care Corporation of St. John's (HCCSJ) and it is the only permanent PN Program site in the province.

Since the PN Program spans only 12 months and can be offered in multiple locations, the response to a need is swift and localized. The process of brokering the program is intended to ensure that the supply of LPNs matches the demonstrated requirement.

Prior to December 1997, all LPNs in the province were designated as Nursing Assistants (NA). At that time, the designation was changed to PN. All graduates of PN programs in Canada (except Quebec graduates) are required to write the national Canadian Practical Nurses' Registration Examination (CPNRE). Prior to 1996 the exam had one core component. Some provinces required instruction in two further components (medications and intravenous therapy) before an LPN could be eligible to practice, leading to the effort to upgrade the national exam. In 1996 these two components were added to the national exam.

Upon transfer of the program to the CNS in 1996, the program included all three components, the core examination, medications, and intravenous therapy, and the 1997 class was the first to write all parts of the national exam. In September 2001, instruction in health assessment and intramuscular injections were added to the PN Program, and in September 2002 students wrote all components of the revised CPNRE.

Due to program changes over the past 15 years, there exist significant differences in graduate competencies in the present LPN workforce. These differences create challenges in implementing scope of practice initiatives aimed at giving LPNs more responsibility.

3.1 Graduates

A summary of PN graduates since 1988/89 is given in Table 10:

Table 10. Summary of PN Graduates, 1988/89 to 2002/03.

Fiscal Year	St. John's (CNA) ¹	St. John's (CNS)	Carbonear (CNA)	Burin (CNA)	Bonavista (CNA)	Placentia (CNA)	Springdale (CNA)	Grand Falls (CNA)	Gander (CNA)	Baie Verte (CNA)	Corner Brook (CNA)	Corner Brook (WRSN) ²	Stephenville (CNA)	Goose Bay (CNA)	St. Anthony (CNA)	Total Graduates ³
1988/89	63												26			89
1989/90	66		19		13								21			119
1990/91	128		20			20	17		17		19				18	239
1991/92	112				14				18		18				17	179
1992/93	68			47											19	134
1993/94	35														18	53
1994/95	89									20						109
1995/96	63														27	90
1996/97	71						24		17		22					134
1997/98		46									19					65
1998/99		55										28				83
1999/00		51							24			29				104
2000/01 ⁴		53						22								75
2001/02		54							36			29		15		134
2002/03		66						21	24		29			14		154
Total	695	325	39	47	27	20	41	43	136	20	107	86	47	29	99	1761

Source: Council for Licensed Practical Nurses [CLPN] Annual Reports, (1988/89 to 2002/03)

Notes:

¹ CNA = College of the North Atlantic is indicated after several locations. However, the name of the institution was different for earlier offerings of the program

² WRSN = Western Regional School of Nursing

³ Not all PN graduates become LPNs as graduates must pass a licensing exam.

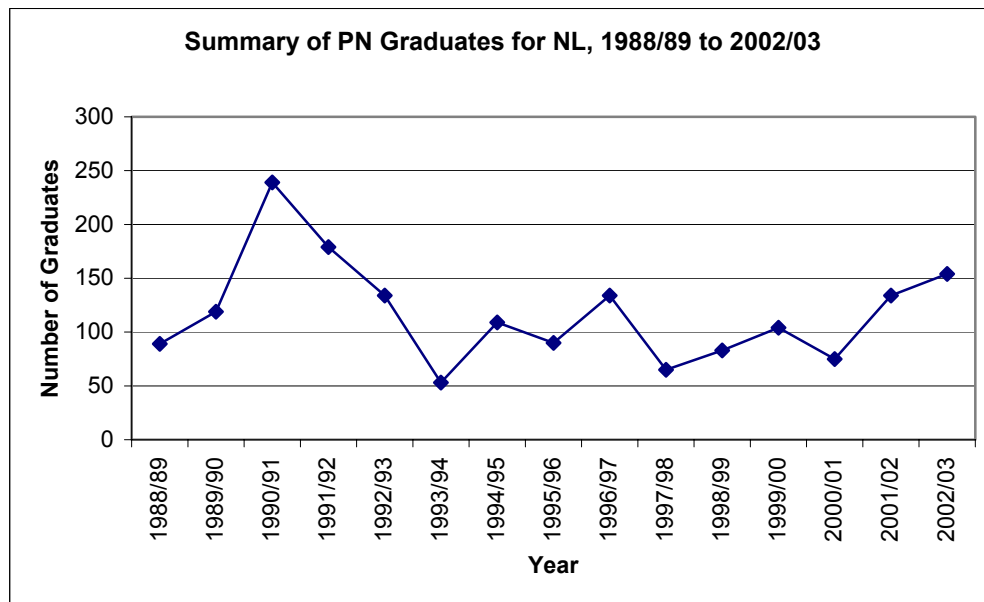
⁴ Moving the PN program from WRSN to CNA resulted in no graduates in Corner Brook in 2000/01.

The average number of graduates in the last five years is 110 per year, but graduate variability trends for that same period suggest a range of plus or minus 34 per year can be

expected. Since 1988/89, the average number of graduates has been 117 per year, with potential variation of plus or minus 48 per year.

The number of graduates is shown graphically in Figure 4:

Figure 4. Summary of PN Graduates for NL, 1988/89 to 2002/03.



Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

The PN Program typically has many more applicants than available seats. The number of applicants, enrolments, graduates, and attrition for graduating year 2002/03 are shown in Table 11:

Table 11. Count of Applicants, Enrolments, Graduates, and Attrition from NL Schools, 2002/03.

Year of Graduation	Applicants			Enrolments			Graduates			Attrition		
	CNS	CNA	Total	CNS	CNA	Total	CNS	CNA	Total	CNS	CNA	Total
2002/03	476	475	947	77	101	178	66	88	154	11	13	24

Source: Centre for Nursing Studies [CNS] Registration Database. (2003); College of the North Atlantic [CNA] Registration Database. (2003)

It is possible that applicants applied to more than one PN Program in the province. Therefore, caution should be taken when reviewing the number of applicants to CNS and CNA programs. The attrition rate for the graduating class of 2002/03 was 13 per cent.

In 2002/03, there were 20 individual faculty members involved with varying degrees in the PN Program at the CNS, including classroom faculty, laboratory faculty and clinical instructors. Faculty at the CNS teach both the PN Program, continuing education, and Bachelor of Nursing (BN) Collaborative Program courses, and faculty members alternate

between classroom and laboratory faculty in different semesters. The CNA brokered sites had a combined total of 13 full-time faculty positions and one part-time faculty position dedicated to the PN Program. All brokered sites had a variable number of supervisory clinical instructors.

3.2 Continuing Education

Continuing education programs allow LPNs to expand their knowledge and competencies to improve overall job performance and meet employer needs. LPNs may avail of similar programs from educational institutions outside NL that are approved by the CLPN, or choose to study at the CNS in the province. Prior to the CNS programs, some employers offered continuing education courses based on workplace need. For example, continuing education in mental health was offered at the Waterford Hospital, a mental health facility, for many years before the current CNS program was developed. Similarly, the General Hospital Corporation offered courses in gerontology, urology, and operating room technician as well as others. Finally, LPNs from other jurisdictions may have already completed programs before entering the province.

The CNS offers LPNs various continuing education opportunities. Employer needs assessments are conducted every five years, and the next assessment is scheduled in Spring-Summer 2004.⁶ Current educational programs and potential program offerings are evaluated and recommendations are made to educational institutions. Student financial assistance is not obligatory by health boards, although the majority offer some support. Table 12 provides basic details of the continuing education program and course offerings and is followed by more general descriptions of each:

Table 12. Continuing Educational Programs and Courses Offered by CNS.

Program	Started	Duration	Location	Total Graduates to Date	Capacity
Re-Entry	Feb-98	Max. 1 year	CNS - Distance Program	116	Unlimited
Medication Administration ¹	Jan-00 pilot - Feb-00 start	16-18 weeks	All health boards	382	50 per instructor
Gerontology	Oct-02	1 year	CNS - Distance Program	0 to date	Unlimited
Mental Health	5 intakes between Sept-02 and Mar-03	1 year	CNS - Distance Program	15	-
Operating Room Technician	Oct-03	26 weeks	CNS - Distance Program	0 to date	10 students
Competency Module: Male / Female Catheterization	Jul-01	1-2 weeks	All health boards	24	Unlimited
Competency Module: Blood Glucose Monitoring	Jul-01	1-2 weeks	All health boards	3	Unlimited
Competency Module: Gastrointestinal tube feeding and Nasogastric Suctioning	Jul-01	1-2 weeks	All health boards	87	Unlimited
Competency Module: Oxygen therapy and Oral Suctioning	Jul-01	1-2 weeks	All health boards	228	Unlimited
Competency Module: Wound Care	Jul-01	1-2 weeks	All health boards	27	Unlimited
LPN Bridging Program	-	1 semester	-	-	-

Source: Centre for Nursing Studies [CNS] CNS Continuing Education Course Offerings. (2003)

Notes:

¹ The Medication Administration program also has a separate “Intramuscular” module, which has had 28 graduates since March 2002.

Re-Entry Program

The Re-Entry Program is designed for PNs in the province who have not practiced in the last five years to allow them to re-apply for licensure. Theoretical components are offered through distance education with a 156-hour clinical preceptorship component. Students can pace their study over a maximum one-year period.⁷

Medication Administration Course

The Medication Administration course was developed to increase the performance and competency of graduates, resulting in comparable competencies across provincial and national benchmarks. Students in the 1997 class were the first graduates in NL to obtain this competency in theory at the “Performed” level. The term “Performed” means “the competency has been taught at the theory, laboratory and clinical levels. The learner demonstrated knowledge of the competency and performed it satisfactorily with

supervision.²¹ Although, graduates are able to practice at the “Performed” level, graduates to date have not received the clinical experience needed to practice at the “Proficient” level due to constraints on employers to meet teaching requirements. The term “Proficient” means “the learner has demonstrated knowledge of the competency and performed it satisfactorily without supervision.”²¹ As a result, in 2004, the PN Program will be expanded by one month to approximately 13 months in total, allowing students to gain the experience in medication administration needed to practice proficiently in the workplace upon graduation.

Currently, the Medication Administration course consists of twenty self-learning theoretical components, a five-day lab, and two days of clinical experience. Lab exercises and clinical experience are completed at the health boards.⁸ Since 2000/01, most health boards have participated in this course, with 384 graduates in total.⁴

Post-Basic Gerontology Program

The Post-Basic Gerontology Program is designed to increase LPN competency in responding to the specialized needs for older persons in a health care environment. It consists of 13 distance education modules and a clinical component to be completed in the learner’s geographic region, if possible. The entire program must be completed in one year.⁹ Eight people enrolled in the 2002/03 offering.⁴

Post-Basic Mental Health Program

The Post-Basic Mental Health Program is designed to prepare LPNs for work in mental health and psychiatric settings. Theory is composed of nine self-learning modules, and a six-week preceptored clinical experience to be completed within one year. Additionally, learning is enhanced by several comprehensive activities and educational packages.¹⁰ Currently, 69 students are enrolled and 15 LPNs have graduated to date.⁴

Operating Room Technician Course

In October 2003, CNS brokered the Operating Room Technician course for LPNs from Grant MacEwan Community College in Alberta. The CNS anticipates the need for two intakes of 10 students per year.⁴ Applicants must have completed the Medication Administration course prior to registering and have completed one year of clinical experience.¹³

The course is divided into two components: Operating Room Theory and Operating Room Experience. The former consists of distance education theoretical components and a two-week on-site laboratory practice. Students have three months to complete this component. Operating Room Experience is a three-month clinical preceptorship located close to the learner’s geographic region, if possible.¹¹

Competency Modules

In 2001, five self-learning competency modules were developed to increase LPN scope of practice in response to needs identified by health boards. Health boards purchase modules for LPNs who graduated from programs that did not include these competencies. Furthermore, health boards are responsible for supervising and testing learner

competencies. Modules include Male and Female Catheterization, Blood Glucose Monitoring, Gastrointestinal Tube Feeding and Nasogastric Suctioning, Oxygen Therapy and Oral Suctioning, and Wound Care.⁴

LPN Bridging Program (Proposed)

The CNS in collaboration with Memorial University School of Nursing and Western Regional School of Nursing have developed an LPN Bridging Program to enable graduates of current PN Programs to enter the second year of the BN (Collaborative) Program. Qualified LPNs could take the Bridging Semester consisting of two Bridging Nursing courses, and other required non-nursing courses.⁶ The new program will commence once funding is established. It will be difficult to introduce the LPN Bridging Program without increasing the overall enrolment in the BN (Collaborative) Program however, as there are no attrition seats generally available for these students to enter in year two. Further planning and policy approval are required to ensure graduates from the LPN Bridging Program can be accommodated in the BN (Collaborative) Program.

Table 13 shows the total number of LPNs having completed continuing education programs from the CNS, as part of the core PN Program, and from other educational sources by health board:

Table 13. Total LPNs with Continuing Education Certificates, November 2003.

Continuing Education	No Employer Listed	AHCIB	CEHCIB	CWHC	GRHS	HCCSJ	HCS-SJ	HLC	PHCC	PSCH	SJNHB	WHCC + HCS-W	Private Employees and Others	Total
Medication Admin.	82	33	67	134	11	111	0	31	67	7	167	180	5	895
IV Therapy	77	33	67	123	11	108	0	29	61	7	157	163	5	841
Health Assessment¹	60	8	12	13	2	13	0	8	8	0	43	35	1	203
Gerontology	4	6	12	16	7	46	1	1	11	3	30	34	2	173
Mental Health	1	8	3	8	3	103	1	0	0	2	11	3	1	144
Operating Room Technician	1	2	2	14	2	15	0	0	0	0	1	10	0	47
Urology	0	0	0	2	0	8	0	0	0	0	0	1	0	11

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (As of November 18, 2003)

Medication Administration and Health Assessment are included in Table 13, although not all LPNs obtained this education through a post-basic course. Medication administration and health assessment modules were added to the PN Program in 1996 and 2001, respectively. Due to data collection methods, it is not possible to distinguish where LPNs obtained medication administration and health assessment education. However, based on administrative data, it is estimated that 43 per cent of LPNs with medication administration completed the post-basic course offered at the CNS. The number of graduates from the CNS course is expected to decrease over the next ten years, as PN Program graduates having already completed this education will enter the system and

replace retiring LPNs. LPNs who obtained education in medication administration and health assessment as part of their core curriculum or a post-basic course in an out-of-province setting are minimal.

Caution should be noted when interpreting these figures. An LPN may have completed multiple distinguishing education programs, and will be counted in each of the appropriate categories. For example, an LPN at AHCIB may have both medication administration and mental health education, and be counted twice or once in each category.

Table 14 compares the total number of LPNs per health board with the total number that have completed medication administration and health assessment education:

Table 14. Total LPNs versus LPNs with Medication Administration and Health Assessment Education, November 2003.

Health Board ¹	Total LPNs	Medication Administration ²		Health Assessment ²	
		#	%	#	%
HLC	62	31	50%	8	13%
PHCC	165	67	41	8	5
WHCC	469	180	38	35	7
CWHC	353	134	38	13	4
CEHCIB	242	67	28	12	5
SJNHB	619	167	27	43	7
PSCH	27	7	26	0	0
HCCSJ	472	111	24	13	3
AHCIB	231	33	14	8	3
GRHS	86	11	13	2	2
HCS-SJ	2	0	0	0	0
Total	2728	808	30	142	5

Source: Council for Licensed Practical Nurses [CLPN] Database for Registration Year 2003/04. (as of November 6, 2003)

Notes:

¹ Private employers and LPNs with no employers listed have been removed from this assessment in order to reflect a clear picture of health board standings.

² Medication Administration and Health Assessment data is captured at a point-in-time, and does not differentiate between where the course was completed, for example, the PN Program, the CNS, or an out-of-province source.

Caution should be noted when interpreting these figures as some health boards have significantly more LPNs than others. This will affect the percentage of LPNs with medication administration and health assessment education. For example, HLC has 50 per cent of LPNs with medication administration education, but only employs 62 LPNs; WHCC has 38 per cent of LPNs with medication administration education, but employs 469 LPNs.

4.0 Employment Trends

4.1 Employment Status

Present employment status is indicated on the CLPN registration form as follows:

1. Permanent full-time (PFT) - typically 75 hours biweekly.
2. Permanent part-time (PPT) - typically 37.5 hours biweekly.
3. Temporary full-time (TFT) and Casual full-time - for example, maternity leave replacement positions.
4. Temporary part-time (TPT) and Casual part-time.¹⁷

Employees under the casual designation cannot participate in the group insurance plan unless a four-month continuous period of work is anticipated in the immediate future. Casual employees receive earned benefits such as annual leave and sick leave on a prorated basis.

Categories three and four above combine temporary and casual employment types. The two major unions representing LPNs in NL, the Newfoundland and Labrador Association of Public and Private Employees (NAPE) and the Canadian Union of Public Employees (CUPE), do not recognize the “casual” designation; it is assumed that these positions are officially designated as “temporary.” To maintain consistency with NAPE and CUPE language, the CLPN combined temporary and casual employment starting in 2001/02. Trends in employment status for LPNs are shown in Table 15:

Table 15. Employment Status of Practicing LPNs, 1988/89 to 2002/03.

Fiscal Year	Total # LPNs Registered	Practicing LPNs ¹							
		PFT		PPT		TFT		TPT	
		#	%	#	%	#	%	#	%
1988/89	2479	1621	65%	126	5%	221	9%	434	18%
1989/90	2569	1739	68	113	4	218	9	406	16
1990/91	2728	1732	64	117	4	273	10	486	18
1991/92	2628	1558	59	108	4	255	10	528	20
1992/93	2658	1531	58	114	4	234	9	625	24
1993/94	2629	1530	58	103	4	210	8	668	25
1994/95	2745	1611	59	118	4	253	9	653	24
1995/96	2731	1598	59	109	4	265	10	655	24
1996/97	2725	1540	57	106	4	245	9	719	26
1997/98	2709	1503	56	114	4	238	9	764	28
1998/99	2753	1561	57	107	4	286	10	738	27
1999/00	2822	1589	56	104	4	305	11	782	28
2000/01	2869	1604	56	138	5	316	11	769	27
2001/02	2912	1745	60	85	3	781	27	221	8
2002/03	2940	1671	57	149	5	673	23	354	12
Change since 1988	461	50	-8%	23.0	0%	452	14%	-80	-6%

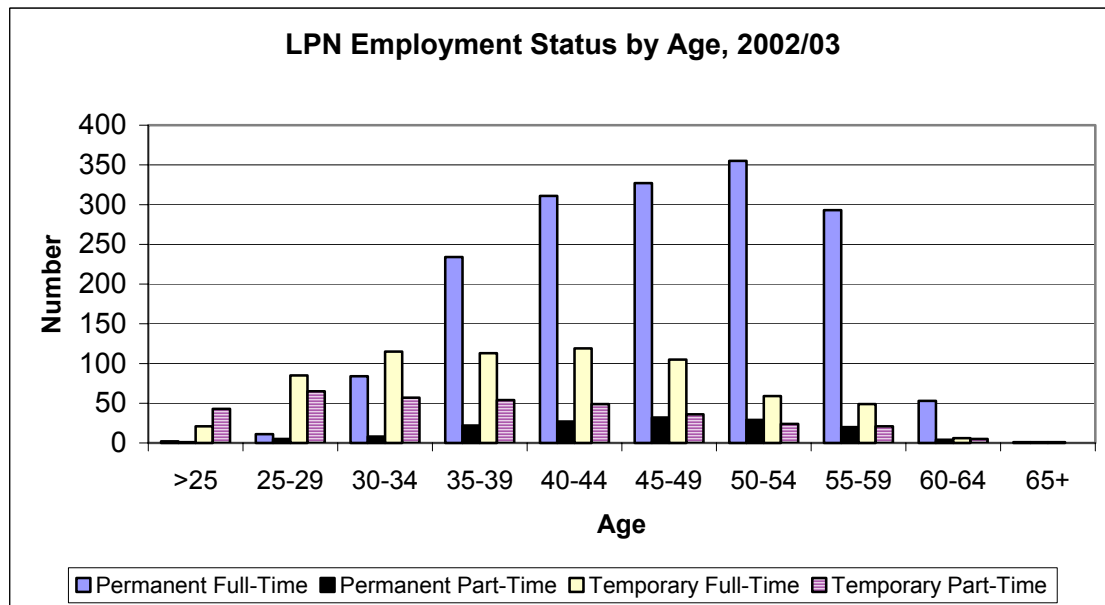
Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

Notes:

¹ Not all registered LPNs are practicing. Therefore, percentages for each year do not equal 100 per cent and the number of LPNs per year does not equal the total LPNs registered.

Employment status by age is provided in Figure 5:

Figure 5. LPN Employment Status by Age, 2002/03.

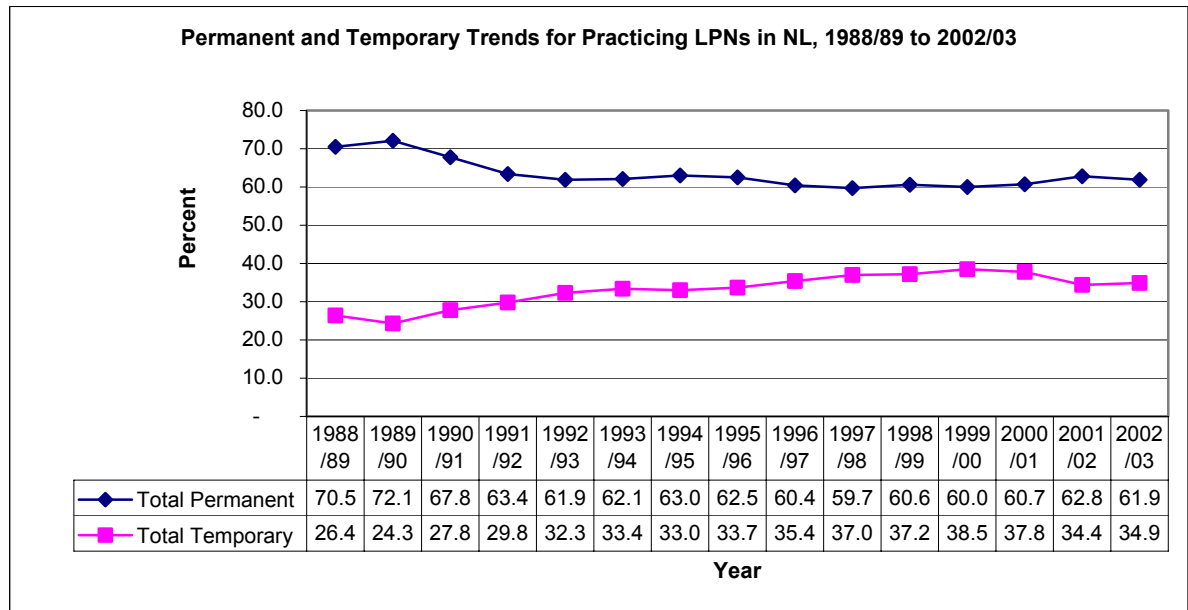


Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (2002/03)

Above age 35, permanent full-time LPNs dominate the workforce.

Permanent and temporary trends in LPN employment are illustrated in Figure 6:

Figure 6. Permanent and Temporary Trends For Practicing LPNs in NL, 1988/89 to 2002/03.



Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

Since 1988/89, permanent staff decreased by 8.6 per cent and temporary staff increased by 8.5 per cent, noting again that temporary and casual designations were combined starting in 2001/02. These changes have been gradual over this time frame.

Table 16 shows the percentages for employment hours in Canadian jurisdictions. Caution should be used when interpreting the table as definitions for full-time and part-time may differ.

Table 16. National Percentage Distribution of LPNs by Employment Hours, 2002.

Jurisdiction	Full-Time	Part-Time	Casual
NT	73.4%	12.7%	13.9%
NL	60.6	5.8	33.6
SK	50.3	10.9	38.7
ON	48.5	38.9	12.6
NS	48.3	26.6	24.8
NB	47.0	30.6	22.3
QC	39.7	45.8	14.5
AB	39.4	47.7	12.6
MB	35.7	56.3	8.0
PE	35.6	42.3	22.1
BC	n/s ¹	n/s	24.7
YT	n/s	n/s	n/s
Canada	42.2	35.7	16.6

Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

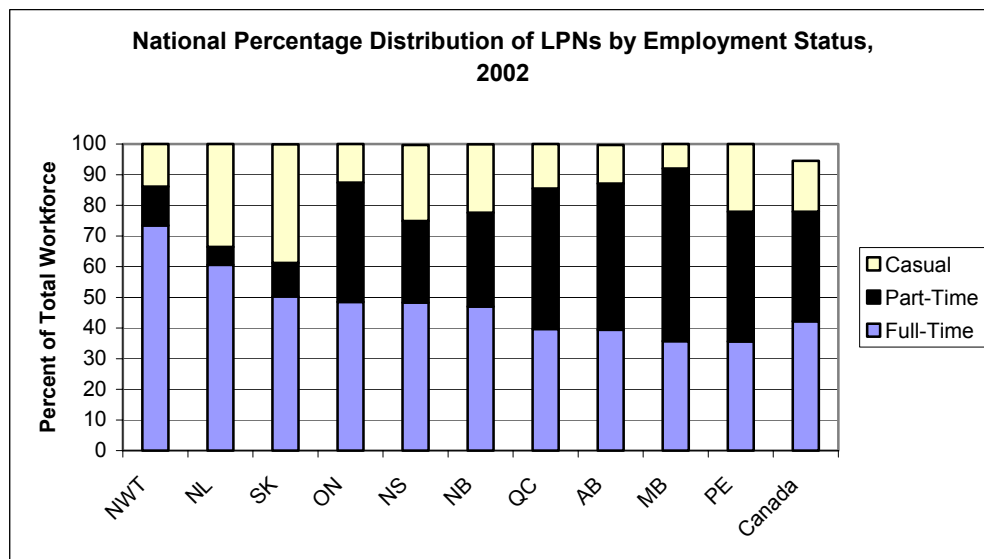
Notes:

¹n/s = Data not submitted to CIHI

The data shows that NL currently has the second highest proportion (60.6 per cent) of LPNs employed on a full-time basis. Seven jurisdictions report less than 50 per cent of the LPN workforce are full-time.

The 2002 national picture is shown graphically in Figure 7:

Figure 7. National Percentage Distribution of LPNs by Employment Hours, 2002.



Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

Notes:

¹British Columbia and the Yukon are not included in Figure 7 due to insufficient data.

Although, NL has the second-highest proportion (60.6 per cent) of LPNs employed on a full-time basis, those employed on a casual or part-time basis represent a substantial resource that could be accessed in times of higher demand.

4.2 Employer Types

Place of employment categories were changed in 2001/02 by CLPN to maintain consistency with CIHI statistics. Long term care and nursing home data now includes rehabilitation statistics; hospital and mental health statistics are also combined. All remaining organizations are grouped together under the heading of “Other”. Data summarized by place of employment is shown in Table 17:

Table 17. Percentage Distribution of LPNs by Place of Employment in NL, 1988/89 to 2002/03.

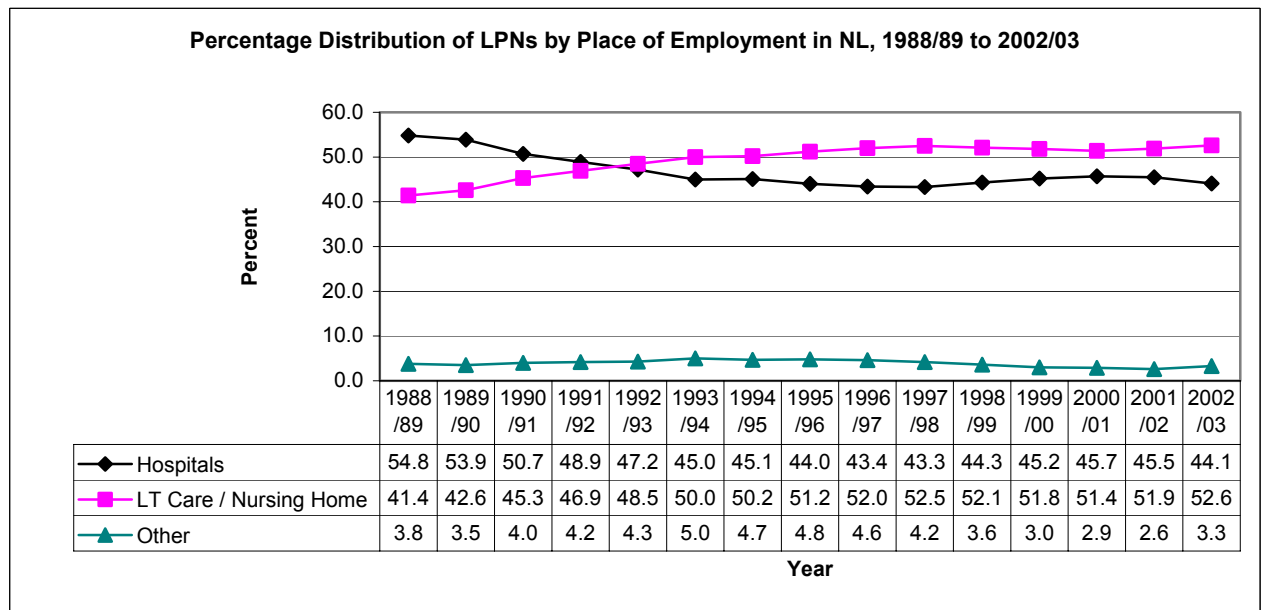
Fiscal Year	Long Term Care / Nursing Home	Hospitals	Other
1988/89	41.4%	54.8%	3.8%
1989/90	42.6	53.9	3.5
1990/91	45.3	50.7	4.0
1991/92	46.9	48.9	4.2
1992/93	48.5	47.2	4.3
1993/94	50.0	45.0	5.0
1994/95	50.2	45.1	4.7
1995/96	51.2	44.0	4.8
1996/97	52.0	43.4	4.6
1997/98	52.5	43.3	4.2
1998/99	52.1	44.3	3.6
1999/00	51.8	45.2	3.0
2000/01	51.4	45.7	2.9
2001/02	51.9	45.5	2.6
2002/03	52.6	44.1	3.3
Change	11.2	-10.7	-0.5

Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

In the NL health system, hospitals have “long term care” or “nursing home” units. Place of employment statistics are self-reported, and it is unsure whether LPNs employed in these units report as working in a hospital, long term care, or nursing home setting. For this reason, caution should be noted when interpreting the data.

Graphically, the trends for hospital, long term care or nursing home, and other place of employment is shown in Figure 8:

Figure 8. Percentage Distribution of LPNs by Place of Employment in NL, 1988/89 to 2002/03.



Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2002/03)

The distribution of LPNs in hospitals decreased by 10.7 per cent between 1988/89 and 2002/03, while the distribution of LPNs in long term care or nursing homes increased by 11.2 per cent during the same period. Trends intersected in 1992/93 with more LPNs working in long term care or nursing home settings, whereas in previous years, the majority of LPNs worked in hospitals.

When compared to other Canadian jurisdictions in Table 18, NL has the second highest proportion of LPNs (50.5 per cent) in long term care settings:

Table 18. National Percentage Distribution of LPNs by Place of Employment, 2002.

Jurisdiction	Place of Work			
	Long Term Care	Hospital	Community Health	Other
QC	55.0%	38.2%	2.3%	4.0%
NL	50.5	45.1	* ¹	1.7
NB	46.0	47.8	3.0	3.2
YT	45.3	28.1	*	17.2
PE	42.8	45.5	4.6	6.9
MB	42.1	42.4	7.3	8.2
NS	37.0	47.3	10.4	5.2
ON	27.5	47.7	9.6	11.1
BC	27.2	61.9	4.6	6.3
AB	23.9	62.5	7.4	5.9
SK	17.0	68.7	8.5	5.6
NT	13.9	67.1	0.0	17.7
Canada	36.4	47.9	6.5	7.3

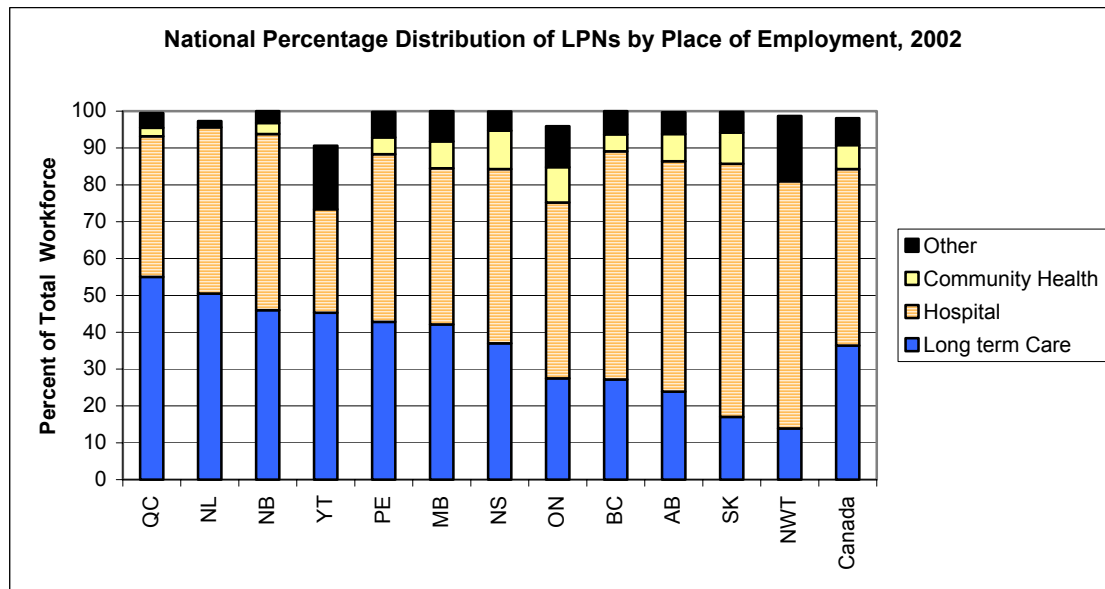
Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002, 2003

Notes:

¹ Value suppressed to ensure confidentiality by CIHI.

Graphically, this data is shown in Figure 9:

Figure 9. National Percentage Distribution of LPNs by Place of Employment, 2002.



Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002, 2003

Prior to the collection of CIHI data, the CLPN collected LPN prime area of responsibility data using eight categories. Trends in LPN prime area of responsibility in NL prior to CIHI data collection are summarized in Table 19:

Table 19. Percentage Distribution of LPNs by Prime Area of Responsibility in NL, 1988/89 to 2000/01.

Fiscal Year	Medicine	Surgery	Obstetrics	Paediatrics	Geriatrics	Psychiatry	Nursery	Other
1988/89	9.2%	7.2%	1.5%	3.3%	47.4%	7.5%	0.6%	22.9%
1989/90	9.7	6.8	1.2	2.8	48.4	6.8	0.5	23.4
1990/91	8.8	6.4	1.1	2.7	50.6	5.5	0.5	24.0
1991/92	8.5	6.3	0.9	2.7	52.6	5.1	0.5	22.9
1992/93	7.9	6.3	1.2	2.1	54.1	5.1	0.3	22.6
1993/94	7.5	6.1	1.1	1.9	55.5	4.8	0.3	22.5
1994/95	6.9	5.3	1.0	2.0	56.2	7.2	0.1	20.8
1995/96	6.2	4.8	0.9	1.9	57.5	7.2	0.0	21.1
1996/97	5.7	4.6	0.8	1.8	59.3	7.0	0.0	20.5
1997/98	5.6	4.5	0.5	1.7	59.0	7.0	0.0	21.2
1998/98	5.9	4.8	0.4	1.8	58.9	6.8	0.0	20.9
1999/00	6.1	4.9	0.5	1.7	62.5	7.2	0.0	16.7
2000/01	6.3	4.5	0.4	1.6	61.9	7.0	0.0	17.9
Change since 1988	-2.9	-2.7	-1.1	-1.7	14.5	-0.5	-0.6	-5.0

Source: Council for Licensed Practical Nurses [CLPN] Annual Reports. (1988/89 to 2000/01)

Since 2000, CIHI instituted a new categorization for collecting LPN data on area of responsibility. Consequently, mapping CLPN's previous categories into the new CIHI categories proved to be difficult. In 2002, the percentage of LPNs working in "Direct Care" varied across jurisdictions, from a low of 67.1 per cent in Northwest Territories to a high of 98.7 per cent in Prince Edward Island, Saskatchewan, and British Columbia.¹ NL had 96.0 per cent of its LPNs working in "Direct Care."¹ Table 20 compares the NL LPN workforce to other jurisdictions by "Direct Care" area of responsibility according to the new CIHI categories:

Table 20. National Percentage Distribution of LPNs by Direct Care Area of Responsibility, 2002.

Province	Area of Responsibility				
	Geriatric / LT Care	Medical / Surgical	Psychiatric / Mental Health	Other Direct Care ¹	Other / Not Stated
QC	60.9%	18.1%	5.2%	13.6%	2.2%
NL	56.9	9.2	6.2	23.7	4.0
MB	53.7	15.8	*	27.2	2.4
NB	47.0	18.2	2.2	28.5	4.1
NS	43.2	29.5	6.8	19.0	1.5
PE	40.0	8.6	9.4	40.7	1.3
BC	33.7	38.7	1.1	25.2	1.3
ON	27.2	12.7	7.5	44.6	8
AB	24.1	26.1	1.7	46.7	1.4
SK	21.7	29.5	1.4	46.1	1.3
YT	*	0.0	*	64.1	*
NT	*	15.2	0.0	24.1	32.9
Canada	39.4	18.3	5.3	32.4	4.6

Source: Canadian Institute for Health Information [CIHI] Workforce Trends of Licensed Practical Nurses in Canada, 2002. 2003

Notes:

¹ Other Direct Care includes Paediatric, Maternal / Newborn, Critical Care, Community Health, Ambulatory Care, Home Care, Occupational Health, Operating Room / Recovery Room, Emergency Room, Several Clinical Areas, Oncology, Rehabilitation, Palliative Care, and Other Patient Care.

The majority of LPNs work in the geriatric or long term care, and medical or surgical areas of “Direct Care”. NL has the second highest number of “Direct Care” LPNs working in geriatric or long term care settings at 56.9 per cent, over 17 per cent higher than the Canadian average. As well, the province only has half as many LPNs working in medical or surgical settings compared to Canadian averages.

4.3 Wellness of Licensed Practical Nurses

There are a number of indicators that assist in the examination of LPN wellness, including sick leave, and workplace injury leave. All lost-time hours are converted into full-time equivalents (FTEs). A FTE is defined as the total earned hours divided by the “normal” hours in the same period (1950). The total number of earned hours is the sum of worked hours and benefit hours.²⁵ Provincially, in fiscal 2000/01, the total number of FTEs lost due to illness and workplace injury for LPNs was approximately 325 (177.8 for sick leave and 147.2 for injury leave). Injury leave is generally work-injury related. The Workplace Health, Safety and Compensation Commission of Newfoundland and Labrador (WHSCC) compensates employees for injuries obtained at the worksite under specific guidelines.

Sick Leave

In fiscal year 2000/01, total sick leave for LPNs employed in health boards was 177.8 FTEs, or 140.4 hours per FTE, or 124.5 hours per LPN.²⁵ Sick leave FTEs translate into 7.2 per cent of all LPN earned hours. LPN sick leave by health board as a percentage of total FTEs is presented in Table 21:

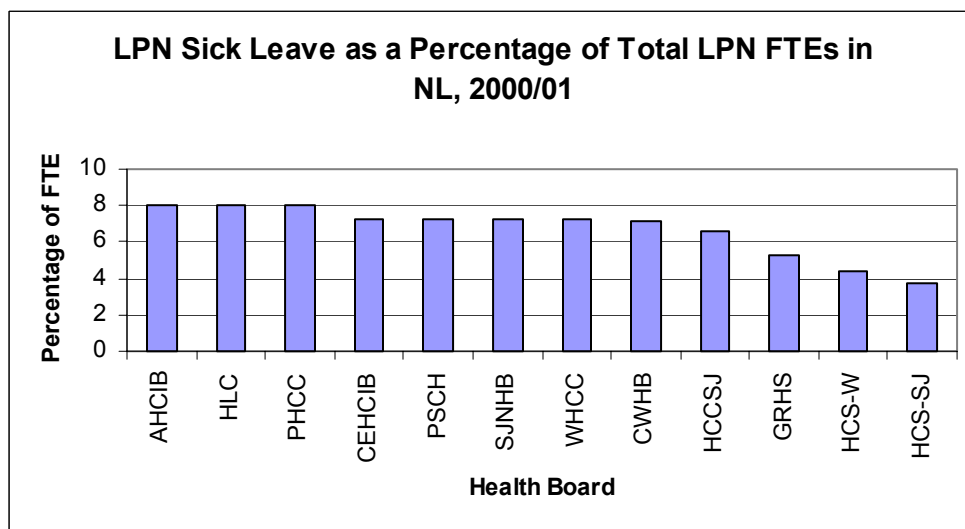
Table 21. LPN Sick Leave as a Percentage of Total LPN FTEs in NL, 2000/01.

Health Board	Sick Leave FTEs	Total FTEs	Sick Leave as a Percentage of FTEs
AHCIB	17.1	212.5	8.0%
HLC	3.5	43.2	8.0
PHCC	12.4	153.6	8.0
CEHCIB	13.7	187.7	7.3
PSCH	1.8	24.7	7.3
SJNHB	42.7	586.5	7.3
WHCC	28.6	392.1	7.3
CWHB	18.9	268.2	7.1
HCCSJ	34.9	527.3	6.6
GRHS	3.7	70.5	5.3
HCS-W	0.4	9.5	4.4
HCS-SJ	0.1	2.6	3.7
Total	177.8	2478.4	7.2

Source: Human Resource Planning Unit Health Human Resources Indicator Report 2000/2001, Newfoundland and Labrador Health and Community Services Human Resources Sector Study (2002)

Figure 10 shows sick leave for LPNs by health board as a percentage of FTEs:

Figure 10. LPN Sick Leave as Percentage of Total LPN FTEs in NL, 2000/01.



Source: Human Resource Planning Unit Health Human Resources Indicator Report 2000/2001, Newfoundland and Labrador Health and Community Services Human Resources Sector Study (2002)

Workplace Injury Leave

Workplace injury lost hour rates are higher in the LPN groups than any other health professional group. In fiscal year 2000/01, total workplace injury leave for LPNs employed in health boards was 147.2 FTEs, or 115.1 hours per FTE, or 88 hours per LPN.²⁵ Workplace injury leave FTEs translate into 5.9 per cent of all LPN earned hours. LPN injury leave by health board as a percentage of total FTEs is presented in Table 22:

Table 22. LPN Injury Leave as a Percentage of Total LPN FTEs in NL, 2000/01.

Boards	Injury Leave FTEs	Total FTEs	Injury Leave as a Percentage of FTEs
AHCIB	26.5	212.5	12.5%
PSCH	2.9	24.7	11.8
SJNHB	43.5	586.5	7.4
CEHCIB	12.2	187.7	6.5
WHCC	24.3	392.1	6.2
CWHB	11.4	268.2	4.2
HCCSJ	20.3	527.3	3.9
PHCC	5.1	153.6	3.3
HLC	1.0	43.2	2.4
GRHS	0.0	70.5	0.0
HCS-W	0.0	9.5	0.0
HCS-SJ	0.0	2.6	0.0
Total	147.2	2478.4	5.9

Source: Human Resource Planning Unit [Health Human Resources Indicator Report 2000/2001](#), Newfoundland and Labrador Health and Community Services Human Resources Sector Study (2002)

Notes:

¹HCS-W and HCS-SJ did not report LPN injury leave. However, the total FTE cannot change from 2478.4.

Figure 11 shows injury leave for LPNs by health board as a percentage of FTEs:

Figure 11. LPN Injury Leave as a Percentage of Total LPN FTEs in NL, 2000/01.



Source: Human Resource Planning Unit [Health Human Resources Indicator Report 2000/2001](#), Newfoundland and Labrador Health and Community Services Human Resources Sector Study (2002)

LPNS show concerning statistics for workplace injuries. Workplace injuries for LPNs consist mainly of “sprains, strains, or tears” of the “back, spine, or trunk” due to “overextension in lifting.”²⁴ Provincial data shows that in fiscal year 2000/01, LPNs were injured at a rate of nearly one in 10 LPNs, when expressed as an average for all LPNs (not just those injured); RNs were injured at a rate of one in 16 RNs.²³ This data reflects incidents only occurring in 2000/01. Not all injuries reported lead to WHSCC claims or lost time.

5.0 Mobility of Licensed Practical Nurses

5.1 Migration

Data on inter-provincial and international migration is difficult to obtain. Currently, the only indication of migration is the number of verifications sent to other jurisdictions from CLPN, although a request for verification does not guarantee this person is moving and may not be the only verification requested. Verifications confirm that an LPN who has graduated from an approved PN Program, with a PN diploma, is eligible for licensure (registration) in a jurisdiction, and has written the CPNRE. When a registrant applies for licensure (registration) in another jurisdiction, the CLPN sends verifications to that jurisdiction at the registrants' request.

It is also important to note that initial registration with CLPN is not mandatory for graduates of the NL PN Program unless the person wishes to work in this province. If a graduate wishes to work in another jurisdiction, verification is still requested to confirm eligibility, including education through an approved program and successful completion of the CPNRE. Some jurisdictions now require graduates to establish registration in their graduation jurisdiction even though they will not be working there. The number of verifications sent from the CLPN is given by province in Table 23:

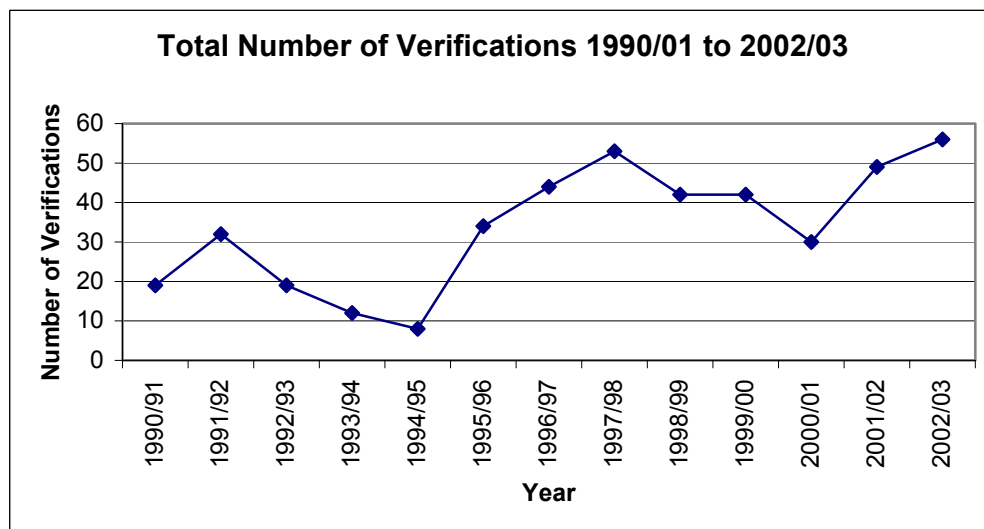
Table 23. Total Verifications Sent From CLPN to Other Jurisdictions, 1990/91 to 2002/03.

Fiscal Year	ON	AB	NS	BC	YT/NT	NB	SK	MB	PE	Other	Total
1990/91	13	4						1		1	19
1991/92	25	3			1		1	1		1	32
1992/93	8	5	3	1	1		1				19
1993/94	4	3	4	1							12
1994/95	2	4	1	1							8
1995/96	11	5	8	8	1					1	34
1996/97	11	9	10	6	3	3	1		1		44
1997/98	9	19	7	6	9	2		1			53
1998/99	11	16	4	6	2		1	1	1		42
1999/00	11	5	5	9	3	2	5		2		42
2000/01	7	7	7	3	1	3	1	1			30
2001/02	9	22	9	5	4						49
2002/03	13	9	13	9	3	4	1		2	2	56
Total	134	111	71	55	28	14	11	5	6	5	440

Source: Council for Licensed Practical Nurse [CLPN] Database for Registration Year 2002/03. (2003)

Ontario, Alberta, and Nova Scotia dominate requests for verifications, and collectively constitute 72 per cent of the total. The total number of verifications from 1990/91 to 2002/03 is shown graphically in Figure 12:

Figure 12. Total Verifications Sent From CLPN to Other Jurisdictions, 1990/91 to 2002/03.



Source: Council for Licensed Practical Nurse [CLPN] Database for Registration Year 2002/03. (2003)

The average number of verifications between 1998/99 and 2002/03 is 44, with a possible variation of plus or minus 8.9 verifications per year. Considering workforce gains other than graduates of the NL PN Program, anecdotal evidence suggests an average of seven LPNs from other jurisdictions enter the province and obtain licensure annually.

A lapsed membership survey was administered in 2001/02 and 2002/03. Survey results indicate the number of LPNs failing to renew their licenses, their reasons for non-renewal, and their satisfaction on several aspects of the organization.²⁰ In fiscal 2001/02, 163 surveys were mailed, 8 returned undeliverable, 54 did not return, and 101 returned completed for a response rate of 62 per cent. In fiscal 2002/03, 200 surveys were mailed, 8 returned undeliverable, 69 did not return, and 123 returned completed for the same response rate of 62 per cent.²⁰ Survey results are shown in Table 24:

Table 24. Reasons for Non-Renewal of LPN Licenses, 2001/02 and 2002/03.

Reason for Non-Renewal	Count for Fiscal 2001/02	Per cent for Fiscal 2001/02	Count for Fiscal 2002/03	Per cent for Fiscal 2003/03
Moved	17	10.4%	36	18.0%
Long term sick leave	20	12.3%	19	9.5%
Retired	9	5.5%	43	21.5%
Maternity leave	4	2.5%	8	4.0%
New job not requiring licensure	4	2.5%	7	3.5%
Other	5	3.1%	10	5.0%
Total Returned / Indicated	59	36.2%	123	61.5%
Total Returned / Did Not Indicate	42	25.8%	0	0.0%
Did Not Return / Undeliverable	62	38.0%	77	38.5%
Total	163	100%	200	100%

Source: Council for Licensed Practical Nurses [CLPN] Lapsed Membership Survey. (2001/02 and 2002/03)

It is difficult to determine whether these trends validly represent the entire pool of non-renewals. An LPN must work a minimum number of hours as an LPN to renew a license to practice. Without these hours, their license will expire and the PN must complete a re-entry program to regain their license. It is unsure whether PNs whose licenses have lapsed for this reason will indicate “Other” as the reason for non-renewal, or simply not indicate an answer to the question.

The CLPN has been working with other regulating authorities across Canada for LPNs to achieve the common goal of improved labour mobility. Jurisdictions have increased their understanding of the ways in which the occupation is similar or different across the country, identifying barriers to worker mobility, and taking significant steps toward eliminating these barriers to accommodate each other’s members. This agreement has established the conditions under which a LPN registered/licensed in one Canadian jurisdiction will have his/her qualifications recognized in another Canadian jurisdiction that is a party to the agreement. This is a requirement of the Labour Mobility Chapter of the Agreement on Internal Trade for all regulated professions.²⁹ The Mutual Recognition Agreement was completed in July 2001.

5.2 Net Change in Licensed Practical Nurses

The net change in practicing LPNs depends on several factors. Workforce gains include:

1. New graduates from the PN Program and the retention rate of new graduates. The average retention rate of graduates, from classes between 1990/91 and 2001/02, was 72 per cent in 2002/03. However, 92 per cent of the 2001/02 graduating class was still registered with the CLPN in 2002/03.^{16,17}
2. An estimated five to 10 LPNs from other jurisdictions registering in NL for the first time.^{16,17}
3. LPNs completing the Re-Entry Program.

It is possible to calculate the overall numbers of LPNs failing to renew licenses for each year. Data are provided in Table 25:

Table 25. LPN License Non-Renewal Trends, 1988/89 to 2002/03.

Fiscal Year	Total Registrants	Gains		Losses	Net Change (D)
		New Registrants (A) ¹	Re-entry (B) ²	Non-renewing (C) ³	
1988/89	2566	-	-	-	-
1989/90	2659	203	39	149	93
1990/91	2848	248	19	78	189
1991/92	2810	196	10	244	-38
1992/93	2817	127	6	126	7
1993/94	2751	79	0	145	-66
1994/95	2853	134	19	51	102
1995/96	2833	124	14	158	-20
1996/97	2838	142	27	164	5
1997/98	2797	85	0	126	-41
1998/99	2809	100	13	101	12
1999/00	2859	121	19	90	50
2000/01	2905	120	26	100	46
2001/02	2912	109	27	129	7
2002/03	2940	149	20	141	28

Source: Council for Licensed Practical Nurse [CLPN] Database for Registration Year 2002/03, (2003)

Notes:

¹ Data were derived directly from CLPN registration numbers, assigned consecutively to those obtaining licensure with CLPN, including new graduates and first-time registrants from out-of-province. New Registrations (A) does not include Re-Entry (B).

² Data were derived directly from Re-Entry Program statistics. The majority of these LPNs had previous registration numbers (licensure was introduced in 1984) and do not get assigned new numbers. If a number was assigned in the past, it is reactivated.

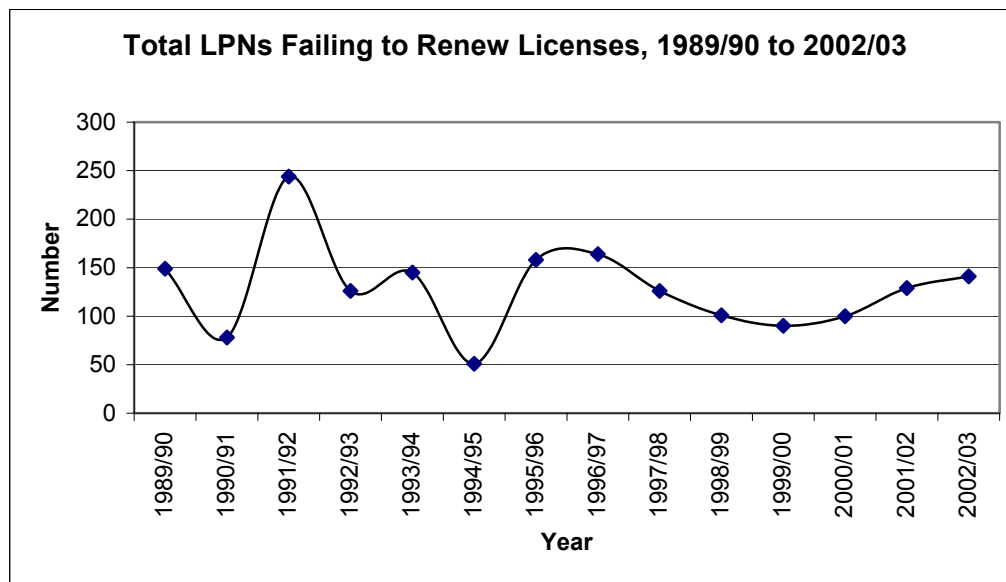
³ Data are derived from CLPN registration numbers. Workforce losses are not so easily detailed as it includes all LPNs who fail to renew a license for any reason. These reasons are many and varied, and change from year to year.

Calculations above are best illustrated with an example: In fiscal year 1991/92, there were 2810 LPNs. In 1992/93, there were 127 new registrations, six re-entries, and 126 non-renewing or exiting, for a net change of seven LPNs from the previous year.

In general terms: $D = A + B - C$

Graphically, the number of LPNs failing to renew licenses is shown in Figure 13:

Figure 13. Total LPNs Failing to Renew Licenses, 1989/90 to 2002/03.



Source: Council for Licensed Practical Nurse [CLPN] Database for Registration Year 2002/03. (2003)

There is no apparent pattern to predict the net change in renewals. LPNs allow their licenses to lapse or re-enter the health system for many and varied reasons. Planning is further challenged by the fact that these statistics reflect individual licenses only, and do not reflect labour force participation.

Returning to Table 25, the next step is to identify how these figures could support a forecasting model. The number of verifications is some indication of the movement of LPNs out of the province, but in different years may account for nearly half of the non-renewals (42 verifications out of 90 non-renewals in 1999/00) or as little as eight per cent (12 verifications out of 145 non-renewals in 1993/94). The net change in renewals is the most reasonable approach for estimating movement into and out of the LPN workforce. Given the present data, one might expect an average net loss of 126 LPNs in any given year, plus or minus a variation of 28 per year.

6.0 Forecast

An LPN five-year supply forecast using recent trends experienced by health boards was completed in 2003.²⁷ Forecasting involves an estimation of LPN gains and losses for the current and future workforce, and the resulting changes in the overall need for health human resources. LPN forecasting consists of two main areas: supply and demand. Supply forecasts are concerned with the flow of people into and out of the workforce; demand forecasts are concerned with population requirements, the health system's response to those requirements, and how the system's staffing requirements are met.²⁷ It is important to note that in this definition of demand, the system providing health services is in itself an important driver of demand.²⁷ The five-year forecast completed in 2003 did not factor in changes in demand. The movements into and out of the LPN workforce are summarized in Table 26:

Table 26. Summary of LPN Forecast, 2003 to 2007.

LICENSED PRACTICAL NURSES ESTIMATES>>	BOARD LEVEL ¹	PROVINCIAL LEVEL
Workforce (number of employees)		2900
Vacancies (number as of March 31, 2001)		14
Projected Retirements (number turning 58, 2003 to 2007)		405
Total Requirements ² (total supply required 2003 to 2007)		550 to 650
Total Graduate Supply ³ (number from NL 2003 to 2007)		550 to 650
Total Other Supply (number other than graduates 2003 to 2007)		Very Low
Potential Surplus (+) or Gap (-) (cumulative 2003 to 2007)		0
Forecast: The overall number of graduates will meet the needs of the workforce in the next five years. Close monitoring of licensed practical nurse requirements is required as a Long-Term and Supportive Care Strategy is developed under the strategic health plan. Close annual monitoring is required. Reduced absenteeism could reduce total requirements for this group.		

Source: Human Resource Planning Unit Newfoundland and Labrador Health and Community Services Human Resource Planning Steering Committee Final Report. (2003)

Notes:

¹ Assume provincial numbers are representative of board members

² Total requirements based on historical turnover rates, the number of external hires, and retirements expected in the next five years.

³ Matched to requirements based on an effective brokering process that satisfies a demonstrated need.

Virtually all of the 2940 LPNs in NL work for health boards. Most LPNs (52.6 per cent) work in long term care. Turnover is about six per cent, and more than half of the positions are filled internally²⁷. The current average age is 44 years and retirements show a steep increase in numbers from 53 in 2003 to 101 projected in 2007, before decreasing to 77 in 2011, and peaking at 111 in 2013. Retirement trends in the next five years will increase the need for graduates based on the current model and location of health service delivery in NL. Given the current important role of LPNs in long term care, these considerations are important for HR planning purposes and must be monitored.

The PN Program spans only 12 months (13 months starting in 2004), and can be offered in multiple locations using the brokering process. Thus, the response to a need is swift and localized, ensuring that the supply of LPNs matches the requirements for the province. No shortage is projected for these professionals in the next five years.

7.0 Conclusion

This report has highlighted a number of important statistics regarding LPN human resources in this province. Although the current workforce is slowly growing and statistics show that NL has the most LPNs per 1000 population in Canada, provincial planners can anticipate a steady requirement for more LPNs in the future. More than one-third of the LPN population is expected to retire between 2003 and 2013. Special attention should be directed towards Operating Room Technicians and Urology Technicians, who show sizable retirements by the year 2012.

The future role of LPNs will evolve as more LPNs assume medication administration responsibilities in the health system. This has been a slow area of growth, as many LPNs

in the present health system do not have this education. However, graduates of the PN Program in 2004 will be the first in NL to have proficiency in medication administration at graduation, and the CNS offers a Medication Administration course to current LPNs in the health system. These efforts are expected to accelerate growth in this area.

Gradual changes in the employment status of LPNs show a decrease in the number of permanent positions since 1988/89. The majority of NL LPNs work in geriatric or long term care, and medical or surgical areas of “Direct Care.” Finally, LPNs show higher rates of absenteeism in NL than other health professionals. Wellness statistics show a concerning number of LPN hours lost annually due to sick leave and workplace injury leave.

Out-migration trends demonstrate a loss of several LPNs each year to other jurisdictions. Verification trends show some indication of the movement of LPNs out of province, but only count as a percentage of the non-renewals each year. Fortunately, the nature of the brokering process means new LPNs can be educated within a short timeframe to suit the needs at a local level where demand can be demonstrated. No shortage is projected for LPNs in the next five years. It is important to note that this report only addresses the supply side of the forecasting equation. It does not consider several other important factors that will have a significant impact on the future need for LPNs.

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