

# **NURSING WORKFORCE STUDY**

## **Volume II**

### **The Supply of Nursing Personnel in Canada**

HHRU 00:4

April 2000

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### *The Supply of Nursing Personnel in Canada*

Arminée Kazanjian

Laura Wood

Harold Yip

Sherin Rahim-Jamal

Allyson MacDonald

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Health Human Resources Unit  
Centre for Health Services and Policy Research  
The University of British Columbia  
Vancouver, British Columbia V6T 1Z3

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## HEALTH HUMAN RESOURCES UNIT

The Health Human Resources Unit (HHRU) was established as a demonstration project by the British Columbia Ministry of Health in 1973. Since that time, the Unit has continued to be funded on an ongoing basis (subject to annual review) as part of the Centre for Health Services and Policy Research. The Unit undertakes a series of research studies that are relevant to health human resources management and to public policy decisions.

The HHRU's research agenda is determined through extensive discussions of key current issues and available resources with the senior staff of the Ministry of Health. Various health care provider groups participate indirectly, through on-going formal and informal communications with Ministry of Health officials and with HHRU researchers. Research is undertaken by seven professional staff, including secretarial and analyst support; Arminée Kazanjian is the Associate Director and Principal Investigator for the Unit.

Three types of research are included in the Unit's research agenda. In conjunction with professional licensing bodies or associations, the HHRU maintains the Cooperative Health Human Resources Database. The Unit uses these data to produce regular status reports that provide a basis for in-depth studies and for health human resources planning. The Unit undertakes more detailed analyses bearing on particular health human resources policy issues and assesses the impact of specific policy measures, using secondary analyses of data from the Cooperative Database, data from the administrative databases maintained under the HIDU, or primary data collected through surveys. The HHRU also conducts specific projects pertaining to the management of health human resources at local, regional and provincial levels.

Copies of studies and reports produced by the HHRU are available at no charge.

Health Human Resources Unit  
Centre for Health Services and Policy Research  
#429-2194 Health Sciences Mall  
Vancouver, BC  
V6T 1Z3  
Ph: (604) 822-4810  
Fax: (604) 822-5690  
email: [hhru@chspr.ubc.ca](mailto:hhru@chspr.ubc.ca)  
URL: [www.chspr.ubc.ca](http://www.chspr.ubc.ca)

## **Nursing Workforce Study**

This study was commissioned by the Federal/Provincial/Territorial Advisory Committee on Health Human Resources (ACHHR) to develop baseline data on the supply and education of Registered Nurses (RNs), Registered Psychiatric Nurses (RPNs), and Licensed Practical Nurses (LPNs), and on employer practices pertaining to the deployment of all patient care providers. The study results are published in five separate volumes:

*Volume I* of the study “Demographic Context and Health System Structure for Nursing Services in Canada”, provides a general overview of demographic and system changes; it describes the current demographic context for nursing practice and the structure of provincial/territorial health care delivery systems. The demographic analyses are based on 1996 Census data. Provincial/territorial health care delivery information for the most part are obtained from “Health System Reform in Canada, 1997,” by Health Canada.

*Volume II* of the study, “The Supply of Nursing Personnel in Canada” examines data on the supply of nursing personnel in the provinces and territories to provide basic information about employment status, deployment (place of employment, area of responsibility, type of position, hours worked), age, and type and place of education/training. The analysis is based on data collected by the respective regulatory bodies in their registration and renewal processes. Two separate years of secondary data are utilized in the analysis (1990 and 1997), presenting a detailed national and regional picture on the supply of nurses in Canada.

*Volume III* of the study “An Inventory of Nursing Program Enrolments and Graduates in Canada by Province/Territory, 1998” describes the production of nursing personnel in Canada. A survey questionnaire was sent to provincial/territorial representatives (usually the education representative) of the ACHHR who were asked to complete the survey for all nursing education programs in their jurisdictions. The questionnaire requested information as to the type of credential offered, the length of the program, the number enrolled in each year of the program, the number of students enrolled full-time, part-time, or in distance education, and the number of graduates in 1997 and 1998. The analysis includes the impact of BN-only basic education for RNs.

*Volume IV* of the study, “Nursing Workforce Deployment: A Survey of Employers” examines employer practices and policies for nursing workforce deployment in each province/territory. A sample survey regarding deployment was undertaken using a questionnaire pertaining to all three regulated nursing groups: LPNs, also known as Registered Nurse Assistants (RNAs), RPNs, and RNs. Information on other professionals and unregulated patient care providers e.g. Aides was also collected by the questionnaire. The questionnaire was designed to capture the following information: hiring practices (amount of experience required, deployment, credentials, etc.), kinds of services provided and the skills perceived to be needed to provide those services, numbers and mix of nursing personnel used to provide services, use of unregulated health care workers in relation to nursing services provision, and anticipated changes in deployment practices related to changes in the organization of the health care delivery system.

*Volume V* of the study, “Changes in the Nursing Workforce and Policy Implications” the final part of the study, synthesizes the findings from each of the above sections and attempts to delineate the salient policy issues.

Copies of other Volumes in this study may be obtained by contacting the Health Human Resources Unit.

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# NURSING WORKFORCE STUDY

## *Volume II: The Supply of Nursing Personnel in Canada*

### I. INTRODUCTION

This part of the Nursing Workforce Study analysis examines data on the supply of nursing personnel in the provinces and territories to provide basic information about employment status, deployment (place of employment, area of responsibility, type of position, hours worked), age, and type and place of education/training. All three nursing groups have been included: Registered Nurses (RNs), Registered Psychiatric Nurses (RPNs), and Licensed Practical Nurses (LPNs) (also known as Registered Nurse Assistants (RNAs) and Registered Practical Nurses (RPNs)). The analysis is based on data collected by the respective regulatory bodies in their registration and renewal processes; all the provinces and territories have had regulatory bodies for RNs (since 1994, when the Yukon Territory established their organisation), while all ten provinces regulate LPNs; only the four western provinces regulate RPNs.

### II. DATA SOURCES AND METHODS

The data were procured through two different processes. Registration information about RNs is transmitted routinely from the regulating jurisdictions to Statistics Canada (until 1995) and the Canadian Institute for Health Information (CIHI - since 1996) through the Canadian Nurses Association (CNA). The data are collected and stored in accordance with a standardized framework that is established by annual agreements between the registrars of the provincial/territorial regulatory bodies and the CNA. We requested data for 1990 and 1997, which necessitated requests for access to all the data stewards from both national organisations. Statistics Canada and CIHI approached each of the jurisdictions to acquire permission for our access, which was granted by all jurisdictions for both time periods.

Data about RPNs and LPNs could not be obtained from either of the national information-collecting agencies. Therefore, we contacted each of the appropriate regulatory bodies and requested access to their databases. Because there is no national collection system, there is no standardized format for data collection and storage. Therefore, information for the specified study years which included all the variables of interest to the project was not always available for the RPNs and LPNs.

Individual-level and person-specific data were requested and obtained from all of the RN organizations and most of the RPN and LPN bodies. The variables of particular interest were as follows:

unique identifier	employment factors
birthdate	(e.g. place, position, hours, etc.)
postal code	type of entry-level education
employment status	place of education
( e.g. full-time, part-time, not employed, etc.)	type of post-basic education

Individual-level data were available for most of these variables for most jurisdictions and for both time periods. Unavailable data items can be identified from the tabular presentations in this section. In Appendix I is a listing of all the RN regulatory bodies with which the project was concerned, and an indication of whether

or not data were made available. A matrix of data fields received from LPN and RPN regulatory bodies is included in Appendix 2.

### III. DATA CHARACTERISTICS

The annual databases represent the sum of registered membership at a particular point in time in each calendar year (usually late fall, often the end of December). A number of caveats follow. To begin with, each province/territory assigns a registered member an unique identifier, but unique identifiers are specific to jurisdictions. There is no single identifier which can be applied to individuals across time and place. As a result, it is impossible to track inter-jurisdictional movement of nursing personnel in a precise manner. Counting annual new registrants according to their place of education (known as place of graduation) allows some estimate of movement to be attempted, but it does not link the out-migration from one jurisdiction directly to the in-migration of another jurisdiction. Moreover, if the nurse who leaves Canada returns to a jurisdiction different from the one in which she was previously registered, there will be no record of her return in the registration data of her previous regulatory body, and she will be counted only as an in-migrant and not as having been previously registered elsewhere in Canada by her new regulatory body. It should also be noted that nurses who leave Canada can only be counted if they choose to maintain registration in one or more jurisdictions. Present day estimates of the 'nursing brain drain' are often based upon 'verifications', which are the processes undertaken by the regulatory bodies to supply another jurisdiction with information about a potential registrant's eligibility for license and work. Nurses may apply to have their credentials 'verified' and sent to an out-of-Canada jurisdiction, but there is no way of knowing from the registration data whether the nurses in question actually leave the country.

Further limitations of the registration databases have to do with the implications of methods of data collection, database management, and registration practices. For example, individuals may be registered and working in a particular jurisdiction for part of a year; if they move to another jurisdiction and take up registration in their new location before the end of the year and the beginning of the registration renewal period, they will only be counted among the employed workforce for that year in their new jurisdiction, despite their contributions to the workforce in the previous jurisdiction. On the other hand, if a member registers in the early part of the year (most registration renewal occurs between January and April of the calendar year) and then decides to leave the workforce before the end of the registration year and the beginning of the registration renewal period, he/she will be included as a member, despite his/her current employment status, unless he/she takes the unusual step of formally terminating membership. Many jurisdictions also allow members to register as non-practising - they pay a lower fee (relative to the full registration costs) and cannot be employed in nursing, but they remain members of the regulatory body. In the past, a member who changed from practising to non-practising status during the year would not be refunded any portion of his/her full registration fee, even if the change occurred early in the registration year, nor would a member who converted from non-practising to practising membership be relieved of the bulk of the practising membership registration fee, unless the date of conversion was very late in the calendar year. Recently, some jurisdictions have developed a system of proration, whereby changing membership status, and even entering into membership for the first time, may be less expensive at certain times of the year. Such changes in the fee policies will affect the comparability of the data over time greatly curtailing the validity of longitudinal analyses. Overall, none of the registration databases can be considered to be comprehensive of all individuals who may have been employed in nursing in any one jurisdiction during any calendar year.

In addition, the data recorded for each individual reflect his/her status at the time of registration. If the member changes employment during the year, the database will not record that fact until the following registration year. Moreover, many jurisdictions use a pre-printed registration renewal form, on which the information conveyed from the previous registration year is presented, and the member is expected to change the information if it is no longer correct or applicable. If the member does not check the recorded information, or does not indicate a change when one has occurred, then the data printed on the form will form the record for that registration year, regardless of accuracy. We are not aware of any jurisdiction which has attempted to verify the accuracy of the information in the registration database.

All caveats aside, however, the data collected by the nursing regulatory organisations constitute the largest and most descriptive body of information about nurses and their employment-related attributes available to health workforce researchers. With appropriate methods of data development and maintenance, even relatively uncomplicated descriptive analyses can yield a surprising amount of information for health workforce planners and policy-makers.

#### IV. DATA VERIFICATION AND STUDY POPULATIONS

Once received, the data on all three nursing groups were examined for completeness (the presence of information requested in the light of information received) and then processed into jurisdiction-specific datasets by an analyst who has extensive experience in dealing with regulatory data from the Registered Nurses Association of B.C. As it is possible for nurses to be registered in more than one jurisdiction concurrently (more likely to occur with RNs), the question of how to circumscribe jurisdictional study populations presented itself. Individuals were counted as members in the province/territory in which they were employed, or if not employed, resident, for the year of record. Keeping in mind the constraints imposed by the databases themselves, this definition of the study population yields what may be described as the total available workforce - the effective supply. Frequency distributions descriptive of age distribution and employment status were generated for the entirety of employed and/or resident numbers, and then the subset of members who were employed in nursing for the years under study was selected, and further tabulations were produced which illustrated the relationship between age (grouped) and employment and education. The subset of members employed in nursing can therefore be described as the actual workforce for that calendar year.

The first section discussed below concerns the individuals described in the previous paragraph: all those RNs registered in each year for each jurisdiction, and all those employed in nursing in each year for each jurisdiction. A second set of tables describes those nurses who were not registered in 1990 in the jurisdiction in which they were registered in 1997. This subset thus includes individuals who entered the nursing workforce during the seven year interval upon completing their basic education, from outside of Canada, from non-practising membership, or from non-membership. On a jurisdictional level, it also includes individuals who moved from one province/territory to the one in which they were registered in 1997. A third set of tables looks at those RNs who were registered in one of the provinces/territories in 1990, but were no longer registered in their 1990 location in 1997. These tables therefore describe RNs who retired from nursing, who moved to another jurisdiction within Canada, who moved out of Canada, who took up non-practising status, who died, or who ceased to be registered for some reason or another. A last set of tables describe those RNs who were registered in the same jurisdiction in both 1990 and 1997 (the stable group). Data on LPNs and RPNs is less comprehensive; the discussion on supply and employment status of LPNs and RPNs comprises the last section of this report.

## V. DISCUSSION

### 1. All RNs, 1990 and 1997

Table 1a describes employment status for the RNs of the ten provinces and the Northwest Territories in 1990 (data were not included for the Yukon Territory as they did not have a regulatory body for RNs until 1994). No data about employment were received for Quebec for 1990. Two variables, employment regular and casual, and employment full- and part-time have been combined to produce totals in those three categories. There are some whose regular full- or part-time status is unknown, as well as others who indicated employment in nursing but gave no other information. Then there are categories for those employed in other than nursing, those not-employed in nursing and those for whom no employment information is available. Table 1b presents row percentages for the subset of RNs employed in nursing. Tables 2a and 2b give similar information for 1997; Quebec employment data were available in that year.

A comparison between the two years suggests that of the RNs employed in Nursing on a regular or casual basis, the proportion of those working regular full-time decreased over time, while the proportion of regular part-timers grew, as did the proportion of those working in casual positions. A majority of RNs in all jurisdictions were in regular full-time employment in 1990 and 1997 (see Figures 1 through 3). However, when considered as a proportion of the total employed in nursing, the drop in full-time employment was striking; while in 1990 71.52% of Newfoundland RNs employed in nursing were working full-time, only 58.93% were so employed in 1997. Smaller, but still noticeable, drops in the proportion of full-timers among the employed in nursing occurred in all provinces and territories. Saskatchewan is alone in being the only jurisdiction where the proportion working full-time among those employed in nursing remained virtually the same between 1990 and 1997, though the drops for PEI, BC and Alberta were small as well. PEI stands out for having experienced a great shift from casual to regular part-time employment; the other Maritime provinces experienced slight growth in the proportion of part-timers among the employed in nursing as did Ontario. Manitoba, Saskatchewan and BC saw considerable growth in the proportion of part-timers, while Alberta, and to a small extent, Newfoundland, experienced a drop in the part-time percentages. All jurisdictions with the exception of PEI and Saskatchewan show growth among those employed as casual. The numbers and proportions of those employed in other than nursing, not employed, or whose employment status is unknown vary considerably over time and between jurisdictions; this is partly due to changing policies about data entry, as well as to the likelihood that the members completing the form will provide detailed information about their employment prospects (or lack thereof) when they are registering but are not yet employed. It is necessary, in most cases, for a RN to be registered before he/she will be considered for employment, so some proportion of the unknown employment group are likely to be new registrants who have not yet found jobs. For Canada as a whole, there appears to have been an increase in the proportions of those whose employment is unknown, and a drop for the employed in other than nursing and the not employed.

**Table 1a**  
**Number of RNs by Province/Territory<sup>1,2</sup> and Employment Status, 1990**

Province/ Territory	Employment Status									
	Employed in Nursing					Employed in Other than Nursing				
	Regular Basis			Casual	Total	Total employed in Nursing			Not Employed	Total
	FT	PT	Unknown	Basis		Unknown			Unknown	
Newfoundland	3443	818	1	552	4814		4814	0	362	5179
PEI	576	26		591	1193		1193	6	36	1235
Nova Scotia	5488	2006		1375	8869		8869	43	343	9270
New Brunswick	4117	1707		1013	6837		6837	45	233	7775
Quebec				0	57501		57501	0	0	58879
Ontario	47283	27066		8005	82354		82354	4840	9155	101925
Manitoba	5151	3740		865	9756		9756	438	103	10399
Saskatchewan	3857	2334	311	1824	8326		8326	40	236	8680
Alberta	10199	5598		3347	19144		19144	270	1100	23588
BC	12742	4823	1346	5783	24694		24694	587	1664	28722
NWT	378	28	6	64	476		476	6	10	492
Total	93234	48146	1664	23419	166463	57501	223964	6275	13242	256144

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> Employment data were not available in 1990 from Quebec.

**Table 1b**  
**Percent of RNs Employed In-Province/Territory in Nursing**  
**by Province/Territory<sup>1,2</sup> and Employment Status, 1990**

Province/ Territory	Employment Status				
	Employed in Nursing (%)				
	Regular Basis			Casual	Total
	FT	PT	Unknown	Basis	
Newfoundland	71.52	16.99	0.02	11.47	100.00
PEI	48.28	2.18	0.00	49.54	100.00
Nova Scotia	61.88	22.62	0.00	15.50	100.00
New Brunswick	60.22	24.97	0.00	14.82	100.00
Ontario	57.41	32.87	0.00	9.72	100.00
Manitoba	52.80	38.34	0.00	8.87	100.00
Saskatchewan	46.32	28.03	3.74	21.91	100.00
Alberta	53.28	29.24	0.00	17.48	100.00
BC	51.60	19.53	5.45	23.42	100.00
NWT	79.41	5.88	1.26	13.45	100.00
Total	56.01	28.92	1.00	14.07	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec as employment data in 1990 were not available.

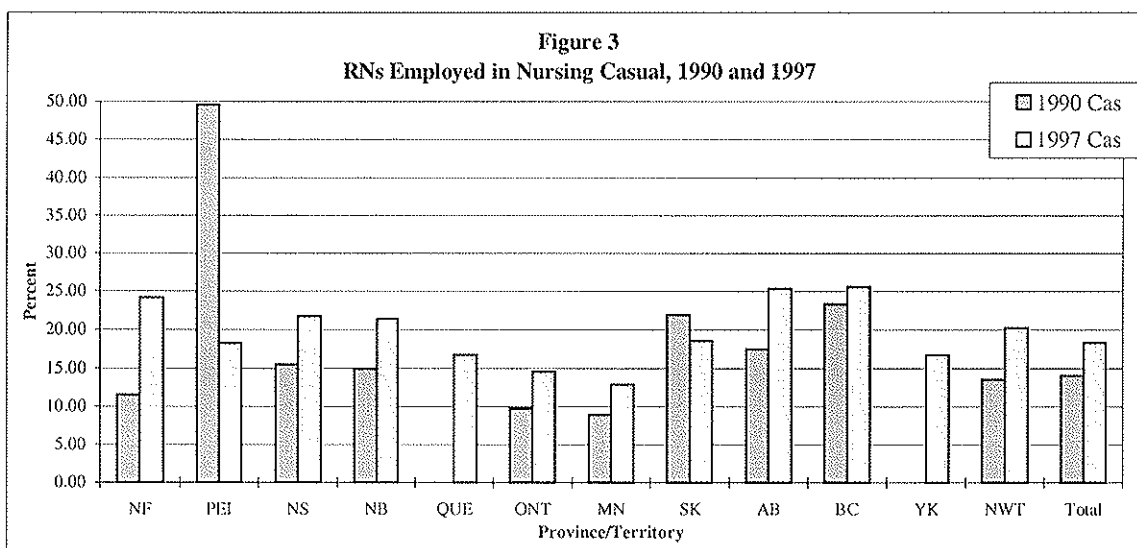
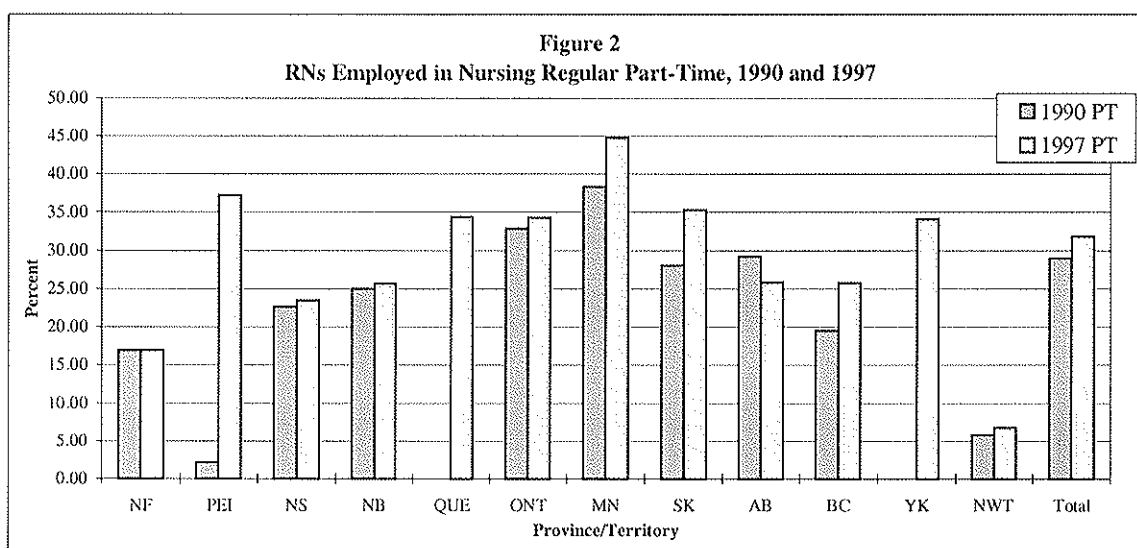
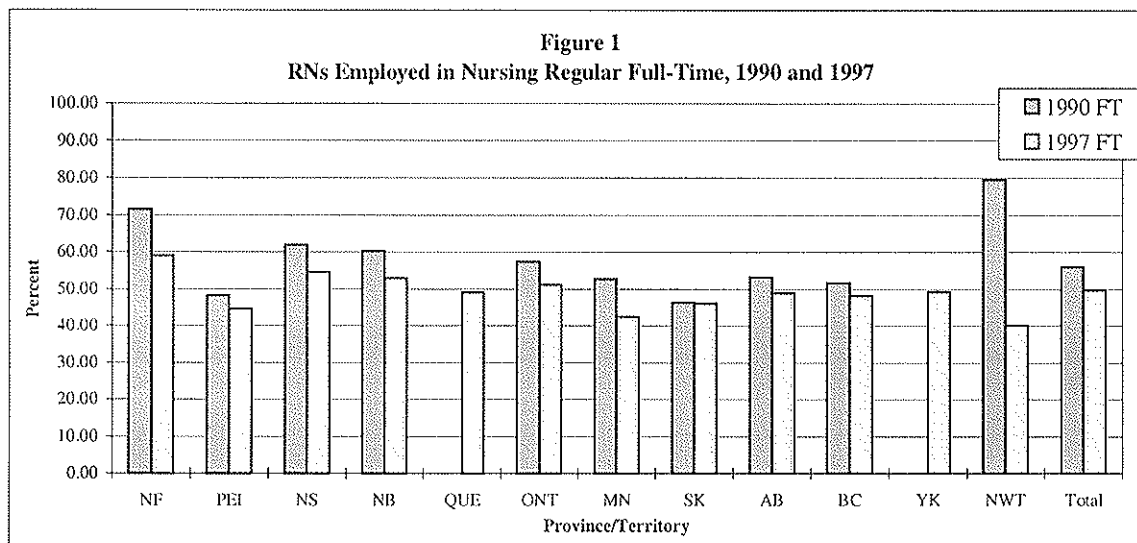


**Table 2a**  
**Number of RNs by Province/Territory and Employment Status, 1997**

Employment Status											
Province/ Territory	Employed in Nursing						Employed in Other than Nursing	Not Employed	Unknown	Total	
	Regular Basis			Casual	Unknown/	Total employed					
	FT	PT	Unknown	Basis	Total	Non-resident	in Nursing				
Newfoundland	3076	883		1261	5220	0	5220	27	210	0	5457
PEI	573	478		234	1285	0	1285	16	47	23	1371
Nova Scotia	4710	2022		1870	8602	110	8712	55	334	0	9101
New Brunswick	3928	1903		1589	7420	354	7774	124	455	66	8419
Quebec	29023	20336		9871	59230	361	59591	0	16	7374	66981
Ontario	40016	26789		11362	78167	6701	84868	5542	5957	9293	105660
Manitoba	4480	4719		1355	10554	110	10664	158	150	407	11379
Saskatchewan	3907	2989		1570	8466	79	8545	105	163	108	8921
Alberta	10471	5543		5452	21466	924	22390	482	1463	660	24995
BC	13840	7388	108	7366	28702	1487	30189	26	68	3613	33896
Yukon	124	86		42	252	50	302	8	16	6	332
NWT	190	32	156	96	474	159	633	21	49	29	732
Total	114338	73168	264	42068	229838	10335	240173	6564	8928	21579	277244

**Table 2b**  
**Percent of RNs Employed In-Province/Territory in Nursing**  
**by Province/Territory and Employment Status, 1997**

Province/ Territory	Employment Status				
	Employed in Nursing (%)				
	Regular Basis			Casual	Total
	FT	PT	Unknown	Basis	
Newfoundland	58.93	16.92	0.00	24.16	100.00
PEI	44.59	37.20	0.00	18.21	100.00
Nova Scotia	54.75	23.51	0.00	21.74	100.00
New Brunswick	52.94	25.65	0.00	21.42	100.00
Quebec	49.00	34.33	0.00	16.67	100.00
Ontario	51.19	34.27	0.00	14.54	100.00
Manitoba	42.45	44.71	0.00	12.84	100.00
Saskatchewan	46.15	35.31	0.00	18.54	100.00
Alberta	48.78	25.82	0.00	25.40	100.00
BC	48.22	25.74	0.38	25.66	100.00
Yukon	49.21	34.13	0.00	16.67	100.00
NWT	40.08	6.75	32.91	20.25	100.00
Total	49.75	31.83	0.11	18.30	100.00



Tables 3 and 4 and Figures 4, 5, and 6 illustrate the sex and age breakdown for each jurisdiction and total Canada, 1990 and 1997. Males remain an insignificant proportion of RNs, though their percentage has increased from 3.30% in 1990 to 4.24% in 1997. When the information about male RNs is considered as a total population per jurisdiction, it is apparent that B.C. and Alberta have gained slightly in the interval, while most of the remaining provinces/territories have remained relatively stable, and Quebec has lost proportionately. Gains and losses among the male population are more dramatic, but as numbers are small, only changes in the total for Canada can be considered reliable.

**Table 3**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Sex, Province/Territory<sup>1</sup> and Age Group, 1990**

**Female**

Province/ Territory	Age Group						Unknown	Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+		
Newfoundland	325	1939	1445	817	168	9	18	4721
PEI	76	336	416	250	101	8	2	1189
Nova Scotia	427	3042	2803	1732	659	44	24	8731
New Brunswick	330	2285	2305	1218	511	44	9	6702
Quebec	2845	15435	20024	10765	3832	486	1	53388
Ontario	2176	21995	28665	19283	7847	730	53	80749
Manitoba	394	2944	3450	1923	729	45	4	9489
Saskatchewan	334	2502	2799	1674	789	62	75	8235
Alberta	856	5821	6767	3917	1334	93	71	18859
BC	644	6038	8560	6198	2436	134	34	24044
NWT	13	188	140	68	32	3	9	453
Total	8420	62525	77374	47845	18438	1658	300	216560
Total %	3.89	28.87	35.73	22.09	8.51	0.77	0.14	100.00

**Male**

Province/ Territory	Age Group						Unknown	Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+		
Newfoundland	1	38	49	2	1	2		93
PEI	1		3					4
Nova Scotia	10	59	44	17	7	1		138
New Brunswick	15	73	33	10	4			135
Quebec	238	1690	1592	531	57	5		4113
Ontario	56	559	634	265	81	10		1605
Manitoba	8	94	105	48	11	1		267
Saskatchewan	4	39	35	9	4			91
Alberta	7	85	135	43	14	1		285
BC	15	185	279	138	33			650
NWT		12	6	3	1		1	23
Total	355	2834	2915	1066	213	20	1	7404
Total %	4.79	38.28	39.37	14.40	2.88	0.27	0.01	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

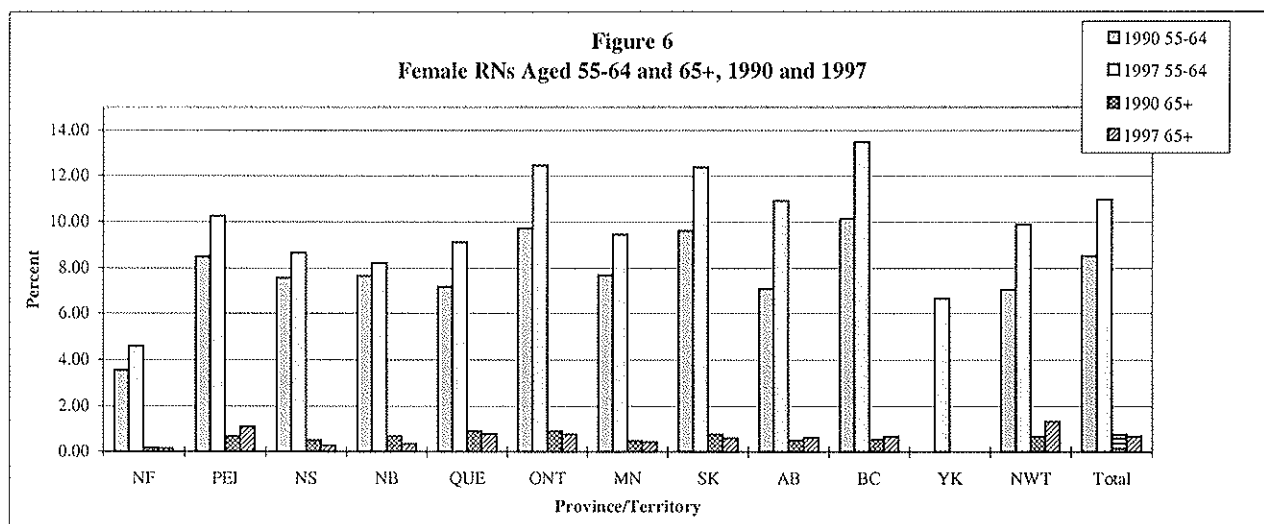
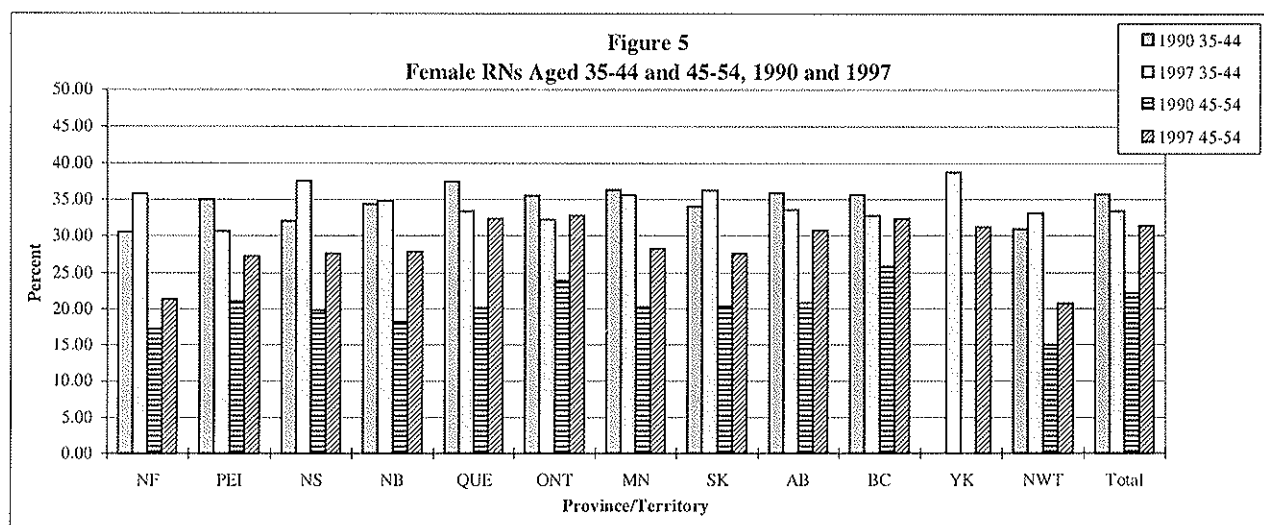
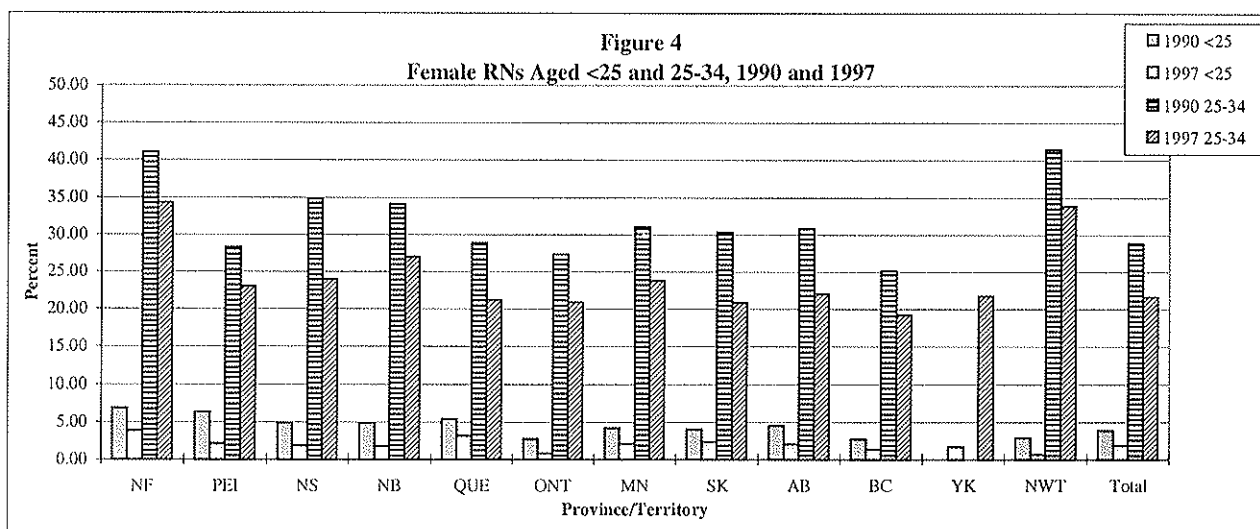
Concentrating on the female RN population and comparing between 1990 and 1997, it seems that for Canada as a whole, the proportion of RNs under 25 years has dropped by about one-half, from 3.89% to 1.89%. This type of decline is seen in all jurisdictions for which there are two years of data, although the percent change is smaller for B.C. (-38.99%), Saskatchewan (-41.92%), Quebec (-39.1%), and Newfoundland (-40.61%) than for Ontario (-68.99%) or PEI (-64.47%). The proportion of 25-34 year olds also decreased to an appreciable extent, from 28.87% in 1990 to 21.64% in 1997, while the proportion of 35-44 year olds remained about the same (35.73% in 1990; 33.42% in 1997). Meanwhile, the proportion of 45-54 year olds rose from 22.09% to 31.35%, while the 55-64 year olds increased by a small amount, accounting for 10.97% of the RNs in 1997, as opposed to 8.51% in 1990.

**Table 4**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Sex, Province/Territory and Age Group, 1997**

<b>Female</b>								
<b>Province/ Territory</b>	<b>Age Group</b>						<b>Unknown</b>	<b>Total</b>
	<b>&lt; 25</b>	<b>25 - 34</b>	<b>35 - 44</b>	<b>45 - 54</b>	<b>55 - 64</b>	<b>65+</b>		
Newfoundland	193	1733	1810	1079	233	7		5055
PEI	27	292	389	345	130	14	70	1267
Nova Scotia	160	2019	3156	2323	729	24		8411
New Brunswick	128	1941	2509	2006	591	24		7199
Quebec	1731	11514	18153	17601	4947	430		54376
Ontario	675	15828	24548	24918	9455	587	11	76022
Manitoba	218	2415	3619	2868	957	44	18	10139
Saskatchewan	194	1727	3012	2288	1027	49		8297
Alberta	425	4638	7044	6451	2291	131	3	20983
BC	393	5320	9066	8957	3725	193		27654
Yukon	4	52	93	75	16	0		240
NWT	3	151	148	92	44	6	2	446
<b>Total</b>	<b>4151</b>	<b>47630</b>	<b>73547</b>	<b>69003</b>	<b>24145</b>	<b>1509</b>	<b>104</b>	<b>220089</b>
<b>Total %</b>	<b>1.89</b>	<b>21.64</b>	<b>33.42</b>	<b>31.35</b>	<b>10.97</b>	<b>0.69</b>	<b>0.05</b>	<b>100.00</b>

<b>Male</b>								
<b>Province/ Territory</b>	<b>Age Group</b>						<b>Unknown</b>	<b>Total</b>
	<b>&lt; 25</b>	<b>25 - 34</b>	<b>35 - 44</b>	<b>45 - 54</b>	<b>55 - 64</b>	<b>65+</b>		
Newfoundland	11	77	52	24	1			165
PEI	2	7	4	5	0			18
Nova Scotia	4	65	79	35	8			191
New Brunswick	1	111	77	26	6			221
Quebec	126	1421	1832	1326	143	6		4854
Ontario	29	544	895	553	120	4		2145
Manitoba	10	142	158	80	19	3	3	415
Saskatchewan	10	75	50	31	3			169
Alberta	11	162	151	129	25	4	1	483
BC	10	234	399	319	84	2		1048
Yukon	0	3	6	3	0			12
NWT	0	6	13	5	4			28
<b>Total</b>	<b>214</b>	<b>2847</b>	<b>3716</b>	<b>2536</b>	<b>413</b>	<b>19</b>	<b>4</b>	<b>9749</b>
<b>Total %</b>	<b>2.20</b>	<b>29.20</b>	<b>38.12</b>	<b>26.01</b>	<b>4.24</b>	<b>0.19</b>	<b>0.04</b>	<b>100.00</b>



It is also possible to compare across jurisdictions by age-group as well as between years, so as to examine the relative share of each province/territory across the ages (column percentages - not shown in the tables). Among the total female RNs aged under 25, Newfoundland accounted for 3.86% in 1990 and 4.65% in 1997, Quebec for 33.79% in 1990 and 41.70% in 1997, and B.C. for 7.65% in 1990 and 9.47% in 1997, while Ontario had 25.84% of the RNs under 25 years in 1990 but only 16.26% in 1997. While most jurisdictions appear to have had about the same relative proportions of 25-34 year olds in 1990 as in 1997, B.C. also gained with this age group, increasing its share from 9.66% of the female total of that age group in 1990 to 11.17% in 1997. Among the 35-44 year olds, Quebec and Ontario lost proportionately between 1990 and 1997 (Quebec: 25.88% vs 24.68%; Ontario: 37.05% vs 33.38), while the other jurisdictions increased their share. For the 45-54 age group, most jurisdictions lost some degree of proportionate share; increases were reported in Quebec, Manitoba and Alberta. Altogether, it would appear that different provinces/territories show different distributions of age groups - some are therefore 'younger' than others, while others are 'older'; in addition, there appear to be different rates of 'ageing'.

## 2. All RNs Employed in Nursing, 1990 and 1997

With Tables 5a, 5b, 6a and 6b and Figures 7, 8 and 9, the study group becomes those RNs employed in nursing in each of the two years. These tables and figures illustrate the distribution of RNs among various places of employment. Between 1990 and 1997, the number of categories for which information is available greatly increased, so that it is possible for the 1997 data to distinguish among fourteen possibilities where only six exist for 1990. In order to make the detailed information more comparable, we have created summary columns for the 1997 data intended to replicate the 1990 categories, and have grouped the 1997 categories accordingly. Therefore, General Hospital and Rehab/Convalescent Centre were combined for Total Hospital (rehabilitation centres usually being facilities with in-patient populations), Community Health Agency, Mental Health Centre, and Home Care were combined for Total Community (as mental health centres are associated with community mental health initiatives, and home care is community-based care), and Business/Industry, Private Nursing Agency, Self-employed, Nursing Station, Association/Government, and Other were combined for Total Other.

**Table 5a**  
**Number of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Place of Employment, 1990**

Province/ Territory	Place of Employment							Total
	Hospital	Nursing Home/ Home for the Aged	Community Health	Physician's Office/ Family Practice Unit	Educational Institution	Other	Unknown	
Newfoundland	3498	574	380	26	139	189	8	4814
PEI	764	189	85	34	38	73	10	1193
Nova Scotia	6939	785	479	187	223	242	14	8869
New Brunswick	5161	685	402	187	196	202	4	6837
Ontario	57337	5451	7965	3306	2139	5729	427	82354
Manitoba	6992	947	830	186	257	519	25	9756
Saskatchewan	5898	927	647	161	88	330	275	8326
Alberta	14678	644	1900	608	556	618	140	19144
BC	18575	1573	2207	541	620	958	220	24694
NWT	245	2	155	4	6	63	1	476
Total	120087	11777	15050	5240	4262	8923	1124	166463

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'place of employment' in 1990 were not available.

**Table 5b**  
**Percent of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Place of Employment, 1990**

Province/ Territory	Place of Employment (%)							Total
	Hospital	Nursing Home/ Home for the Aged	Community Health	Physician's Office/ Family Practice Unit	Educational Institution	Other	Unknown	
Newfoundland	72.66	11.92	7.89	0.54	2.89	3.93	0.17	100.00
PEI	64.04	15.84	7.12	2.85	3.19	6.12	0.84	100.00
Nova Scotia	78.24	8.85	5.40	2.11	2.51	2.73	0.16	100.00
New Brunswick	75.49	10.02	5.88	2.74	2.87	2.95	0.06	100.00
Ontario	69.62	6.62	9.67	4.01	2.60	6.96	0.52	100.00
Manitoba	71.67	9.71	8.51	1.91	2.63	5.32	0.26	100.00
Saskatchewan	70.84	11.13	7.77	1.93	1.06	3.96	3.30	100.00
Alberta	76.67	3.36	9.92	3.18	2.90	3.23	0.73	100.00
BC	75.22	6.37	8.94	2.19	2.51	3.88	0.89	100.00
NWT	51.47	0.42	32.56	0.84	1.26	13.24	0.21	100.00
Total	72.14	7.07	9.04	3.15	2.56	5.36	0.68	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'place of employment' in 1990 were not available.

For Canada as a whole, the proportion of RNs employed in a Hospital (Rehab/convalescent Centre is included for 1997) has dropped from 72.14% in 1990 to 61.21% in 1997. Newfoundland, Nova Scotia, and New Brunswick show the highest rates of hospital employment across time and the territories the lowest. By 1997, Ontario and Quebec have almost identical proportions of hospital-employed RNs, while B.C. and Alberta are on a par with Manitoba, and PEI and Saskatchewan are lower. Overall, there has been appreciable growth in the proportion of RNs employed in nursing homes, with particular increases seen in Nova Scotia, Manitoba, Saskatchewan, B.C. and the Northwest Territories, a near doubling of the proportion in that sector in Ontario and a virtual tripling for Alberta.

Community health employment has undergone a proportionate rise as well that is more uniform across the jurisdictions but which shows similar large increases in proportionate share for PEI, Nova Scotia, Ontario, Saskatchewan, and B.C. Together, these two areas (nursing homes/LTC and total community) accounted for over 25% of RN employment in 1997. However, it should be noted that the actual numbers employed in the Community Health and Nursing Home sectors are not large, so the size of the proportional changes appear magnified by the smaller numbers. It might also be useful to reflect on the fact that Nursing Home employment is institutional/facility-based work, not 'community-based' in the sense intended by the phrase "the acute-to-community shift." The other two sectors specified in 1990 and recognizable in 1997 - Physician's Office/Family Practice Unit and Educational Institution have lost a little ground, and account for about 6% of the overall total in 1990 and 5% in 1997. The Other category has grown, assuming the aggregation of categories given in the 1997 table is similar to the places thought to comprise Other in 1990.

**Table 6a**  
**Number of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Place of Employment, 1997**

Province/ Territory	Place of Employment								Physician's Office/ Family Practice Unit
	General Hospital <sup>1</sup>	Rehab/ Convalescent Centre	Total Hospital <sup>2</sup>	Nursing Home	Community Health Agency	Mental Health Centre	Home Care	Total Community <sup>3</sup>	
Newfoundland	3652	7	3659	645	406	2	74	482	30
PEI	738	7	745	199	94	54	42	190	34
Nova Scotia	5747	178	5925	982	453	196	312	961	130
New Brunswick	5247	76	5323	754	243	251	86	580	183
Quebec	34768	697	35465	9361	5932	2661	172	8765	643
Ontario	45752	776	46528	8689	3497	120	6502	10119	3039
Manitoba	6466	275	6741	1325	564	44	252	860	163
Saskatchewan	4631	140	4771	1253	784	59	541	1384	182
Alberta	12634	271	12905	2229	1382	221	1189	2792	865
BC	18049	237	18286	2390	2373	300	624	3297	575
Yukon	106	0	106	25	24	2	7	33	11
NWT	222	0	222	13	0	2	14	16	4
Total	138012	2664	140676	27865	15752	3912	9815	29479	5859

... continued below

Province/ Territory	Educational Institution	Business/ Industry <sup>4</sup>	Private Nursing Agency <sup>5</sup>	Self- employed	Nursing Station <sup>6</sup>	Association/ Government	Other	Total Other	Unknown	Total
Newfoundland	121	29	25	15	57	23	120	269	14	5220
PEI	23	13	2	7	0	43	11	76	18	1285
Nova Scotia	163	116	85	52	7	118	63	441	0	8602
New Brunswick	146	43	69	41	0	140	139	432	2	7420
Quebec	1504	1108	655	200	30	758	284	3035	457	59230
Ontario	1680	1295	690	663	163	1000	3995	7806	306	78167
Manitoba	213	72	270	70	178	368	164	1122	130	10554
Saskatchewan	185	82	61	46	95	193	99	576	115	8466
Alberta	565	368	102	236	90	257	994	2047	63	21466
BC	702	164	142	306	96	555	681	1944	1508	28702
Yukon	6	3	2	3	44	12	6	70	1	252
NWT	6	6	1	2	170	14	9	202	11	474
Total	5314	3299	2104	1641	930	3481	6565	18020	2625	229838

<sup>1</sup> Maternity, Paediatrics, Psychiatry

<sup>2</sup> Total of institutional sites

<sup>3</sup> Total of non-institutional sites

<sup>4</sup> Occupational Health

<sup>5</sup> Private Duty Nursing

<sup>6</sup> Outpost, Nursing Clinic

<sup>7</sup> Six Preceding Columns



**Table 6b**  
**Percent of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Place of Employment, 1997**

Province/ Territory	Place of Employment (%)								Physician's Office/ Family Practice Unit
	General Hospital <sup>1</sup>	Rehab/ Convalescent Centre	Total Hospital <sup>2</sup>	Nursing Home	Community Health Agency	Mental Health Centre	Home Care	Total Community <sup>3</sup>	
Newfoundland	69.96	0.13	70.10	12.36	7.78	0.04	1.42	9.23	0.57
PEI	57.43	0.54	57.98	15.49	7.32	4.20	3.27	14.79	2.65
Nova Scotia	66.81	2.07	68.88	11.42	5.27	2.28	3.63	11.17	1.51
New Brunswick	70.71	1.02	71.74	10.16	3.27	3.38	1.16	7.82	2.47
Quebec	58.70	1.18	59.88	15.80	10.02	4.49	0.29	14.80	1.09
Ontario	58.53	0.99	59.52	11.12	4.47	0.15	8.32	12.95	3.89
Manitoba	61.27	2.61	63.87	12.55	5.34	0.42	2.39	8.15	1.54
Saskatchewan	54.70	1.65	56.35	14.80	9.26	0.70	6.39	16.35	2.15
Alberta	58.86	1.26	60.12	10.38	6.44	1.03	5.54	13.01	4.03
BC	62.88	0.83	63.71	8.33	8.27	1.05	2.17	11.49	2.00
Yukon	42.06	0.00	42.06	9.92	9.52	0.79	2.78	13.10	4.37
NWT	46.84	0.00	46.84	2.74	0.00	0.42	2.95	3.38	0.84
Total	60.05	1.16	61.21	12.12	6.85	1.70	4.27	12.83	2.55

... continued below

Province/ Territory	Educational Institution	Business/ Industry <sup>4</sup>	Private Nursing Agency <sup>5</sup>	Self- employed	Nursing Station <sup>6</sup>	Association/ Government	Other	Total Other	Unknown	Total
Newfoundland	2.32	0.56	0.48	0.29	1.09	0.44	2.30	5.15	0.27	100.00
PEI	1.79	1.01	0.16	0.54	0.00	3.35	0.86	5.91	1.40	100.00
Nova Scotia	1.89	1.35	0.99	0.60	0.08	1.37	0.73	5.13	0.00	100.00
New Brunswick	1.97	0.58	0.93	0.55	0.00	1.89	1.87	5.82	0.03	100.00
Quebec	2.54	1.87	1.11	0.34	0.05	1.28	0.48	5.12	0.77	100.00
Ontario	2.15	1.66	0.88	0.85	0.21	1.28	5.11	9.99	0.39	100.00
Manitoba	2.02	0.68	2.56	0.66	1.69	3.49	1.55	10.63	1.23	100.00
Saskatchewan	2.19	0.97	0.72	0.54	1.12	2.28	1.17	6.80	1.36	100.00
Alberta	2.63	1.71	0.48	1.10	0.42	1.20	4.63	9.54	0.29	100.00
BC	2.45	0.57	0.49	1.07	0.33	1.93	2.37	6.77	5.25	100.00
Yukon	2.38	1.19	0.79	1.19	17.46	4.76	2.38	27.78	0.40	100.00
NWT	1.27	1.27	0.21	0.42	35.86	2.95	1.90	42.62	2.32	100.00
Total	2.31	1.44	0.92	0.71	0.40	1.51	2.86	7.84	1.14	100.00

<sup>1</sup> Maternity, Paediatrics, Psychiatry

<sup>2</sup> Total of institutional sites

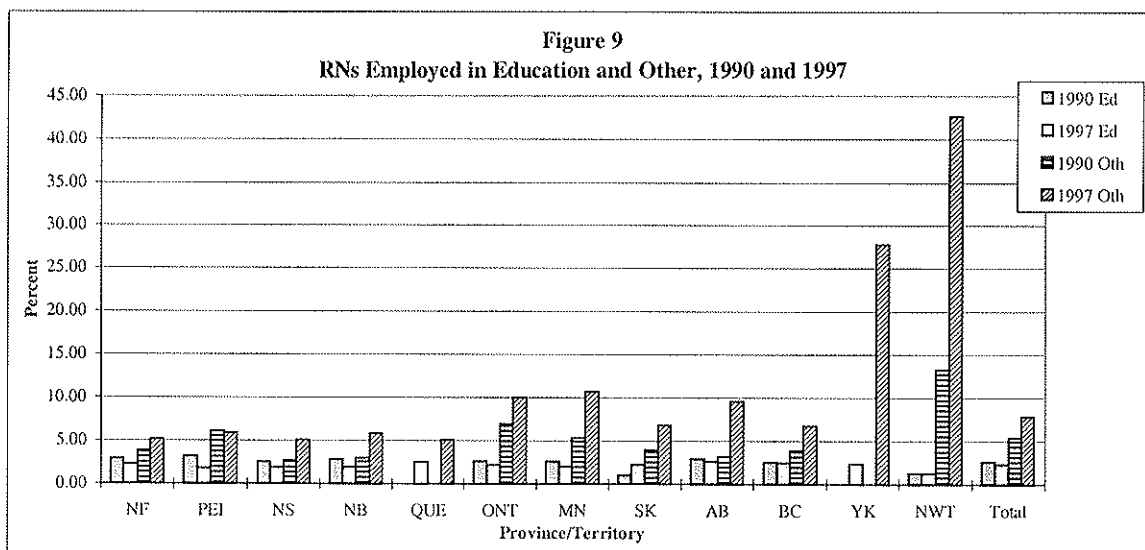
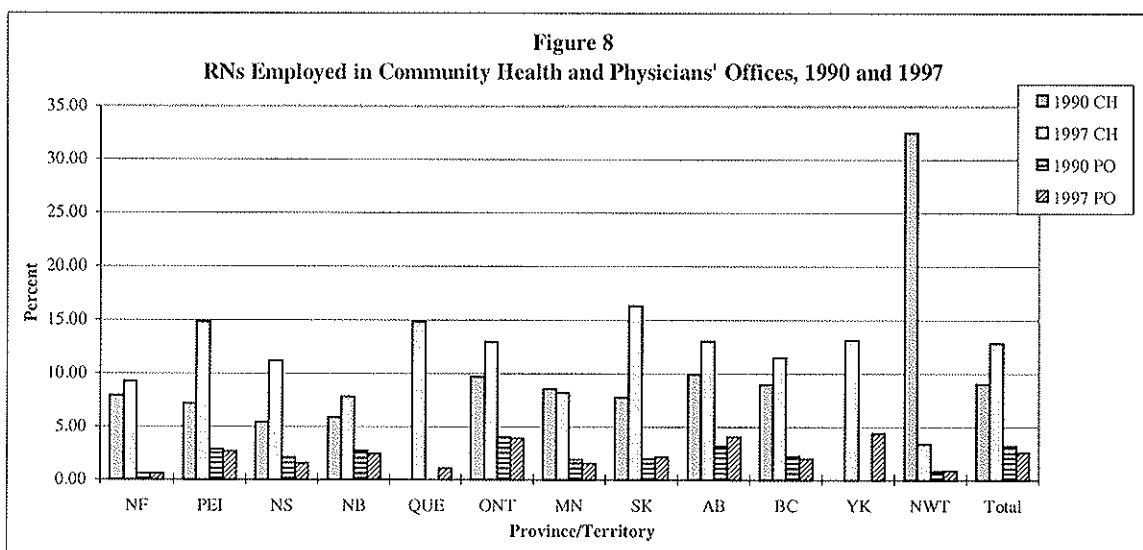
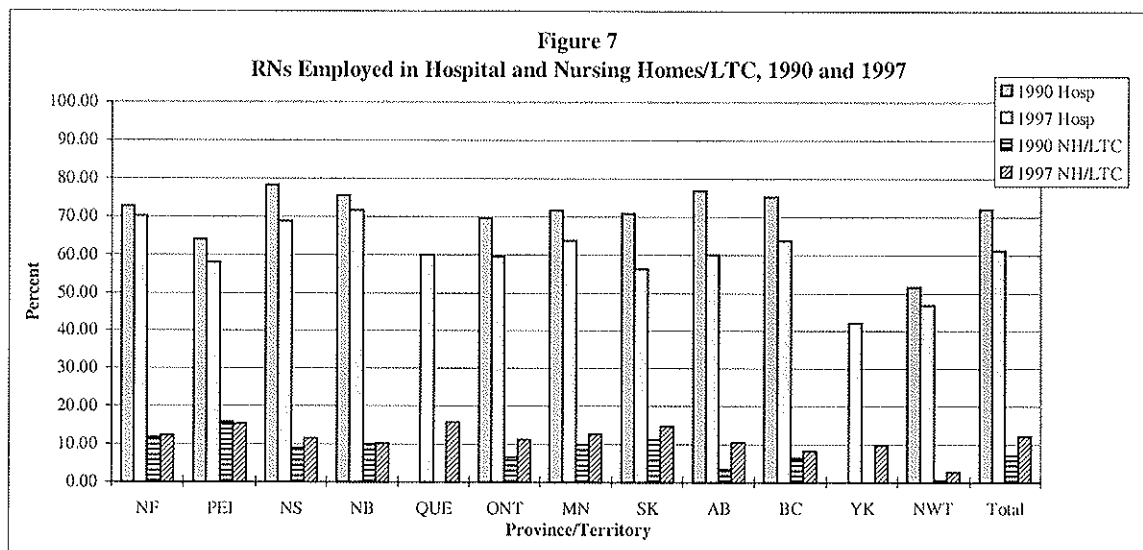
<sup>3</sup> Total of non-institutional sites

<sup>4</sup> Occupational Health

<sup>5</sup> Private Duty Nursing

<sup>6</sup> Outpost, Nursing Clinic

<sup>7</sup> Six Preceding Columns



Area of responsibility, the subject of Tables 7a, 7b, 8a and 8b, and Figures 10 and 11, has seen a blossoming of categories between 1990 and 1997 that was even more pronounced than the enlargement seen for place of employment. While the 1990 data make use of only five categories, the 1997 contain no less than twenty-five categories. Once again, the 1997 categories have been grouped so as to approximate the broader designations used in 1990. All the categories up to and including Other Patient Care were combined into Total Direct Patient Care, while Total Administration includes Nursing Service Administration, Nursing Education Administration, and Other Administration, and Total Education brings together Teaching Education - Students, - Employees, - Patient/Clients, and Other. Total Research incorporates Nursing Research and Other Research.

**Table 7a**  
**Number of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Area of Responsibility, 1990**

Province/ Territory	Area of Responsibility						Total
	Direct Patient Care	Admin- istration	Education	Research	Other	Unknown	
Newfoundland	4464	193	120	8	24	5	4814
PEI	988	49	27	0	113	16	1193
Nova Scotia	8053	491	267	43	0	15	8869
New Brunswick	6148	302	244	4	133	6	6837
Ontario	70638	6212	3216	493	0	1795	82354
Manitoba	8442	757	481	54	0	22	9756
Saskatchewan	7151	362	239	18	67	489	8326
Alberta	16808	1060	805	80	149	242	19144
BC	19986	1344	1169	140	0	2055	24694
NWT	416	41	8	2	0	9	476
Total	143094	10811	6576	842	486	4654	166463

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'area of responsibility' in 1990 were not available.

**Table 7b**  
**Percent of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Area of Responsibility, 1990**

Province/ Territory	Area of Responsibility (%)						Total
	Direct Patient Care	Admin- istration	Education	Research	Other	Unknown	
Newfoundland	92.73	4.01	2.49	0.17	0.50	0.10	100.00
PEI	82.82	4.11	2.26	0.00	9.47	1.34	100.00
Nova Scotia	90.80	5.54	3.01	0.48	0.00	0.17	100.00
New Brunswick	89.92	4.42	3.57	0.06	1.95	0.09	100.00
Ontario	85.77	7.54	3.91	0.60	0.00	2.18	100.00
Manitoba	86.53	7.76	4.93	0.55	0.00	0.23	100.00
Saskatchewan	85.89	4.35	2.87	0.22	0.80	5.87	100.00
Alberta	87.80	5.54	4.20	0.42	0.78	1.26	100.00
BC	80.93	5.44	4.73	0.57	0.00	8.32	100.00
NWT	87.39	8.61	1.68	0.42	0.00	1.89	100.00
Total	85.96	6.49	3.95	0.51	0.29	2.80	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'area of responsibility' in 1990 were not available.

**Table 8a**  
**Number of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Area of Responsibility, 1997**

Province/ Territory	Area of Responsibility										
	Direct Patient Care										
	Medical/ Surgical	Psychiatric/ Mental Health	Paediatric	Maternal/ Newborn	Geriatric/ Long Term Care	Critical Care	Community Health	Ambulatory Care	Home Care	Occup- ational Health	Operating Room
Newfoundland	1089	272	279	280	681	391	384	63	88	35	203
PEI	285	84	37	87	194	60	106	11	28	13	45
Nova Scotia	2182	519	366	548	1093	680	394	186	414	100	493
New Brunswick	1414	404	193	395	1052	977	595	207	0	66	364
Quebec	9302	3101	0	1960	5959	2922	1744	2473	882	383	1244
Ontario	12346	4123	2727	4670	4800	6223	4442	1244	4260	1497	2982
Manitoba	1979	308	292	712	1461	717	784	290	378	96	484
Saskatchewan	1622	168	260	399	1315	649	553	98	489	92	322
Alberta	4484	861	899	1430	2363	1513	966	326	1281	351	1039
BC	6091	1562	836	1879	4243	2086	1790	386	946	182	1741
Yukon	25	4	11	13	22	0	45	4	5	3	9
NWT	37	15	16	21	22	9	125	7	17	6	14
Total	40856	11421	5916	12394	23205	16227	11928	5295	8788	2824	8940

... continued below

Province/ Territory	Direct Patient Care continued										
	Several						Administration				
	Emergency Room	Clinical Areas	Oncology	Rehab- ilitation	Other	Total	Nursing Service	Nursing Education	Other	Total	
Newfoundland	235	248	4	1	340	4593	241	15	65	321	
PEI	58	108	0	0	43	1159	69	5	7	81	
Nova Scotia	388	101	134	147	162	7907	228	28	69	325	
New Brunswick	431	122	0	154	482	6856	210	10	121	341	
Quebec	1746	7954	293	521	1409	41893	7637	0	0	7637	
Ontario	3631	1642	1232	1311	6957	64087	1919	266	1039	3224	
Manitoba	473	827	117	175	372	9465	391	51	132	574	
Saskatchewan	313	801	66	100	185	7432	366	35	87	488	
Alberta	934	1290	0	0	1769	19506	521	61	299	881	
BC	1240	1153	302	424	1510	26371	565	59	410	1034	
Yukon	19	47	0	2	11	220	10	1	14	25	
NWT	28	66	0	2	23	408	20	6	7	33	
Total	9496	14359	2148	2837	13263	189897	12177	537	2250	14964	

... continued below

Province/ Territory	Teaching - Education									
	Students	Employees	Patients/ Clients	Other	Total	Research			Unknown	Total
						Nursing	Other	Total		
Newfoundland	107	32	10	11	160	0	15	15	131	5220
PEI	18	3	1	0	22	1	2	3	20	1285
Nova Scotia	128	68	60	40	296	20	54	74	0	8602
New Brunswick	122	48	35	0	205	17	1	18	0	7420
Quebec	0	0	0	1315	1315	264	129	393	7992	59230
Ontario	911	364	493	256	2024	159	345	504	8328	78167
Manitoba	66	93	32	43	234	46	38	84	197	10554
Saskatchewan	122	57	44	29	252	8	36	44	250	8466
Alberta	374	178	169	53	774	63	160	223	82	21466
BC	573	202	213	64	1052	35	119	154	91	28702
Yukon	3	1	0	2	6	0	0	0	1	252
NWT	6	1	1	0	8	0	0	0	25	474
Total	2430	1047	1058	1813	6348	613	899	1512	17117	229838

**Table 8b**  
**Percent of RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Area of Responsibility, 1997**

Province/ Territory	Area of Responsibility (%)										
	Direct Patient Care										
	Psychiatric/ Mental Health			Geriatric/ Long Term Care			Critical Care	Community Health	Ambulatory Care	Home Care	Occup- ational Health
Newfoundland	20.86	5.21	5.34	5.36	13.05	7.49	7.36	1.21	1.69	0.67	3.89
PEI	22.18	6.54	2.88	6.77	15.10	4.67	8.25	0.86	2.18	1.01	3.50
Nova Scotia	25.37	6.03	4.25	6.37	12.71	7.91	4.58	2.16	4.81	1.16	5.73
New Brunswick	19.06	5.44	2.60	5.32	14.18	13.17	8.02	2.79	0.00	0.89	4.91
Quebec	15.70	5.24	0.00	3.31	10.06	4.93	2.94	4.18	1.49	0.65	2.10
Ontario	15.79	5.27	3.49	5.97	6.14	7.96	5.68	1.59	5.45	1.92	3.81
Manitoba	18.75	2.92	2.77	6.75	13.84	6.79	7.43	2.75	3.58	0.91	4.59
Saskatchewan	19.16	1.98	3.07	4.71	15.53	7.67	6.53	1.16	5.78	1.09	3.80
Alberta	20.89	4.01	4.19	6.66	11.01	7.05	4.50	1.52	5.97	1.64	4.84
BC	21.22	5.44	2.91	6.55	14.78	7.27	6.24	1.34	3.30	0.63	6.07
Yukon	9.92	1.59	4.37	5.16	8.73	0.00	17.86	1.59	1.98	1.19	3.57
NWT	7.81	3.16	3.38	4.43	4.64	1.90	26.37	1.48	3.59	1.27	2.95
Total	17.78	4.97	2.57	5.39	10.10	7.06	5.19	2.30	3.82	1.23	3.89

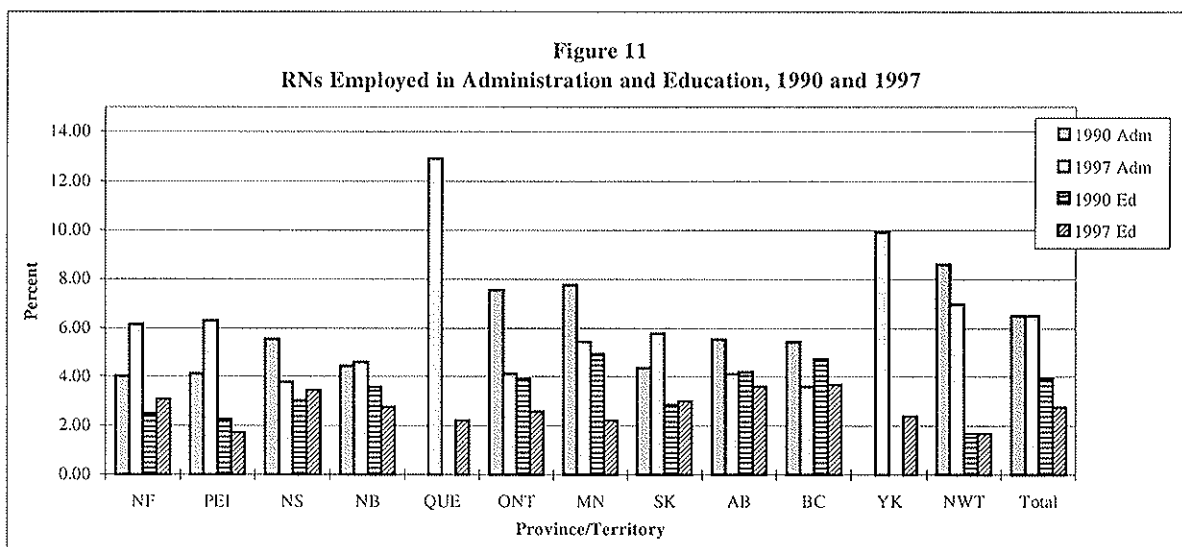
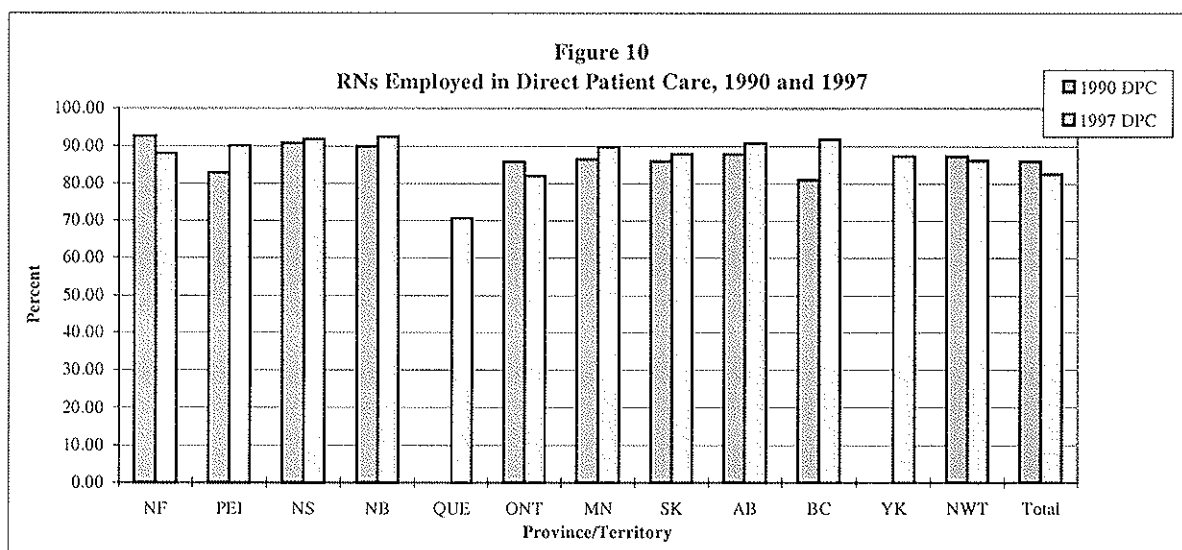
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Province/ Territory	Direct Patient Care continued									
	Several						Administration			
	Emergency Room	Clinical Areas	Oncology	Rehab- ilitation	Other	Total	Nursing Service	Nursing Education	Other	Total
Newfoundland	4.50	4.75	0.08	0.02	6.51	87.99	4.62	0.29	1.25	6.15
PEI	4.51	8.40	0.00	0.00	3.35	90.19	5.37	0.39	0.54	6.30
Nova Scotia	4.51	1.17	1.56	1.71	1.88	91.92	2.65	0.33	0.80	3.78
New Brunswick	5.81	1.64	0.00	2.08	6.50	92.40	2.83	0.13	1.63	4.60
Quebec	2.95	13.43	0.49	0.88	2.38	70.73	12.89	0.00	0.00	12.89
Ontario	4.65	2.10	1.58	1.68	8.90	81.99	2.46	0.34	1.33	4.12
Manitoba	4.48	7.84	1.11	1.66	3.52	89.68	3.70	0.48	1.25	5.44
Saskatchewan	3.70	9.46	0.78	1.18	2.19	87.79	4.32	0.41	1.03	5.76
Alberta	4.35	6.01	0.00	0.00	8.24	90.87	2.43	0.28	1.39	4.10
BC	4.32	4.02	1.05	1.48	5.26	91.88	1.97	0.21	1.43	3.60
Yukon	7.54	18.65	0.00	0.79	4.37	87.30	3.97	0.40	5.56	9.92
NWT	5.91	13.92	0.00	0.42	4.85	86.08	4.22	1.27	1.48	6.96
Total	4.13	6.25	0.93	1.23	5.77	82.62	5.30	0.23	0.98	6.51

... continued below

Province/ Territory	Teaching - Education									
	Patients/					Research				
	Students	Employees	Clients	Other	Total	Nursing	Other	Total	Unknown	Total
Newfoundland	2.05	0.61	0.19	0.21	3.07	0.00	0.29	0.29	2.51	100.00
PEI	1.40	0.23	0.08	0.00	1.71	0.08	0.16	0.23	1.56	100.00
Nova Scotia	1.49	0.79	0.70	0.47	3.44	0.23	0.63	0.86	0.00	100.00
New Brunswick	1.64	0.65	0.47	0.00	2.76	0.23	0.01	0.24	0.00	100.00
Quebec	0.00	0.00	0.00	2.22	2.22	0.45	0.22	0.66	13.49	100.00
Ontario	1.17	0.47	0.63	0.33	2.59	0.20	0.44	0.64	10.65	100.00
Manitoba	0.63	0.88	0.30	0.41	2.22	0.44	0.36	0.80	1.87	100.00
Saskatchewan	1.44	0.67	0.52	0.34	2.98	0.09	0.43	0.52	2.95	100.00
Alberta	1.74	0.83	0.79	0.25	3.61	0.29	0.75	1.04	0.38	100.00
BC	2.00	0.70	0.74	0.22	3.67	0.12	0.41	0.54	0.32	100.00
Yukon	1.19	0.40	0.00	0.79	2.38	0.00	0.00	0.00	0.40	100.00
NWT	1.27	0.21	0.21	0.00	1.69	0.00	0.00	0.00	5.27	100.00
Total	1.06	0.46	0.46	0.79	2.76	0.27	0.39	0.66	7.45	100.00

The all-Canada proportion of RNs who describe themselves as working primarily in Direct Patient Care has diminished somewhat since 1990, but across the jurisdictions, PEI, Nova Scotia, New Brunswick, and all four Western provinces show increased proportions in that sector. B.C. has experienced the largest increase, from an all-Canada low in 1990 of 80.93% to 91.88% in 1997. Quebec reports only 70.73% of its RNs as employed in Direct Patient care in 1997, and Ontario is next lowest at 81.99%. The proportion involved in Administration has remained almost identical (6.5% for both 1990 and 1997), while both the number and proportion employed in Education (teaching) has slightly decreased. There has been a significant rise in the number and proportion whose area of service is unknown, particularly with Ontario. Therefore, Ontario's rather low standing relative to Direct Patient care, which is not compensated by any other broad categories, may be related to the large unknown factor. Quebec shows almost double the proportion employed in Administration in relation to the other provinces and territories and the country as a whole, and a proportion Unknown that is even larger than Ontario's. Within the area of Direct Patient care, Medical/Surgical, Geriatrics, Critical care, Several Clinical Areas, Maternal/Newborn, Community Health, and Psychiatric account for about 57% of the employed RNs overall, though the proportions across provinces and territories are surprisingly variable.



As can be seen in Tables 9 and 10, and Figures 12 to 14, the number of categories for type of position, equivalent in many cases to job or position title, have also expanded between 1990 and 1997, though to a lesser extent than with place of employment or area of responsibility. The expansion has taken place with the Chief Nursing Officer, Director and Assistant/Associate Director category, and among the positions grouped for 1997 as Other: namely, Office and Occupational Health nurse, Researcher, and Consultant. This has the potential effect of expanding the range of possible senior positions as well as the range of administrative roles available; the actual numbers and frequency distributions, however, indicate the opposite trend.

The majority of RNs who described themselves as Staff or Community Health nurses dropped slightly from 75.05% in 1990 to 72.74% in 1997, though there was a dramatic increase in the proportion of RNs from Newfoundland who indicated Staff Nurse/Community Health positions, and lesser increases for the other Atlantic provinces, NWT, and B.C. Ontario, Saskatchewan and Alberta remained about the same. Quebec showed the smallest proportion of Staff/Community Health nurses in 1997, in keeping with the Territories and Yukon, though a high proportion of Unknowns suggests that the number for Quebec may be an underestimate. Directorships and supervisory positions have undergone an overall decline between 1990 and 1997, along with Head Nurses/Unit Managers and Instructor/Professors, while Other has expanded. Ontario, Alberta and B.C. show substantial increases in their proportions of Other, while Newfoundland has dropped. The 1997 proportion of Other is also large for Quebec. PEI, Nova Scotia, and the territories still possess substantial proportions of Supervisor/Co-ordinators, while PEI, Saskatchewan and the Territories continue to indicate proportions of Directors and Assistant/Associate Directors larger than other jurisdictions.

**Table 9**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Type of Position, 1990**

Province/ Territory	Position								Total
	Director, Assistant/ Associate Director	(Assistant) Supervisor/ Coordinator	Clinical Specialist	Head Nurse	General Duty/ Staff Nurse	Instructor/ Professor	Other	Unknown	
Newfoundland	130	361	13	89	3447	188	576	10	4814
PEI	42	144	5	69	808	35	75	15	1193
Nova Scotia	248	693	31	541	6823	214	252	67	8869
New Brunswick	194	291	22	354	5381	197	381	17	6837
Ontario	1968	4788	806	4034	60114	2188	5970	2486	82354
Manitoba	340	318	41	760	7319	336	576	66	9756
Saskatchewan	354	360	20	283	6237	57	506	509	8326
Alberta	418	1006	185	561	15019	593	1086	276	19144
BC	566	608	232	1428	19476	679	1276	429	24694
NWT	18	40	7	55	301	5	32	18	476
Total	4278	8609	1362	8174	124925	4492	10730	3893	166463

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'position' in 1990 were not available.

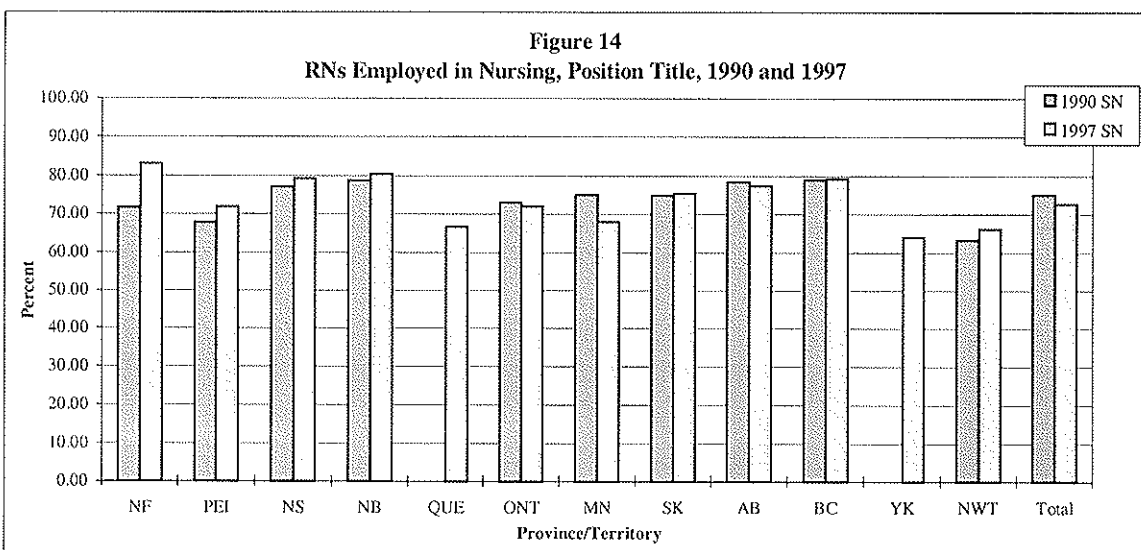
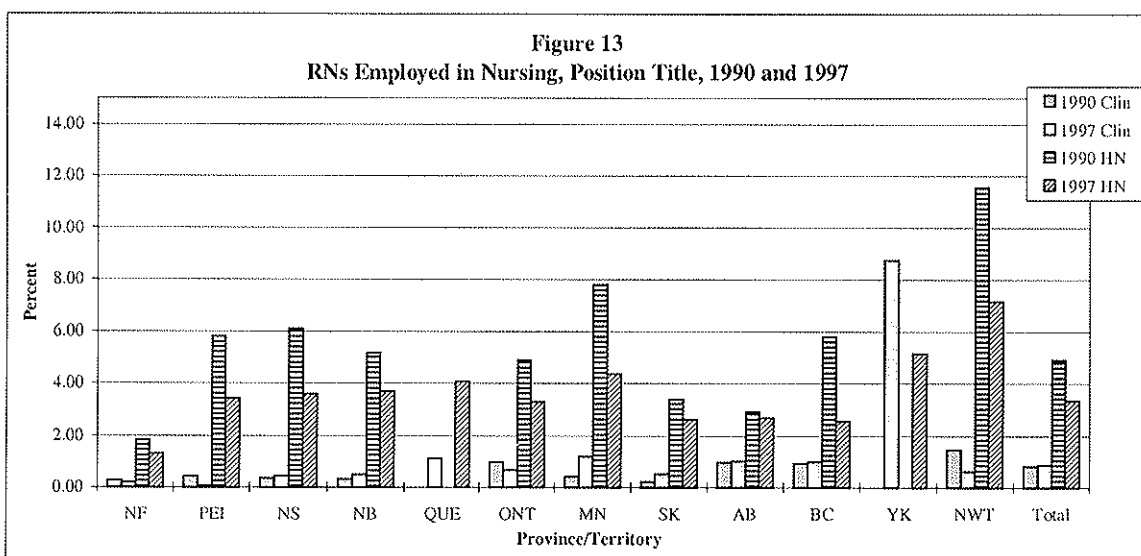
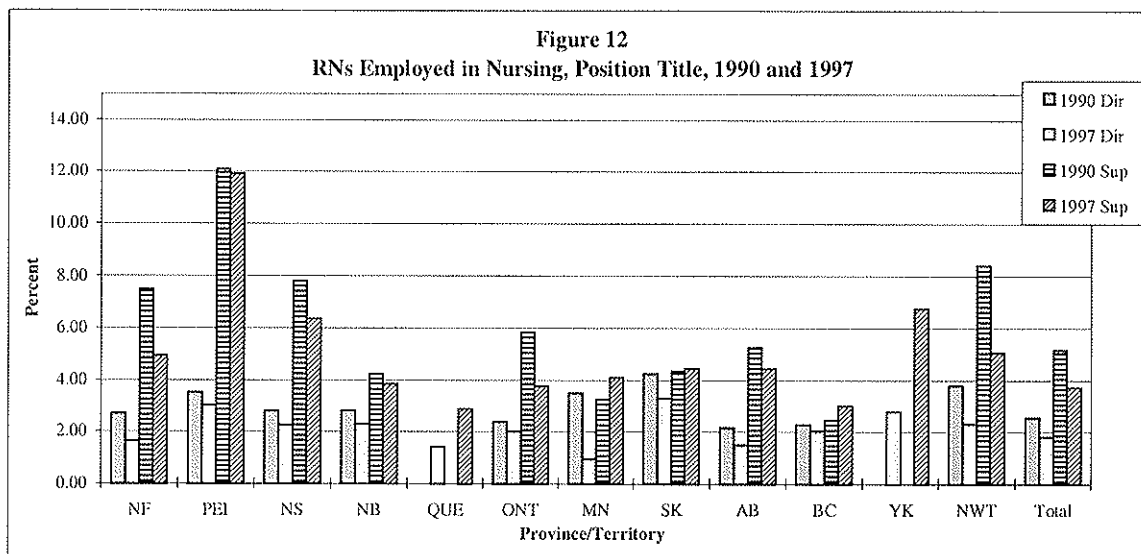
**Table 10**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Type of Position, 1997**

Province/ Territory	Position							
	Administrative			Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Comm Health Nurse	Instructor/ Professor
	Chief Nurse Officer/ Director	Assistant/ Associate Director	Total					
Newfoundland'	56	30	86	258	11	67	4341	148
PEI	35	4	39	153	1	44	924	21
Nova Scotia	129	65	194	546	37	309	6814	177
New Brunswick	143	29	172	285	38	273	5966	149
Quebec	672	169	841	1715	656	2417	39461	805
Ontario	1254	308	1562	2946	526	2566	56290	1422
Manitoba	59	43	102	433	126	461	7175	303
Saskatchewan	238	42	280	375	44	221	6377	212
Alberta	249	74	323	954	216	577	16616	483
BC	465	121	586	866	283	733	22741	734
Yukon	6	1	7	17	22	13	161	7
NWT	11	0	11	24	3	34	313	7
Total	3317	886	4203	8572	1963	7715	167179	4468

... continued below

Province/ Territory	Other						
	Office/ Occupational				Total	Unknown	Total
	Health Nurse	Researcher	Consultant	Other			
Newfoundland'	37	15	20	216	288	21	5220
PEI	40	4	16	23	83	20	1285
Nova Scotia	163	72	52	205	492	33	8602
New Brunswick	0	18	50	459	527	10	7420
Quebec	308	199	1210	4528	6245	7090	59230
Ontario	1870	379	787	5805	8841	4014	78167
Manitoba	119	76	88	353	636	1318	10554
Saskatchewan	181	27	64	197	469	488	8466
Alberta	676	140	190	1063	2069	228	21466
BC	575	94	404	1503	2576	183	28702
Yukon	12	2	10	1	25	0	252
NWT	14	0	11	30	55	27	474
Total	3995	1026	2902	14383	22306	13432	229838





Information about hours worked in the previous calendar years (1989 and 1996) is found in Table 11. Beginning in the 1980's, most jurisdictions moved to a 'minimum hours' estimate as a requirement for maintaining eligibility for practising membership, wherein a total number of hours had to be accumulated over a defined period of time up to the present. At the same time, members were expected to report their total hours worked in each calendar year. In 1990, there were no hours data contributed by PEI, Quebec, Manitoba, and Alberta, and the overall proportion of Unknown hours among those who did contribute was 52.23%, where no jurisdiction reported less than 19% Unknowns. As a result, no comparisons have been made between 1990 and 1997 for this variable. By 1997, the quality of the data had improved, though Quebec data were still unavailable, and Ontario and Nova Scotia reported 19.83% and 22.63% Unknown, respectively.

**Table 11**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1,2</sup> and Hours Worked, 1990 and 1997**

1990		Hours Worked*					
Province/ Territory	< 500	500 - 999	1000 - 1499	1500 - 1999	2000 +	Unknown	Total
Newfoundland	17	179	49	3380	1	1188	4814
PEI	0	0	0	0	0	1193	1193
Nova Scotia	346	837	164	5466	6	2050	8869
New Brunswick	144	874	242	3934	108	1535	6837
Ontario	6165	8633	8899	16718	960	40979	82354
Manitoba	0	0	0	0	0	9756	9756
Saskatchewan	235	717	208	2838	51	4277	8326
Alberta	0	0	0	0	0	19144	19144
BC	2043	3699	10547	1597	71	6737	24694
NWT	32	31	87	220	14	92	476
Total	8982	14970	20196	34153	1211	86951	166463

\* Data provided as 'hours per week' and converted to 'hours per year' on the basis of a 44 work week year.

1997		Hours Worked					
Province/ Territory	< 500	500 - 999	1000 - 1499	1500 - 1999	2000 +	Unknown	Total
Newfoundland	351	910	1888	1525	28	518	5220
PEI	76	212	291	680	0	26	1285
Nova Scotia	499	1148	1425	3430	153	1947	8602
New Brunswick	390	919	1438	4179	15	479	7420
Ontario	6145	9918	14684	29782	2138	15500	78167
Manitoba	872	1763	2821	4606	0	492	10554
Saskatchewan	559	1451	2211	3486	295	464	8466
Alberta	2043	3722	4637	8240	213	2611	21466
BC	2026	4935	6141	12378	316	2906	28702
Yukon	19	42	57	130	3	1	252
NWT	31	70	67	280	9	17	474
Total	13011	25090	35660	68716	3170	24961	170608

<sup>1</sup> No data appear in the 1990 table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in these tables for Quebec, as detailed data on 'hours worked' were not available in 1990 or 1997.

Among those jurisdictions where reporting seems reliable, it appears that the majority of RNs reported having worked between 1500 and 1999 hours in 1996, a range that is inclusive of most definitions of full-time employment. Therefore, about the same proportion of the 1997 RNs worked full-time as worked less than full-time. Newfoundland shows a majority working 1000 to 1499 hours, with a smaller though still significant proportion at 1500 to 1999 hours, which may reflect differences in collective agreement provisions. The Territories show the highest proportion reporting full-time hours, followed by New Brunswick and PEI. It should be noted that overall, the proportion reporting hours in excess of 2000 for 1996 is less than 2%, with the highest proportions reported for Saskatchewan and Ontario. In general, however, the distributions are heavily weighted by the amount of Unknown for Ontario, so comments must remain impressionistic.

Table 12 and Figure 15 illustrate the distribution of types of basic education for RNs in 1990 and 1997. Experience with the B.C. RN database indicates that the classification of baccalaureates may be open to interpretation, as some non-Canadian jurisdictions educate RNs in educational systems where the credential awarded at the end of the training is described as a baccalaureate, but not considered to be the equivalent of the North American Bachelor's in Nursing degree. In the case of these data, we decided to take the designation at face value, so the number of baccalaureates may be slightly inflated overall.

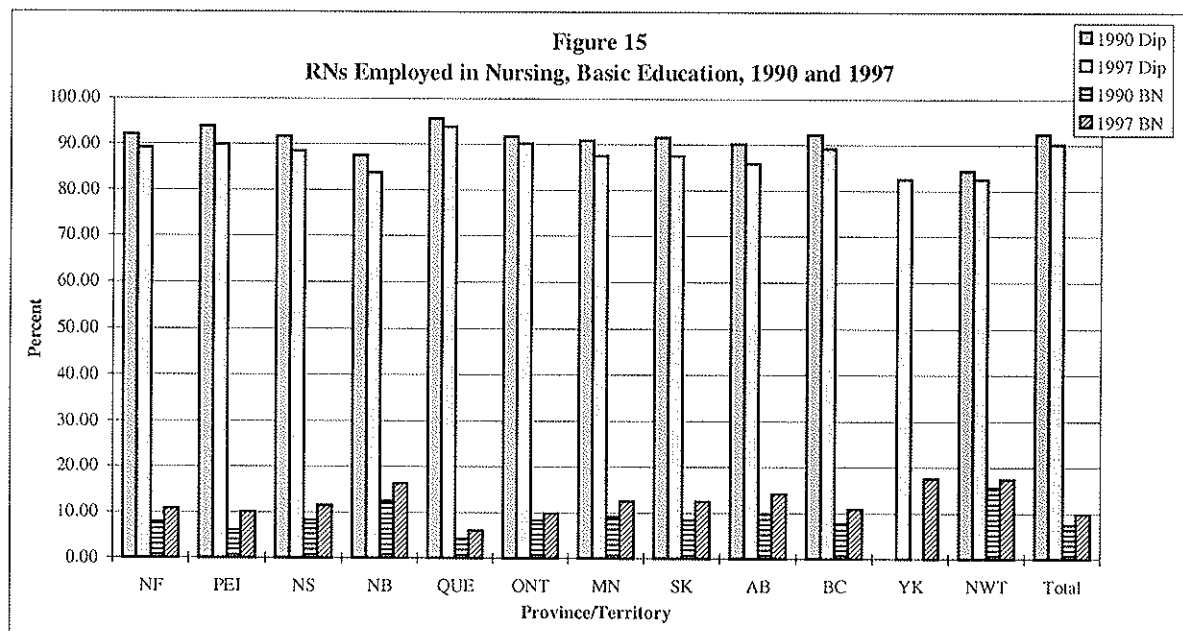
**Table 12**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1</sup> and Basic Education, 1990 and 1997**

Province/ Territory	Basic Education, 1990				Basic Education, 1997			
	Diploma	Bachelor's Degree	Master's Degree	Total	Diploma	Bachelor's Degree	Master's Degree	Total
Newfoundland	4429	383	2	4814	4651	568	1	5220
PEI	1120	73	0	1193	1154	130	1	1285
Nova Scotia	8131	736	2	8869	7611	988	3	8602
New Brunswick	5987	850	0	6837	6215	1205	0	7420
Quebec	54985	2471	45	57501	55559	3612	59	59230
Ontario	75488	6866	0	82354	70502	7665	0	78167
Manitoba	8856	900	0	9756	9241	1311	2	10554
Saskatchewan	7622	704	0	8326	7411	1055	0	8466
Alberta	17276	1867	1	19144	18428	3035	3	21466
BC	22786	1896	12	24694	25593	3100	9	28702
Yukon					208	44	0	252
NWT	401	74	1	476	391	82	1	474
Total	207081	16820	63	223964	206964	22795	79	229838

<sup>1</sup> No data appear in the 1990 table for the Yukon Territory as no nursing association existed in 1990.

The vast majority of RNs employed in nursing in 1990 and 1997 obtained a diploma in their basic education; only the Northwest Territories and New Brunswick had less than 90% of the RNs as graduates of diploma programs in 1990. The smallest proportion of basic baccalaureate graduates in 1990 was in Quebec, followed by PEI and B.C. By 1997, the overall proportion of diploma holders was 90.05%, but only in Quebec and Ontario were the diploma proportions still at or above the national average. In all the other provinces, the proportion of basic baccalaureate graduates ranged between a high of 16.24% for New Brunswick and a low of 10.12% for PEI. The Territories show the highest proportion of basic baccalaureate graduates. However, the absolute numbers of baccalaureate graduates are small relative to the total number of RNs in each province, so that a large percentage increase may occur with relatively small increases in the actual numbers.

A very small number of RNs enters practice with a basic Master's degree; the proportions of those holding such degrees have remained essentially stable between 1990 and 1997.



The subject of Table 13, place of graduation, describes the location in which an RN obtained his/her entry-level or basic education. Overall, the majority of RNs are employed in the province from which they received their basic education, though Alberta and B.C. show much lower proportions of local graduates than the other provinces, and the territories are heavily dependent upon the provinces for their workforce. In general, the number and proportion of employed RNs resident in their province of basic education rose between 1990 and 1997. The changes in place of graduation distributions for PEI is likely the result of changes in data management of place of graduation information, since the number of Unknowns has dropped from 376 out of a total of 1193 RNs in 1990 to 38 of a total of 1285 RNs in 1997. Nova Scotia and Ontario experienced a drop in the number of home province RNs, while most other jurisdictions experienced a drop in numbers of other-Canada RNs (the exceptions being PEI and B.C.). RNs educated outside Canada accounted for 8.55% of the total in 1990 and 7.73% in 1997; they are more apparent in Ontario, Alberta, and B.C., as well as the Territories, relative to the rest of Canada.

**Table 13**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1</sup> and Place of Graduation, 1990 and 1997**

Province/ Territory	Place of Graduation, 1990					Place of Graduation, 1997				
	Home Province	Other Canada	Other Country	Unknown	Total	Home Province	Other Canada	Other Country	Unknown	Total
Newfoundland	4285	286	205	38	4814	4842	237	134	7	5220
PEI	632	175	10	376	1193	898	326	23	38	1285
Nova Scotia	7008	1567	259	35	8869	6816	1568	218	0	8602
New Brunswick	5596	1092	28	121	6837	6301	1024	91	4	7420
Quebec	53315	1575	1850	761	57501	56224	1329	1664	13	59230
Ontario	64232	8064	10054	4	82354	62738	6384	8936	109	78167
Manitoba	7832	1235	687	2	9756	8827	1151	572	4	10554
Saskatchewan	6596	1412	315	3	8326	6901	1274	228	63	8466
Alberta	11224	6058	1827	35	19144	13431	5904	1563	568	21466
BC	12277	8550	3857	10	24694	15115	9313	4274	0	28702
Yukon						0	234	18	0	252
NWT	0	353	52	71	476	7	401	46	20	474
Total	172997	30367	19144	1456	223964	182100	29145	17767	826	229838

<sup>1</sup> No data appear in the 1990 table for the Yukon Territory as no nursing association existed in 1990.

Table 14 and Figure 16 give information about post-basic education among employed RNs. At the outset it is apparent that by far the largest proportion of RNs report having no post-basic education, while a smaller proportion is shown as Unknown. It is very likely that most of the Unknowns are RNs who have no post-basic education, since it is reasonable to assume that most would leave the area of the form blank rather than indicate a negative. That being said, the total proportion with no indicated post-basic education did drop by about 7% between 1990 and 1997, while the proportion of post-basic baccalaureate graduates doubled overall and in Alberta, and tripled in Quebec. The proportion reporting post-basic non-degree education fell overall by a substantial margin, though increases are observable for Ontario, PEI and Nova Scotia. Something appears to have happened to the reporting of non-degree education for Quebec, B.C. and Alberta; decreases of such magnitude in the proportion indicating such education are difficult to explain otherwise. The proportion obtaining Master's degrees in nursing remained very small, but did increase over time, especially in PEI, Nova Scotia, Alberta, B.C., and the Northwest Territories. The number with doctoral degrees in nursing has actually fallen, while the proportion with post-basic education defined as 'other than in nursing' expanded.

**Table 14**  
**RNs Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1</sup> and Post-basic Education, 1990 and 1997**

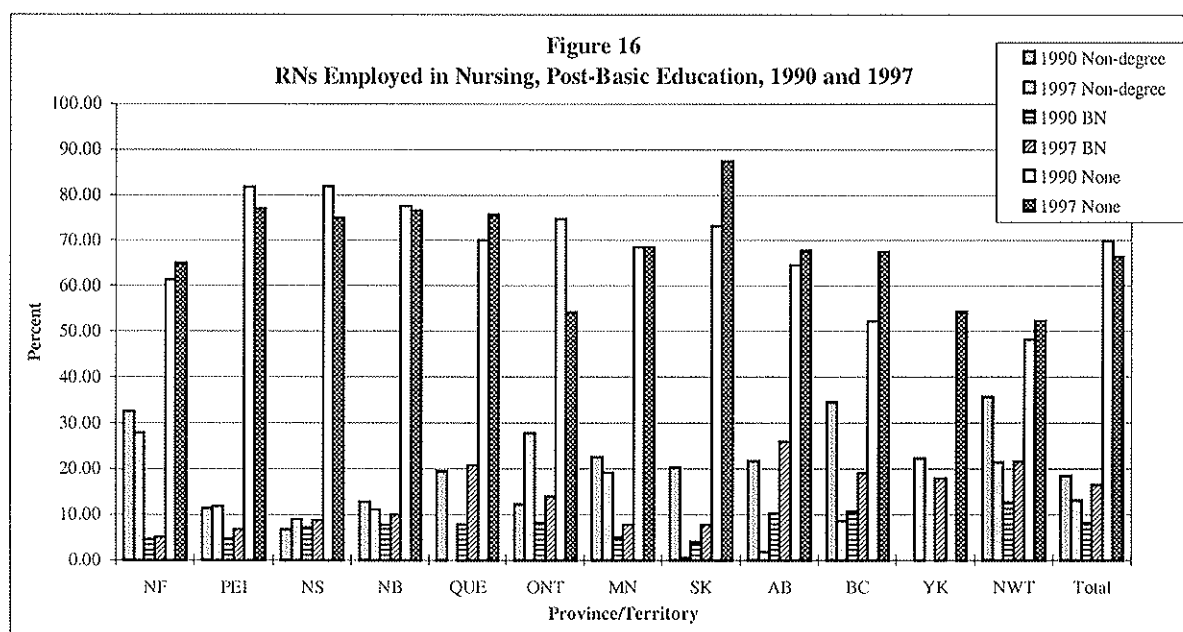
1990

Province/ Territory	Post-basic Education							Total
	Nursing - Non-degree	Nursing - Baccalaureate	Nursing - Master's	Nursing - Doctorate	Other than Nursing	None	Unknown	
Newfoundland	1570	221	31	4	36	0	2952	4814
PEI	135	56	8	0	19	0	975	1193
Nova Scotia	603	630	77	3	282	7274	0	8869
New Brunswick	875	522	72	1	70	26	5271	6837
Quebec	11142	4540	718	66	778	40242	15	57501
Ontario	10102	6731	688	264	3101	12513	48955	82354
Manitoba	2194	490	78	9	306	445	6234	9756
Saskatchewan	1681	341	36	3	165	5005	1095	8326
Alberta	4165	1966	186	16	450	12311	50	19144
BC	8537	2624	281	8	384	11949	911	24694
NWT	170	60	2	0	15	126	103	476
Total	41174	18181	2177	374	5606	89891	66561	223964

1997

Province/ Territory	Post-basic Education							Total
	Nursing - Non-degree	Nursing - Baccalaureate	Nursing - Master's	Nursing - Doctorate	Other than Nursing	None	Unknown	
Newfoundland	1459	264	48	4	58	3387	0	5220
PEI	153	85	18	0	39	990	0	1285
Nova Scotia	778	759	143	4	465	6453	0	8602
New Brunswick	821	740	94	4	82	5679	0	7420
Quebec	0	12321	749	23	1310	10682	34145	59230
Ontario	21723	10952	967	46	2198	25720	16561	78167
Manitoba	2018	812	138	15	334	7237	0	10554
Saskatchewan	46	652	48	9	306	7405	0	8466
Alberta	397	5565	423	26	498	14557	0	21466
BC	2432	5470	544	37	835	18719	665	28702
Yukon	56	45	2	0	12	137	0	252
NWT	101	102	10	1	12	129	119	474
Total	29984	37767	3184	169	6149	101095	51490	229838

<sup>1</sup> No data appear in the 1990 table for the Yukon Territory as no nursing association existed in 1990.



### 3. 1997 RNs Who Were Not Registered in 1990

While it is impossible to examine inter-provincial/territorial mobility without making use of personal identifiers, in the following section we have attempted to capture some aspects of workforce mobility. Given the limitations of the data, only a partial measure of movement across jurisdictions and time could be captured. In particular, the infusion of new registrants and the attrition of the previously registered cannot be fully described. But, in the subsequent tables and text, we have examined the same data as above for those RNs who, in 1990, were not registered in the province/territory in which they were registered in 1997. We have named this group the 'inflow'. It is a somewhat heterogeneous group comprised of individuals who completed basic nursing education and were initially registered in their home province by 1997, as well as RNs who were registered in one jurisdiction in 1990 or thereafter and registered in another jurisdiction by 1997, and those who were not registered as practising members in one jurisdiction in 1990 but who had become practising members in their home province/territory or another province/territory by 1997. The limitations inherent in these "synthetic cohorts" do not permit the identification of 'true' new registrants Canada-wide in the years under study. About 27% of the 1997 total number of practising RNs were not registered in the same province/territory in 1990.

In comparison with the total population of RNs registered in 1997 (Table 2a), the inflow RNs (Tables 15a and 15b) were less likely to be employed in nursing in Canada (72.78% vs. 82.90%), and more likely to have Unknown employment status (10.61% vs 7.78%), to be employed outside nursing (3.01% vs 2.37%), or not employed (4.17% vs 3.22%). Of all those employed in nursing, the inflow group is very much less likely to be employed full-time (30.67% vs 49.75), and very much more likely to be working in casual positions (42.40% vs 18.30%). They are also less likely to be working in part-time (26.69% vs 31.83%).

**Table 15a**  
**Number of RNs Registered in 1997 and not 1990,**  
**by Province/Territory and Employment Status**

Province/ Territory	Employment Status									
	Employed in Nursing					Unknown/ Not Resident	Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis			Casual Basis	Total					
	FT	PT	Unknown							
Newfoundland	449	130		915	1494	0	24	164		1682
PEI	120	116		148	384	0	7	20	10	421
Nova Scotia	669	354		1129	2152	74	34	163		2423
New Brunswick	468	274		992	1734	289	84	170	19	2296
Quebec	2828	3640		5819	12287	205	0	0	3868	16360
Ontario	5106	5507		5171	15784	4469	1623	1736	1835	25447
Manitoba	1047	1184		880	3111	69	108	76	193	3557
Saskatchewan	749	631		992	2372	59	76	97	32	2636
Alberta	2174	988		2848	6010	536	277	626	342	7791
BC	2953	1706	30	4220	8909	1201	14	36	1665	11825
Yukon	124	86		42	252	50	8	16	6	332
NWT	125	14	101	83	323	143	13	35	23	537
Total	16812	14630	131	23239	54812	7095	2268	3139	7993	75307

**Table 15b**  
**Percent of RNs Registered in 1997 and not 1990,**  
**by Province/Territory and Employment Status**

Province/ Territory	Employment Status (%)									
	Employed in Nursing					Unknown/ Not Resident	Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis			Casual Basis	Total					
	FT	PT	Unknown							
Newfoundland	26.69	7.73	0.00	54.40	88.82	0.00	1.43	9.75	0.00	100.00
PEI	28.50	27.55	0.00	35.15	91.21	0.00	1.66	4.75	2.38	100.00
Nova Scotia	27.61	14.61	0.00	46.60	88.82	3.05	1.40	6.73	0.00	100.00
New Brunswick	20.38	11.93	0.00	43.21	75.52	12.59	3.66	7.40	0.83	100.00
Quebec	17.29	22.25	0.00	35.57	75.10	1.25	0.00	0.00	23.64	100.00
Ontario	20.07	21.64	0.00	20.32	62.03	17.56	6.38	6.82	7.21	100.00
Manitoba	29.43	33.29	0.00	24.74	87.46	1.94	3.04	2.14	5.43	100.00
Saskatchewan	28.41	23.94	0.00	37.63	89.98	2.24	2.88	3.68	1.21	100.00
Alberta	27.90	12.68	0.00	36.55	77.14	6.88	3.56	8.03	4.39	100.00
BC	24.97	14.43	0.25	35.69	75.34	10.16	0.12	0.30	14.08	100.00
Yukon	37.35	25.90	0.00	12.65	75.90	15.06	2.41	4.82	1.81	100.00
NWT	23.28	2.61	18.81	15.46	60.15	26.63	2.42	6.52	4.28	100.00
Total	22.32	19.43	0.17	30.86	72.78	9.42	3.01	4.17	10.61	100.00

Table 16 below illustrates the age/sex distributions for the inflow group. Overall, female RNs in the inflow group were much more likely to be under 25 and 25-34 than was the total RN population in 1997 (Table 4). Excluding the territories, the provinces with the lowest percentages of under 25's were B.C. and Ontario at 4.68% and 4.53% respectively, while PEI, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and Alberta all ranged between 7.24% and 8.55%, and Quebec and Newfoundland were at the high end with 15.89% and 13.78% respectively. The majority of the female inflow group was aged 25-34 in 1997, accounting for 51.49% overall (similarly for males, 52.44%), with Newfoundland showing the largest proportion in that age group (67.88%) and B.C. the lowest (42.78%) among the provinces, and the Yukon



showing a sharp difference from the Northwest Territories (21.67% vs 43.38%, respectively). B.C. experienced the largest proportional inflow of 35-44 year olds (31.21%) of all the provinces, with Newfoundland the lowest (12.49%), which was the reverse of their respective positions for the group aged 25-34. It is likely that most of the under 25 group are recent 'local' graduates, while those in the 25-34 year old group may include new graduates as well as individuals who had left practising registration for a time (e.g. for childbearing) and those who had changed locations. Those 35 and older in the inflow group are most likely individuals who had been out of the workforce in 1990 or who have relocated in recent years. Given the high proportion of home-province-educated RNs in all jurisdictions except Alberta, B.C. and the territories, it is possible that for the other provinces, the inflow represents those returning to the workforce and new graduates, as well as those who had trained in their home province, migrated for a time, and then returned between 1990 and 1997.

**Table 16**  
**RNs Registered in 1997 and not 1990,**  
**Employed In-Province/Territory in Nursing,**  
**by Sex, Province/Territory, and Age Group**

<b>Female</b>								
<b>Province/ Territory</b>	<b>Age Group</b>						<b>Unknown</b>	<b>Total</b>
	<b>&lt; 25</b>	<b>25 - 34</b>	<b>35 - 44</b>	<b>45 - 54</b>	<b>55 - 64</b>	<b>65+</b>		
Newfoundland	193	951	175	71	10	1		1401
PEI	27	168	87	47	15	2	27	373
Nova Scotia	160	1024	520	277	64	4		2049
New Brunswick	128	947	358	172	32	1		1638
Quebec	1731	5671	2194	1106	175	14		10891
Ontario	675	8487	3758	1671	306	18	1	14916
Manitoba	218	1502	779	331	53	2	18	2903
Saskatchewan	194	1005	612	348	104	5		2268
Alberta	425	2800	1547	803	172	8	3	5758
BC	393	3589	2618	1448	323	18		8389
Yukon	4	52	93	75	16			240
NWT	3	131	93	44	27	2	2	302
<b>Total</b>	<b>4151</b>	<b>26327</b>	<b>12834</b>	<b>6393</b>	<b>1297</b>	<b>75</b>	<b>51</b>	<b>51128</b>
<b>Total %</b>	<b>8.12</b>	<b>51.49</b>	<b>25.10</b>	<b>12.50</b>	<b>2.54</b>	<b>0.15</b>	<b>0.10</b>	<b>100.00</b>

<b>Male</b>								
<b>Province/ Territory</b>	<b>Age Group</b>						<b>Unknown</b>	<b>Total</b>
	<b>&lt; 25</b>	<b>25 - 34</b>	<b>35 - 44</b>	<b>45 - 54</b>	<b>55 - 64</b>	<b>65+</b>		
Newfoundland	11	65	14	2	1			93
PEI	2	6	3	0	0			11
Nova Scotia	4	55	35	8	1			103
New Brunswick	1	61	29	5	0			96
Quebec	126	806	374	86	4			1396
Ontario	29	405	327	94	13			868
Manitoba	10	119	66	10	0		3	208
Saskatchewan	10	65	23	6	0			104
Alberta	11	138	82	18	2		1	252
BC	10	203	222	76	9			520
Yukon	0	3	6	3	0			12
NWT	0	6	10	3	2			21
<b>Total</b>	<b>214</b>	<b>1932</b>	<b>1191</b>	<b>311</b>	<b>32</b>	<b>0</b>	<b>4</b>	<b>3684</b>
<b>Total %</b>	<b>5.81</b>	<b>52.44</b>	<b>32.33</b>	<b>8.44</b>	<b>0.87</b>	<b>0.00</b>	<b>0.11</b>	<b>100.00</b>

Tables 17a and 17b below illustrate the place of employment indicated by the inflow RNs in 1997. Overall, this group was less likely to be working in a hospital-type setting; whereas 61.21% of the total 1997 employed RNs (see Tables 6a and 6b) were employed in a Hospital or Rehab/Convalescent Centre, 57.45% of the inflow group were so employed. Conversely, the inflow RNs were more likely to be employed in a Nursing home (15.49% vs 12.12%) or in Total Other (9.52% vs 7.84%). The inflow group was less likely to be employed in an Educational Institution (1.15% vs 2.31%), and about as often employed in the aggregate of community-based sites (12.36% vs 12.83%) and Physician's Office/Family Practice Unit (2.37% vs 2.55%) as the 1997 total RN population. More specifically, a slightly larger proportion of the inflow RNs working in hospital-based settings were working in Rehab/Convalescent Centres (2.15% vs 1.89%), while those employed in community-based settings were less likely to be employed in a Community Health Agency (43.94% vs 53.43%) or Mental Health Centre (12.07% vs 13.27%) and much more likely to be working in Home Care (43.99% vs 33.29%). Inflow RNs working in grouped Other categories were almost twice as likely to be working for Private Nursing Agency (22.51% vs 11.68%) and Nursing Station (10.00% vs 5.16%), but less likely to be employed in Business/Industry (12.76% vs 18.31%), Association/Government (16.44% vs 19.32%), or Other (31.02% vs 36.43%).

**Table 17a**  
**Number of RNs Registered in 1997 and not 1990, Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Place of Employment**

Province/ Territory	Place of Employment								Physician's Office/ Family Practice Unit	Educational Institution
	Hospital			Nursing home	Community Health Agency	Mental Health Centre	Home Care	Total Community <sup>3</sup>		
	General	Rehab/ Convalescent	Total <sup>2</sup>							
	Hospital <sup>1</sup>	Centre								
Newfoundland	1089	3	1092	155	80	1	48	129	8	10
PEI	214	2	216	67	18	14	9	41	8	9
Nova Scotia	1282	45	1327	346	86	38	144	268	31	32
New Brunswick	1253	14	1267	189	31	47	16	94	27	26
Quebec	7350	128	7478	2291	785	467	60	1312	149	84
Ontario	7678	195	7873	2733	583	28	1858	2469	547	134
Manitoba	1773	83	1856	470	174	23	87	284	25	37
Saskatchewan	1047	51	1098	389	316	29	145	490	45	102
Alberta	3419	58	3477	768	349	79	358	786	270	81
BC	5443	99	5542	1051	532	89	241	862	177	110
Yukon	106	0	106	25	24	2	7	33	11	6
NWT	159	0	159	9	0	1	8	9	1	2
Total	30813	678	31491	8493	2978	818	2981	6777	1299	633

... continued below

Province/ Territory	Other							Total Unknown	Total
	Business/ Industry <sup>4</sup>	Private Nursing Agency <sup>5</sup>	Self- employed	Nursing Station <sup>6</sup>	Association/ Government	Other	Total		
Newfoundland	12	19	3	33	5	21	93	7	1494
PEI	9	0	2	0	15	2	28	15	384
Nova Scotia	26	45	14	5	38	20	148	0	2152
New Brunswick	6	36	15	0	38	35	130	1	1734
Quebec	245	387	46	8	128	72	886	87	12287
Ontario	185	388	142	88	172	917	1892	136	15784
Manitoba	15	138	11	106	90	38	398	41	3111
Saskatchewan	23	31	12	44	65	32	207	41	2372
Alberta	95	56	56	40	96	252	595	33	6010
BC	43	72	76	39	192	218	640	527	8909
Yukon	3	2	3	44	12	6	70	1	252
NWT	4	1	0	115	7	6	133	10	323
Total	666	1175	380	522	858	1619	5220	899	54812

<sup>1</sup> Maternity, Paediatrics, Psychiatry

<sup>2</sup> Total of institutional sites

<sup>3</sup> Total of non-institutional sites

<sup>4</sup> Occupational Health

<sup>5</sup> Private Duty Nursing

<sup>6</sup> Outpost, Nursing Clinic

**Table 17b**  
**Percent of RNs Registered in 1997 and not 1990, Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Place of Employment**

Province/ Territory	Place of Employment (%)								Physician's Office/ Family Practice Unit	Educational Institution
	Hospital			Nursing home	Community Health Agency	Mental Health Centre	Home Care	Total Community <sup>3</sup>		
	General Hospital <sup>1</sup>	Rehab/ Convalescent Centre	Total <sup>2</sup>							
Newfoundland	72.89	0.20	73.09	10.37	5.35	0.07	3.21	8.63	0.54	0.67
PEI	55.73	0.52	56.25	17.45	4.69	3.65	2.34	10.68	2.08	2.34
Nova Scotia	59.57	2.09	61.66	16.08	4.00	1.77	6.69	12.45	1.44	1.49
New Brunswick	72.26	0.81	73.07	10.90	1.79	2.71	0.92	5.42	1.56	1.50
Quebec	59.82	1.04	60.86	18.65	6.39	3.80	0.49	10.68	1.21	0.68
Ontario	48.64	1.24	49.88	17.32	3.69	0.18	11.77	15.64	3.47	0.85
Manitoba	56.99	2.67	59.66	15.11	5.59	0.74	2.80	9.13	0.80	1.19
Saskatchewan	44.14	2.15	46.29	16.40	13.32	1.22	6.11	20.66	1.90	4.30
Alberta	56.89	0.97	57.85	12.78	5.81	1.31	5.96	13.08	4.49	1.35
BC	61.10	1.11	62.21	11.80	5.97	1.00	2.71	9.68	1.99	1.23
Yukon	42.06	0.00	42.06	9.92	9.52	0.79	2.78	13.10	4.37	2.38
NWT	49.23	0.00	49.23	2.79	0.00	0.31	2.48	2.79	0.31	0.62
Total	56.22	1.24	57.45	15.49	5.43	1.49	5.44	12.36	2.37	1.15

... continued below

Province/ Territory	Other							Unknown	Total
	Business/ Industry <sup>4</sup>	Private Nursing Agency <sup>5</sup>	Self- employed	Nursing Station <sup>6</sup>	Association/ Government	Other	Total		
Newfoundland	0.80	1.27	0.20	2.21	0.33	1.41	6.22	0.47	100.00
PEI	2.34	0.00	0.52	0.00	3.91	0.52	7.29	3.91	100.00
Nova Scotia	1.21	2.09	0.65	0.23	1.77	0.93	6.88	0.00	100.00
New Brunswick	0.35	2.08	0.87	0.00	2.19	2.02	7.50	0.06	100.00
Quebec	1.99	3.15	0.37	0.07	1.04	0.59	7.21	0.71	100.00
Ontario	1.17	2.46	0.90	0.56	1.09	5.81	11.99	0.86	100.00
Manitoba	0.48	4.44	0.35	3.41	2.89	1.22	12.79	1.32	100.00
Saskatchewan	0.97	1.31	0.51	1.85	2.74	1.35	8.73	1.73	100.00
Alberta	1.58	0.93	0.93	0.67	1.60	4.19	9.90	0.55	100.00
BC	0.48	0.81	0.85	0.44	2.16	2.45	7.18	5.92	100.00
Yukon	1.19	0.79	1.19	17.46	4.76	2.38	27.78	0.40	100.00
NWT	1.24	0.31	0.00	35.60	2.17	1.86	41.18	3.10	100.00
Total	1.22	2.14	0.69	0.95	1.57	2.95	9.52	1.64	100.00

<sup>1</sup> Maternity, Paediatrics, Psychiatry

<sup>2</sup> Total of institutional sites

<sup>3</sup> Total of non-institutional sites

<sup>4</sup> Occupational Health

<sup>5</sup> Private Duty Nursing

<sup>6</sup> Outpost, Nursing Clinic

Tables 18a and 18b below show the distribution of inflow RNs across areas of responsibility in 1997. Relative to the total employed RNs in 1997 (Tables 8a and 8b), the inflow group were more likely to be working in Total Direct Patient Care (86.48% vs 82.62%) and much less likely to be employed in either Total Administration (2.63% vs 6.51%) or Total Education (1.31% vs 2.76%); similar proportions of inflow and total 1997 RNs were working in Research (0.65% vs 0.66%). Within the total Direct Patient Care areas, the inflow group were more likely to be employed in Medical/Surgical (26.97 % vs 21.51%), Geriatric/Long-term Care (15.59% vs 12.22%), Home Care (5.51% vs 4.63%), and Several Clinical Areas (9.76% vs 7.56%). If working within the grouped Administration categories, inflow RNs were more often employed in Nursing Education Administration (5.27% vs 3.59%) and in Other Administration (19.85% vs 15.04%). Across the Education categories, the inflow group was slightly more likely to be teaching Students (40.68% vs 38.28%) and Patient/Clients (22.57% vs 16.67%). In general, where the numbers are relatively small, caution in interpreting these results is advisable.

**Table 18a**  
**Number of RNs Registered in 1997 and not 1990, Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Area of Responsibility**

Province/ Territory	Area of Responsibility										
	Direct Patient Care										
	Medical/ Surgical	Psychiatric/ Mental Health	Paediatric	Maternal/ Newborn	Geriatric/ Long Term Care	Critical Care	Community Health	Ambulatory Care	Home Care	Occup- ational Health	Operating Room
Newfoundland	480	41	70	39	193	109	96	10	51	12	27
PEI	101	20	9	15	68	25	24	1	6	7	3
Nova Scotia	631	136	97	108	377	121	98	16	171	11	63
New Brunswick	478	100	49	66	263	244	94	26	0	6	55
Quebec	2575	442	0	307	1609	569	245	260	151	37	92
Ontario	3123	780	689	569	1419	850	832	95	1219	167	395
Manitoba	796	102	95	134	533	166	273	38	133	7	86
Saskatchewan	508	69	52	65	414	120	257	21	145	16	35
Alberta	1484	262	229	311	833	487	231	58	428	72	188
BC	2557	537	264	458	1643	512	471	39	294	42	301
Yukon	25	4	11	13	22	0	45	4	5	3	9
NWT	27	10	12	18	15	8	83	5	10	4	7
Total	12785	2503	1577	2103	7389	3211	2749	573	2613	384	1261

... continued below

Province/ Territory	Direct Patient Care continued									
	Several Clinical Areas						Administration			
	Emergency Room	Oncology	Rehab- ilitation	Other	Total	Nursing Service	Nursing Education	Other	Total	
Newfoundland	44	144	3	1	63	1383	10	1	2	13
PEI	9	48	0	0	8	344	13	2	1	16
Nova Scotia	68	33	31	53	34	2048	26	3	6	35
New Brunswick	104	61	0	32	94	1672	10	1	9	20
Quebec	362	2456	100	99	265	9569	573	0	0	573
Ontario	463	430	319	289	1077	12716	157	31	95	283
Manitoba	84	337	33	53	92	2962	44	5	12	61
Saskatchewan	45	227	16	34	58	2082	60	14	24	98
Alberta	187	417	0	0	463	5650	64	8	52	124
BC	283	374	114	156	426	8471	99	7	69	175
Yukon	19	47	0	2	11	220	10	1	14	25
NWT	20	52	0	1	15	287	13	3	2	18
Total	1688	4626	616	720	2606	47404	1079	76	286	1441

... continued below

Province/ Territory	Teaching - Education									
	Patients/ Clients					Research			Unknown	
	Students	Employees	Other	Total	Nursing	Other	Total	Unknown	Total	
Newfoundland	4	1	1	2	8	0	2	2	88	1494
PEI	8	0	0	0	8	0	1	1	15	384
Nova Scotia	26	11	7	2	46	5	18	23	0	2152
New Brunswick	21	1	7	0	29	12	0	12	1	1734
Quebec	0	0	0	87	87	64	11	75	1983	12287
Ontario	44	17	73	32	166	41	62	103	2516	15784
Manitoba	6	10	7	10	33	7	10	17	38	3111
Saskatchewan	72	6	7	8	93	1	12	13	86	2372
Alberta	51	26	39	11	127	24	35	59	50	6010
BC	73	38	31	15	157	20	33	53	53	8909
Yukon	3	1	0	2	6	0	0	0	1	252
NWT	2	0	0	0	2	0	0	0	16	323
Total	310	111	172	169	762	174	184	358	4847	54812

**Table 18b**  
**Percent of RNs Registered in 1997 and not 1990, Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Area of Responsibility**

Province/ Territory	Area of Responsibility (%)										
	Direct Patient Care										
	Medical/ Surgical	Psychiatric/ Mental Health	Paediatric	Maternal/ Newborn	Geriatric/ Long Term Care	Critical Care	Community Health	Ambulatory Care	Home Care	Occup- ational Health	Operating Room
Newfoundland	32.13	2.74	4.69	2.61	12.92	7.30	6.43	0.67	3.41	0.80	1.81
PEI	26.30	5.21	2.34	3.91	17.71	6.51	6.25	0.26	1.56	1.82	0.78
Nova Scotia	29.32	6.32	4.51	5.02	17.52	5.62	4.55	0.74	7.95	0.51	2.93
New Brunswick	27.57	5.77	2.83	3.81	15.17	14.07	5.42	1.50	0.00	0.35	3.17
Quebec	20.96	3.60	0.00	2.50	13.10	4.63	1.99	2.12	1.23	0.30	0.75
Ontario	19.79	4.94	4.37	3.60	8.99	5.39	5.27	0.60	7.72	1.06	2.50
Manitoba	25.59	3.28	3.05	4.31	17.13	5.34	8.78	1.22	4.28	0.23	2.76
Saskatchewan	21.42	2.91	2.19	2.74	17.45	5.06	10.83	0.89	6.11	0.67	1.48
Alberta	24.69	4.36	3.81	5.17	13.86	8.10	3.84	0.97	7.12	1.20	3.13
BC	28.70	6.03	2.96	5.14	18.44	5.75	5.29	0.44	3.30	0.47	3.38
Yukon	9.92	1.59	4.37	5.16	8.73	0.00	17.86	1.59	1.98	1.19	3.57
NWT	8.36	3.10	3.72	5.57	4.64	2.48	25.70	1.55	3.10	1.24	2.17
Total	23.33	4.57	2.88	3.84	13.48	5.86	5.02	1.05	4.77	0.70	2.30

... continued below

Province/ Territory	Direct Patient Care continued										
	Several Clinical Areas						Administration				
	Emergency Room	Clinical Areas	Oncology	Rehab- ilitation	Other	Total	Nursing Service	Nursing Education	Other	Total	
Newfoundland	2.95	9.64	0.20	0.07	4.22	92.57	0.67	0.07	0.13	0.87	
PEI	2.34	12.50	0.00	0.00	2.08	89.58	3.39	0.52	0.26	4.17	
Nova Scotia	3.16	1.53	1.44	2.46	1.58	95.17	1.21	0.14	0.28	1.63	
New Brunswick	6.00	3.52	0.00	1.85	5.42	96.42	0.58	0.06	0.52	1.15	
Quebec	2.95	19.99	0.81	0.81	2.16	77.88	4.66	0.00	0.00	4.66	
Ontario	2.93	2.72	2.02	1.83	6.82	80.56	0.99	0.20	0.60	1.79	
Manitoba	2.70	10.83	1.06	1.70	2.96	95.21	1.41	0.16	0.39	1.96	
Saskatchewan	1.90	9.57	0.67	1.43	2.45	87.77	2.53	0.59	1.01	4.13	
Alberta	3.11	6.94	0.00	0.00	7.70	94.01	1.06	0.13	0.87	2.06	
BC	3.18	4.20	1.28	1.75	4.78	95.08	1.11	0.08	0.77	1.96	
Yukon	7.54	18.65	0.00	0.79	4.37	87.30	3.97	0.40	5.56	9.92	
NWT	6.19	16.10	0.00	0.31	4.64	88.85	4.02	0.93	0.62	5.57	
Total	3.08	8.44	1.12	1.31	4.75	86.48	1.97	0.14	0.52	2.63	

... continued below

Province/ Territory	Teaching - Education					Research					
	Students	Employees	Patients/ Clients		Other	Total	Nursing	Other	Total	Unknown	Total
Newfoundland	0.27	0.07	0.07	0.13	0.54	0.00	0.13	0.13	5.89	100.00	
PEI	2.08	0.00	0.00	0.00	2.08	0.00	0.26	0.26	3.91	100.00	
Nova Scotia	1.21	0.51	0.33	0.09	2.14	0.23	0.84	1.07	0.00	100.00	
New Brunswick	1.21	0.06	0.40	0.00	1.67	0.69	0.00	0.69	0.06	100.00	
Quebec	0.00	0.00	0.00	0.71	0.71	0.52	0.09	0.61	16.14	100.00	
Ontario	0.28	0.11	0.46	0.20	1.05	0.26	0.39	0.65	15.94	100.00	
Manitoba	0.19	0.32	0.23	0.32	1.06	0.23	0.32	0.55	1.22	100.00	
Saskatchewan	3.04	0.25	0.30	0.34	3.92	0.04	0.51	0.55	3.63	100.00	
Alberta	0.85	0.43	0.65	0.18	2.11	0.40	0.58	0.98	0.83	100.00	
BC	0.82	0.43	0.35	0.17	1.76	0.22	0.37	0.59	0.59	100.00	
Yukon	1.19	0.40	0.00	0.79	2.38	0.00	0.00	0.00	0.40	100.00	
NWT	0.62	0.00	0.00	0.00	0.62	0.00	0.00	0.00	4.95	100.00	
Total	0.57	0.20	0.31	0.31	1.39	0.32	0.34	0.65	8.84	100.00	

Table 19 describes type of position indicated by the inflow RNs in 1997. Relative to the 1997 total employed RNs, the inflow group were about half as likely to be working in the grouped category of Total Chief/Director/Asst Director (0.92% vs 1.83%) or as Head Nurse/Unit Manager (1.55% vs 3.36%), and much more likely to be employed as Staff Nurse/Community Health Nurse (80.31% vs 72.74%). The inflow RNs equally likely to indicate the position title of Researcher (0.46% vs 0.45%), and were less likely to indicate any of the other titles than was the total population of RNs employed in nursing in 1997.

**Table 19**  
**RNs Registered in 1997 and not 1990, Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Position**

Province/ Territory	Position							
	Administrative			Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Comm Health Nurse	Instructor/ Professor
	Chief Nurse Officer/ Director	Assistant/ Associate Director	Total					
Newfoundland	3	2	5	17	0	5	1413	10
PEI	7	3	10	34	0	2	290	13
Nova Scotia	16	9	25	123	11	39	1814	28
New Brunswick	10	1	11	29	9	7	1556	0
Quebec	50	14	64	93	82	160	9602	20
Ontario	123	42	165	410	49	305	12190	209
Manitoba	4	9	13	74	29	62	2322	21
Saskatchewan	44	3	47	89	9	31	1845	42
Alberta	33	7	40	183	38	96	5018	179
BC	89	23	112	211	50	111	7575	156
Yukon	6	1	7	17	22	13	161	12
NWT	7	0	7	10	2	19	233	7
Total	392	114	506	1290	301	850	44019	697

... continued below

Province/ Territory	Other						Total
	Office/ Occupational	Researcher	Consultant	Other	Total Other	Unknown	
	Health Nurse						
Newfoundland	9	1	1	23	34	10	1494
PEI	8	2	4	6	20	15	384
Nova Scotia	28	23	12	45	108	4	2152
New Brunswick	27	7	5	78	117	5	1734
Quebec	43	46	136	471	696	1570	12287
Ontario	79	73	135	1239	1526	930	15784
Manitoba	31	17	18	79	145	445	3111
Saskatchewan	86	10	25	56	177	132	2372
Alberta	59	44	27	236	366	90	6010
BC	91	31	86	390	598	96	8909
Yukon	7	0	2	10	19	1	252
NWT	2	0	5	20	27	18	323
Total	470	254	456	2653	3833	3316	54812

Below, in Table 20, the hours worked in the last year by the inflow RNs are indicated. Given the high proportion of Unknowns for this variable, (15.93% for the inflow group vs 14.63% for the 1997 total employed RNs), it is still noteworthy that the inflow group appear much more likely to be working less than a total of 500 hours (11.30% vs 7.63%), and slightly more likely to be working 500-999 hours (16.64% vs 14.71%). In addition, they were much less likely to be working 1500-1999 hours (32.29% vs 40.28%). Interestingly, the inflow RNs are somewhat more likely to work for 2000+ hours than the total RN population (2.39% vs 1.86%).

**Table 20**  
**RNs Registered in 1997 and not 1990, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1</sup> and Hours Worked**

Province/ Territory	Hours Worked						Total
	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	
Newfoundland	135	313	494	277	10	265	1494
PEI	34	63	86	179	0	22	384
Nova Scotia	239	384	426	749	57	297	2152
New Brunswick	121	264	406	758	9	176	1734
Ontario	1984	2367	3100	4323	600	3410	15784
Manitoba	374	530	741	1144	0	322	3111
Saskatchewan	256	453	584	765	86	228	2372
Alberta	809	1056	1242	1827	82	994	6010
BC	813	1557	1936	3394	164	1045	8909
Yukon	19	42	57	130	3	1	252
NWT	22	47	49	184	6	15	323
Total	4806	7076	9121	13730	1017	6775	42525

<sup>1</sup> No data appear in this table for Quebec, as detailed data on 'hours worked' were not available in 1990 or 1997.

In Table 21 below, the basic education of the inflow group is described. Inflow RNs were much more likely to have basic baccalaureate education than the total 1997 RN population (16.55% vs 9.92%).

**Table 21**  
**RNs Registered in 1997 and not 1990,**  
**Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Basic Education**

Province/ Territory	Basic Education			Total
	Diploma	Bachelor's Degree	Master's Degree	
Newfoundland	1281	213	0	1494
PEI	309	74	1	384
Nova Scotia	1714	436	2	2152
New Brunswick	1283	451	0	1734
Quebec	10804	1460	23	12287
Ontario	13485	2299	0	15784
Manitoba	2508	602	1	3111
Saskatchewan	1854	518	0	2372
Alberta	4491	1517	2	6010
BC	7504	1402	3	8909
Yukon	208	44	0	252
NWT	269	53	1	323
Total	45710	9069	33	54812

In relation to place of graduation, Table 22 indicates that inflow RNs were slightly less likely to have been educated in their Home province than all 1997 employed RNs (76.03% vs 79.23%), while the proportion of inflow RNs educated elsewhere in Canada was somewhat larger than all 1997 RNs (14.87% vs 12.68%). The proportion of inflow RNs educated outside Canada was surprisingly similar to that of the total RN population

(7.67% vs 7.73%). These findings suggest that inter-jurisdictional mobility is probably a major contributor to inflow, relative to international migration or local production.

**Table 22**  
**RNs Registered in 1997 and not 1990,**  
**Employed In-Province/Territory in Nursing,**  
**by Province/Territory and Place of Graduation**

Province/ Territory	Place of Graduation				Total
	Home Province/ Territory	Other Canada	Other Country	Unknown	
Newfoundland	1388	82	17	7	1494
PEI	197	150	11	26	384
Nova Scotia	1535	555	62	0	2152
New Brunswick	1450	267	17	0	1734
Quebec	11705	288	281	13	12287
Ontario	12135	1343	2200	106	15784
Manitoba	2609	391	111	0	3111
Saskatchewan	1893	367	50	62	2372
Alberta	4006	1351	99	554	6010
BC	4750	2850	1309	0	8909
Yukon	0	234	18	0	252
NWT	7	272	27	17	323
Total	41675	8150	4202	785	54812

With regard to post-basic education, Table 23 suggests that the inflow RNs were less likely than the 1997 total employed RNs to have non-degree nursing qualifications (10.61% vs 13.05%) and about as likely to have post-basic BNs (16.35% vs 16.43%). Finally, the proportion of inflow RNs who have indicated “none” for post-basic education was slightly larger than that seen among the 1997 total employed RN population (45.33% vs 43.99%).

**Table 23**  
**RNs Registered in 1997 and not 1990, Employed In-Province/Territory**  
**in Nursing, by Province/Territory and Post-basic Education**

Post-basic Education								
Province/ Territory	Nursing - Non-degree	Nursing - Baccalaureate	Nursing - Master's	Nursing - Doctorate	Other than Nursing	None	Unknown	Total
Newfoundland	134	22	4	0	16	1318	0	1494
PEI	35	14	6	0	23	306	0	384
Nova Scotia	121	96	24	0	225	1686	0	2152
New Brunswick	155	45	23	0	16	1495	0	1734
Quebec	0	2202	58	3	257	1206	8561	12287
Ontario	4254	2565	143	8	352	4430	4032	15784
Manitoba	243	127	19	3	60	2659	0	3111
Saskatchewan	12	191	9	1	116	2043	0	2372
Alberta	95	1955	58	7	167	3728	0	6010
BC	647	1641	114	14	334	5742	417	8909
Yukon	56	45	2	0	12	137	0	252
NWT	62	61	8	1	10	98	83	323
Total	5814	8964	468	37	1588	24848	13093	54812



#### 4. 1990 RNs Who Were Not Registered in 1997

The 'outflow' group of RNs are those who were registered in some province or territory in 1990 but were no longer registered in that jurisdiction in 1997. Included among the outflow RNs are RNs who left nursing practice entirely, as well as those who changed jurisdictions or who left the country. Those who left practice may have retired or died, or might be on some type of leave, with the intention of returning to practise at some point in the future. With this subpopulation, the point of comparison is with the population of RNs registered in one province or territory in 1990.

Employment status for the outflow RNs is described in Tables 24a and 24b below. In comparison with the 1990 total RN population (Table 1a), the outflow RNs were much less likely to be employed in nursing (73.90% vs 87.44%), and much more likely to have described themselves as Not Employed (13.03% vs 5.17%). Within the subgroup of outflow RNs whose employment status was known, outflow RNs were slightly less likely than 1990 total RNs to have been working in regular, full-time positions (53.18% vs 56.01%) and somewhat more likely to have been working on a casual basis (18.60% vs 14.07%).

**Table 24a**  
**Number of RNs Registered in 1990 and not 1997, by Province/Territory<sup>1</sup> and Employment Status**

Province/ Territory	Employment Status										
	Employed in Nursing						Total employed in Nursing	Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis			Casual Basis	Total	Unknown					
	FT	PT	Unknown								
Newfoundland	756	183		204	1143		1143	0	260	1	1404
PEI	115	4		142	261		261	5	19		285
Nova Scotia	1408	500		472	2380		2380	24	179	9	2592
New Brunswick	703	321		267	1291		1291	27	110	224	1652
Quebec				0	7634		7634	0		624	8258
Ontario	7352	4368		1708	13428		13428	2026	4726	1532	21712
Manitoba	1146	711		279	2136		2136	303	84	54	2577
Saskatchewan	968	509	90	607	2174		2174	24	157	40	2395
Alberta	2333	1307		1057	4697		4697	155	590	942	6384
BC	2237	895	242	1255	4629		4629	318	932	772	6651
NWT	225	16	4	41	286		286	4	7		297
Total	17243	8814	336	6032	32425	7634	40059	2886	7064	4198	54207

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

**Table 24b**  
**Percent of RNs Registered in 1990 and not 1997, by Province/Territory<sup>1</sup> and Employment Status**

Province/ Territory	Employment Status (%)										
	Employed in Nursing						Total employed in Nursing	Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis			Casual Basis	Total	Unknown					
FT	PT	Unknown									
Newfoundland	53.85	13.03	0.00	14.53	81.41	0.00	81.41	0.00	18.52	0.07	100.00
PEI	40.35	1.40	0.00	49.82	91.58	0.00	91.58	1.75	6.67	0.00	100.00
Nova Scotia	54.32	19.29	0.00	18.21	91.82	0.00	91.82	0.93	6.91	0.35	100.00
New Brunswick	42.55	19.43	0.00	16.16	78.15	0.00	78.15	1.63	6.66	13.56	100.00
Quebec	0.00	0.00	0.00	0.00	0.00	92.44	92.44	0.00	0.00	7.56	100.00
Ontario	33.86	20.12	0.00	7.87	61.85	0.00	61.85	9.33	21.77	7.06	100.00
Manitoba	44.47	27.59	0.00	10.83	82.89	0.00	82.89	11.76	3.26	2.10	100.00
Saskatchewan	40.42	21.25	3.76	25.34	90.77	0.00	90.77	1.00	6.56	1.67	100.00
Alberta	36.54	20.47	0.00	16.56	73.57	0.00	73.57	2.43	9.24	14.76	100.00
BC	33.63	13.46	3.64	18.87	69.60	0.00	69.60	4.78	14.01	11.61	100.00
NWT	75.76	5.39	1.35	13.80	96.30	0.00	96.30	1.35	2.36	0.00	100.00
Total	31.81	16.26	0.62	11.13	59.82	14.08	73.90	5.32	13.03	7.74	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

With regard to age distribution, Table 25 indicates that, relative to the total female RN population in 1990 (Table 3), the female outflow group was much more likely to be aged 55-64 (31.78% vs 8.51%) and much less likely to be aged 35-44 (18.25% vs 35.73%). Female outflow RNs were also less often aged 25-34 (20.43% vs 28.87%) or under 25 (3.09% vs 3.89%). It is of particular interest that the proportion of female outflow RNs aged 45-54 (22.90%) was almost exactly that of the total 1990 population (22.09%). The concentration of outflow RNs in the oldest age groups suggests that retirement may have been an important promoter of 'outflow' behaviour.

**Table 25**  
**RNs Registered in 1990 and not 1997,**  
**Employed In-Province/Territory in Nursing,**  
**by Sex, Province/Territory,<sup>1</sup> and Age Group**

Female								
Province/ Territory	Age Group						Unknown	Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+		
Newfoundland	68	311	206	382	139	7	8	1121
PEI	12	47	51	76	68	6	1	261
Nova Scotia	108	572	431	609	560	43	8	2331
New Brunswick	38	248	236	287	408	41	4	1262
Quebec	229	1120	1236	1785	2520	319	1	7210
Ontario	260	2359	2145	2847	4906	590	14	13121
Manitoba	67	531	442	447	545	40	3	2075
Saskatchewan	78	483	452	444	614	60	19	2150
Alberta	204	1284	1097	985	943	81	18	4612
BC	132	876	734	1014	1643	106	4	4509
NWT	6	122	74	38	22	3	6	271
Total	1202	7953	7104	8914	12368	1296	86	38923
Total %	3.09	20.43	18.25	22.90	31.78	3.33	0.22	100.00

Male								
Province/ Territory	Age Group						Unknown	Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+		
Newfoundland	1	5	14	1	1			22
PEI	0	0	0	0	0			0
Nova Scotia	4	22	10	7	5	1		49
New Brunswick	3	14	8	0	4			29
Quebec	34	141	111	90	44	4		424
Ontario	9	93	80	55	60	10		307
Manitoba	1	24	11	17	7	1		61
Saskatchewan	0	11	7	2	4			24
Alberta	1	30	33	11	9	1		85
BC	3	44	37	16	20			120
NWT	0	11	1	1	1		1	15
Total	56	395	312	200	155	17	1	1136
Total %	4.93	34.77	27.46	17.61	13.64	1.50	0.09	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

Tables 26a and 26b illustrate place of employment among outflow RNs in 1990. The outflow group appears to have been less often employed in Hospital (66.12% vs 72.14%), Community Health (8.78% vs 9.04%) and Educational Institution (2.37% vs 2.56%) than the total RN population in 1990 (Tables 5a and 5b), and more often employed in Nursing Home/Home for the Aged (9.94% vs 7.07%), Physician's Office/Family Practice Unit (3.78% vs 3.15%) and Other (7.86% vs 5.36%).

**Table 26a**  
**Number of RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Place of Employment**

Province/ Territory	Place of Employment							Total
	Hospital	Nursing Home/ Home for the Aged	Community Health	Physician's Office/ Family Practice Unit	Educational Institution	Other	Unknown	
Newfoundland	777	165	88	7	32	68	6	1143
PEI	138	65	17	10	12	15	4	261
Nova Scotia	1762	244	148	68	56	96	6	2380
New Brunswick	903	161	80	37	37	71	2	1291
Ontario	8238	1316	1236	658	348	1497	135	13428
Manitoba	1405	295	164	42	56	160	14	2136
Saskatchewan	1350	304	187	64	28	150	91	2174
Alberta	3524	213	419	188	111	192	50	4697
BC	3192	459	416	148	85	262	67	4629
NWT	149	1	91	3	3	38	1	286
Total	21438	3223	2846	1225	768	2549	376	32425

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'place of employment' in 1990 were not available.

**Table 26b**  
**Percent of RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Place of Employment**

Province/ Territory	Place of Employment (%)							Total
	Hospital	Nursing Home/ Home for the Aged	Community Health	Physician's Office/ Family Practice Unit	Educational Institution	Other	Unknown	
Newfoundland	67.98	14.44	7.70	0.61	2.80	5.95	0.52	100.00
PEI	52.87	24.90	6.51	3.83	4.60	5.75	1.53	100.00
Nova Scotia	74.03	10.25	6.22	2.86	2.35	4.03	0.25	100.00
New Brunswick	69.95	12.47	6.20	2.87	2.87	5.50	0.15	100.00
Ontario	61.35	9.80	9.20	4.90	2.59	11.15	1.01	100.00
Manitoba	65.78	13.81	7.68	1.97	2.62	7.49	0.66	100.00
Saskatchewan	62.10	13.98	8.60	2.94	1.29	6.90	4.19	100.00
Alberta	75.03	4.53	8.92	4.00	2.36	4.09	1.06	100.00
BC	68.96	9.92	8.99	3.20	1.84	5.66	1.45	100.00
NWT	52.10	0.35	31.82	1.05	1.05	13.29	0.35	100.00
Total	66.12	9.94	8.78	3.78	2.37	7.86	1.16	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'place of employment' in 1990 were not available.

Tables 27a and 27b illustrate area of responsibility for the outflow group. Relative to the total 1990 population (Tables 7a and 7b), outflow RNs were more likely to be employed in Administration (7.87% vs 6.49%) and proportionately less often seen in Direct Patient Care (83.90% vs 85.96%).

**Table 27a**  
**Number of RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Area of Responsibility**

Province/ Territory	Area of Responsibility						Total
	Direct Patient Care	Admin- istration	Education	Research	Other	Unknown	
Newfoundland	1023	80	26	1	9	4	1143
PEI	208	14	8	0	26	5	261
Nova Scotia	2118	179	65	11	0	7	2380
New Brunswick	1104	89	54	0	42	2	1291
Ontario	11103	1254	432	75	0	564	13428
Manitoba	1782	230	98	14	0	12	2136
Saskatchewan	1764	120	66	7	37	180	2174
Alberta	4093	275	154	17	59	99	4697
BC	3756	289	181	27	0	376	4629
NWT	255	23	5	1	0	2	286
Total	27206	2553	1089	153	173	1251	32425

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'area of responsibility' in 1990 were not available.

**Table 27b**  
**Percent of RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Area of Responsibility**

Province/ Territory	Area of Responsibility (%)						Total
	Direct Patient Care	Admin- istration	Education	Research	Other	Unknown	
Newfoundland	89.50	7.00	2.27	0.09	0.79	0.35	100.00
PEI	79.69	5.36	3.07	0.00	9.96	1.92	100.00
Nova Scotia	88.99	7.52	2.73	0.46	0.00	0.29	100.00
New Brunswick	85.52	6.89	4.18	0.00	3.25	0.15	100.00
Ontario	82.69	9.34	3.22	0.56	0.00	4.20	100.00
Manitoba	83.43	10.77	4.59	0.66	0.00	0.56	100.00
Saskatchewan	81.14	5.52	3.04	0.32	1.70	8.28	100.00
Alberta	87.14	5.85	3.28	0.36	1.26	2.11	100.00
BC	81.14	6.24	3.91	0.58	0.00	8.12	100.00
NWT	89.16	8.04	1.75	0.35	0.00	0.70	100.00
Total	83.90	7.87	3.36	0.47	0.53	3.86	100.00

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'area of responsibility' in 1990 were not available.

Type of Position, shown in Table 28, indicates that the outflow RNs were more likely to have been employed in director-type (3.57% vs 2.57%) and assistant supervisor/coordinator-type (6.53% vs 5.17%) positions, as well as Head Nurse (5.88% vs 4.91%) and Other (8.43% vs 6.45%). The outflow group were very much less often found as General Duty/Staff Nurses (69.45% vs 75.05%), and were slightly less likely to be working as Instructor/Professor (2.15% vs 2.70%) or Clinical Specialist (0.67% vs 0.82%).

**Table 28**  
**RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Position**

Province/ Territory	Position								Total
	Director, Assistant/ Associate Director	(Assistant) Supervisor/ Coordinator	Clinical Specialist	Head Nurse	General Duty/ Staff Nurse	Instructor/ Professor	Other	Unknown	
Newfoundland	58	135	2	25	733	41	141	8	1143
PEI	12	52	0	17	146	11	17	6	261
Nova Scotia	90	233	9	186	1677	49	106	30	2380
New Brunswick	54	76	2	77	942	34	100	6	1291
Ontario	423	981	112	884	8803	283	1317	625	13428
Manitoba	119	101	9	181	1470	71	168	17	2136
Saskatchewan	125	110	3	76	1471	16	210	163	2174
Alberta	125	266	38	121	3637	102	321	87	4697
BC	142	139	37	306	3456	89	332	128	4629
NWT	10	25	4	32	184	2	21	8	286
Total	1158	2118	216	1905	22519	698	2733	1078	32425

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'position' in 1990 were not available.

Hours worked in the last year are described in Table 29. As with the data on hours presented for the 1990 RN population, the large proportion of Unknown in these data make comparisons very difficult. That being the case, it should be noted that the outflow group were slightly more likely than the 1990 Total RNs to have worked fewer hours (less than 1000) in the last year (15.72% vs 14.39%), but less likely than the 1990 Total RNs to have worked 1000-1499 hours (10.78% vs 12.13%) or 1500-1999 hours (18.75% vs 20.52%).

**Table 29**  
**RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1,2</sup> and Hours Worked**

Province/ Territory	Hours Worked*						Total
	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	
Newfoundland	3	53	17	748	0	322	1143
PEI	0	0	0	0	0	261	261
Nova Scotia	132	264	43	1407	1	533	2380
New Brunswick	53	193	49	672	15	309	1291
Ontario	1352	1483	1516	2155	140	6782	13428
Manitoba	0	0	0	0	0	2136	2136
Saskatchewan	86	201	60	689	17	1121	2174
Alberta	0	0	0	0	0	4697	4697
BC	507	730	1759	280	13	1340	4629
NWT	21	19	53	128	9	56	286
Total	2154	2943	3497	6079	195	17557	32425

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

<sup>2</sup> No data appear in this table for Quebec, as detailed data on 'hours worked' in 1990 and 1997 were not available.

\* Data provided as 'hours per week' and converted to 'hours per year' on the basis of a 44 work week year.

In relation to the total 1990 RN population, Table 30 illustrates that the outflow group were as likely to have obtained a diploma in their basic nursing education (92.84% vs 92.46%), and somewhat less likely to have a basic baccalaureate (7.11% vs 7.51%).

**Table 30**  
**RNs Registered in 1990 and not 1997,**  
**Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1</sup> and Basic Education**

Province/ Territory	Basic Education			Total
	Diploma	Bachelor's Degree	Master's Degree	
Newfoundland	843	298	2	1143
PEI	247	14	0	261
Nova Scotia	2203	176	1	2380
New Brunswick	1188	103	0	1291
Quebec	7337	286	11	7634
Ontario	12570	858	0	13428
Manitoba	1956	180	0	2136
Saskatchewan	2007	167	0	2174
Alberta	4281	416	0	4697
BC	4315	311	3	4629
NWT	244	41	1	286
Total	37191	2850	18	40059

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

With regard to place of graduation, the outflow RNs in Table 31 appear to have been considerably less likely than the 1990 RN population to be employed in their home province (64.82% vs 77.24%), and much more likely to have been educated elsewhere in Canada (22.28% vs 13.56%) or outside the country (12.07% vs 8.55%). Relative to the 1990 RN population, Table 32 illustrates that the outflow RNs had more often obtained nursing non-degree credits (20.94% vs 18.38%), or Education in Other than Nursing (2.69% vs 2.50%). They were slightly less likely to have baccalaureate degrees (7.54% vs 8.12%).

**Table 31**  
**RNs Registered in 1990 and not 1997,**  
**Employed In-Province/Territory in Nursing,**  
**by Province/Territory<sup>1</sup> and Place of Graduation**

Province/ Territory	Place of Graduation				Total
	Home Province/ Territory	Other Canada	Other Country	Unknown	
Newfoundland	876	145	101	21	1143
PEI	115	46	5	95	261
Nova Scotia	1689	573	104	14	2380
New Brunswick	896	361	9	25	1291
Quebec	6594	456	463	121	7634
Ontario	8628	2377	2423	0	13428
Manitoba	1491	431	214	0	2136
Saskatchewan	1544	496	133	1	2174
Alberta	2327	1819	541	10	4697
BC	1805	2007	814	3	4629
NWT	0	216	29	41	286
Total	25965	8927	4836	331	40059

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

**Table 32**  
**RNs Registered in 1990 and not 1997, Employed In-Province/Territory**  
**in Nursing, by Province/Territory<sup>1</sup> and Post-basic Education**

Province/ Territory	Post-basic Education							Total
	Nursing - Non-degree	Nursing - Baccalaureate	Nursing - Master's	Nursing- Doctorate	Other than Nursing	None	Unknown	
Newfoundland	449	66	5	1	14	0	608	1143
PEI	43	16	2	0	0	4	196	261
Nova Scotia	230	193	20	1	78	1858	0	2380
New Brunswick	205	85	21	1	13	8	958	1291
Quebec	1581	620	124	8	152	5143	6	7634
Ontario	2051	1002	122	43	490	1699	8021	13428
Manitoba	540	113	20	1	78	80	1304	2136
Saskatchewan	423	106	12	3	47	1299	284	2174
Alberta	1048	409	44	6	118	3062	10	4697
BC	1726	371	45	0	76	2226	185	4629
NWT	94	40	2	0	11	72	67	286
Total	8390	3021	417	64	1077	15451	11639	40059

<sup>1</sup> No data appear in this table for the Yukon Territory as no nursing association existed in 1990.

## 5. RNs Who Were Registered in 1990 and 1997

In this section, we will look briefly at RNs who were registered in a single jurisdiction in both 1990 and 1997 - the 'stable' group. Data about the Yukon Territory are not included in the tables in this section as they did not have a regulatory body in 1990. Data about Quebec are also not included in these tables as no data about employment were received for Quebec in 1990. The analysis is presented by age group, so that those RNs who were under 25 years in 1990 are examined seven years later in 1997, according to employment status, employment factors, and hours worked. The process is then repeated for those whose age in 1990 was 25-34, 35-44, 45-54, and 55-64.

For the cohort aged less than 25 (Table 33), there was clearly some movement out of full-time employment; only 59.12% of the 1990 full-time RNs were employed full-time in 1997. However, there was also appreciable movement into full-time employment among those who were part-time in 1990 (33.82%), and among those who were working casual (41.17%).

For the 25-34 year old cohort (Table 34), the situation was of less change of employment type. A larger percentage of the 25-34 cohort than the under 25 cohort (Table 33) remained in full-time employment between 1990 and 1997 (61.32%), those in part-time employment and casual status in 1990 were also more likely than their under 25 counterparts to hold the same status in 1997 (part-time 57.09%; casual 30.43%).

The trend to retain one's employment status for the years under study appeared to hold for the next two age groups, the 35-44 year olds (Table 35) and the 45-54 year olds (Table 36); the more stable of these age-groups was the 35-44 cohort with 77.62% remaining full-time in 1997. For those aged 55-64 (Table 37), the trend was to reduced proportions of both full-time and part-time employment and a higher proportion in casual employment when compared with the younger cohorts.

Table 33  
Practising RNs in Province/Territory Aged <25 Years in 1990, Employment Status in 1990<sup>1</sup> by Employment Status in 1997

1990	1997													
	Employed in Nursing								Employed in Other than Nursing					
	Regular Basis			Casual Basis	Total	Out of Province			Seeking		Not Seeking		Unknown	Total
	FT	PT	Unknown			in Can	Out Can	Total						
Employed in Nursing														
Regular FT	1871	730	0	312	2913	17	91	108	6	12	35	32	59	3165
PT	233	325	0	75	633	4	15	19	5	9	7	5	11	689
Regular Unknown	34	19	0	10	63	0	1	1	0	0	0	0	4	68
Casual	310	217	1	148	676	3	20	23	2	11	7	15	19	753
Total	2448	1291	1	545	4285	24	127	151	13	32	49	52	93	4675
Employed in Other Than Nursing														
Seeking	6	3	0	4	13	0	0	0	1	0	0	0	1	15
Not Seeking	1	2	0	1	4	0	1	1	0	1	0	0	2	8
Not Employed in Nursing														
Seeking	25	11	0	14	50	1	2	3	0	1	0	2	3	59
Not Seeking	11	3	0	2	16	0	0	0	0	2	3	1	0	22
Unknown	297	150	0	62	509	3	19	22	1	6	9	8	15	570
Total	2788	1460	1	628	4877	28	149	177	15	42	61	63	114	5349

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).



Table 34

Practising RNs in Province/Territory Aged 25-34 Years in 1990, Employment Status in 1990<sup>1</sup> by Employment Status in 1997

		1997													
1990		Employed in Nursing							Employed in Other than Nursing						
		Regular Basis			Casual Basis	Out of Province			Not Employed		Not Employed				
		FT	PT	Unknown		in Can	Out Can	Total	Seeking	Not Seeking	Seeking	Not Seeking	Unknown	Total	
Employed in Nursing															
	Regular FT	14707	5463	22	1744	21936	170	492	662	57	195	270	275	589	23984
	PT	2494	6002	2	1066	9564	53	165	218	46	131	141	167	246	10513
	Regular Unknown	194	122	4	70	390	0	4	4	1	0	0	0	23	418
	Casual	1437	1991	10	1798	5236	27	82	109	31	95	112	114	212	5909
	Total	18832	13578	38	4678	37126	250	743	993	135	421	523	556	1070	40824
Employed in Other Than Nursing															
	Seeking	27	43	0	21	91	0	5	5	5	23	3	5	19	151
	Not Seeking	45	54	0	40	139	2	3	5	10	109	5	24	44	336
Not Employed in Nursing															
	Seeking	172	182	1	158	513	2	19	21	13	27	25	28	47	674
	Not Seeking	114	154	1	158	427	6	13	19	23	103	41	139	102	854
	Unknown	857	622	2	288	1769	15	65	80	11	35	39	33	99	2066
	Total	20047	14633	42	5343	40065	275	848	1123	197	718	636	785	1381	44905

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Table 35

Practising RNs in Province/Territory Aged 35-44 Years in 1990, Employment Status in 1990<sup>1</sup> by Employment Status in 1997

		1997													
1990		Employed in Nursing							Employed in Other than Nursing						
		Regular Basis			Casual Basis	Out of Province					Not Employed		Unknown	Total	
		FT	PT	Unknown		in Can	Out Can	Total	Seeking	Not Seeking	Seeking	Not Seeking			
Employed in Nursing															
	Regular FT	20816	2649	36	903	24404	185	467	652	68	320	321	211	842	26818
	PT	4991	10009	6	1280	16286	81	176	257	84	262	224	193	526	17832
	Regular Unknown	257	143	5	45	450	2	7	9	0	0	2	0	14	475
	Casual	1760	2534	9	2179	6482	31	62	93	33	111	102	119	277	7217
	Total	27824	15335	56	4407	47622	299	712	1011	185	693	649	523	1659	52342
Employed in Other Than Nursing															
	Seeking	86	57	1	39	183	4	3	7	10	83	6	10	46	345
	Not Seeking	161	112	0	82	355	8	14	22	29	534	20	79	201	1240
Not Employed in Nursing															
	Seeking	220	230	1	150	601	10	17	27	16	39	45	60	84	872
	Not Seeking	184	316	2	206	708	9	22	31	33	210	63	344	316	1705
Unknown		1229	653	1	295	2178	28	36	64	14	71	51	47	204	2629
Total		29704	16703	61	5179	51647	358	804	1162	287	1630	834	1063	2510	59133

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 36**  
**Practising RNs in Province/Territory Aged 45-54 Years in 1990<sup>1</sup> by Employment Status in 1997**

		1997													
1990		Employed in Nursing							Employed in Other than Nursing						
		Regular Basis			Casual Basis	Total	Out of Province		Seeking	Not Seeking	Not Employed			Unknown	Total
		FT	PT	Unknown			in Can	Out Can			Seeking	Not Seeking	Unknown		
Employed in Nursing															
	Regular FT	13421	1428	13	721	15583	93	236	329	39	237	350	231	1600	18369
	PT	1851	4980	3	646	7480	30	59	89	40	111	181	151	674	8726
	Regular Unknown	161	88	5	26	280	2	5	7	0	0	4	1	20	312
	Casual	535	833	4	1073	2445	9	25	34	8	56	69	44	178	2834
	Total	15968	7329	25	2466	25788	134	325	459	87	404	604	427	2472	30241
Employed in Other Than Nursing															
	Seeking	39	32	0	27	98	3	2	5	5	57	6	9	49	229
	Not Seeking	73	45	0	37	155	4	6	10	19	338	17	47	201	787
Not Employed in Nursing															
	Seeking	80	77	0	80	237	2	7	9	8	24	28	41	88	435
	Not Seeking	48	74	0	54	176	4	7	11	5	95	24	156	283	750
	Unknown	898	370	0	175	1443	16	23	39	12	49	58	50	238	1889
	Total	17106	7927	25	2839	27897	163	370	533	136	967	737	730	3331	34331

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 37**  
**Practising RNs in Province/Territory Aged 55-64 Years in 1990<sup>1</sup> by Employment Status in 1997**

		1997													
1990		Employed in Nursing							Employed in Other than Nursing						
		Regular Basis			Casual Basis	Total	Out of Province		Seeking	Not Seeking	Not Employed		Unknown	Total	
		FT	PT	Unknown			in Can	Out Can			Seeking	Not Seeking			
Employed in Nursing															
	Regular FT	1238	230	3	298	1769	3	25	28	5	30	77	83	1018	3010
	PT	142	555	1	149	847	4	8	12	4	17	31	39	314	1264
	Regular Unknown	10	15	0	6	31	0	0	0	0	0	0	0	11	42
	Casual	36	104	0	185	325	3	0	3	3	7	12	16	87	453
	Total	1426	904	4	638	2972	10	33	43	12	54	120	138	1430	4769
Employed in Other Than Nursing															
	Seeking	5	2	0	2	9	2	0	2	2	7	1	5	21	47
	Not Seeking	3	7	0	5	15	0	0	0	1	30	0	5	81	132
Not Employed in Nursing															
	Seeking	7	15	0	9	31	1	0	1	0	3	6	9	70	120
	Not Seeking	1	6	0	7	14	0	0	0	0	7	2	41	214	278
	Unknown	93	66	0	47	206	2	7	9	2	16	9	21	146	409
	Total	1535	1000	4	708	3247	15	40	55	17	117	138	219	1962	5755

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Tables 38 through 42 illustrate the relationship between place of employment in 1990 and place of employment in 1997 for the 'stable' RNs. It is striking that the vast majority of those who were working in the hospital sector in 1990 remained in that sector in 1997, so that for those under age 45, about 84% of those still employed are working in hospitals in 1997, while that proportion dropped to about 78% for the 45-54 year olds and to about 66% for the 55-64 year olds. It would appear that, across the age groups greater than 25 years, over 80% of those who had been working in nursing homes in 1990 were employed in the community in 1997. It is also striking that for all age groups, anywhere from 35% to 48% of those who were working in the community sector in 1990 were employed in physicians' offices or family practice clinics in 1997.

**Table 38**  
**Practising RNs Employed in Nursing in Province/Territory Aged <25 Years in 1990,**  
**Place of Employment in 1990<sup>1</sup> by Place of Employment in 1997**

1990	1997							
	Total	Nursing	Total	Physician's	Educational	Total	Unknown	Total
	Hospital	home	Community	Office/Family Practice Unit	Institution	Other		
Hospital	3416	10	274	126	21	190	21	4058
Nursing Home/								
Home for the Aged	11	0	51	1	0	4	1	68
Community Health	11	1	19	24	3	9	0	67
Physician's Office/								
Family Practice Unit	8	0	4	1	0	7	0	20
Educational Institution	7	0	2	0	0	2	0	11
Other	30	0	4	1	2	5	0	42
Unknown	15	0	3	0	0	1	0	19
Total	3498	11	357	153	26	218	22	4285

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 39**  
**Practising RNs Employed in Nursing in Province/Territory Aged 25-34 Years in 1990,**  
**Place of Employment in 1990<sup>1</sup> by Place of Employment in 1997**

1990	1997							
	Total	Nursing	Total	Physician's	Educational	Total	Unknown	Total
	Hospital	home	Community	Office/Family Practice Unit	Institution	Other		
Hospital	26705	63	1921	724	136	1760	169	31478
Nursing Home/								
Home for the Aged	112	2	922	34	5	56	12	1143
Community Health	230	23	699	1216	41	324	10	2543
Physician's Office/								
Family Practice Unit	105	2	27	18	8	309	5	474
Educational Institution	115	0	36	50	9	262	5	477
Other	227	23	112	62	77	344	4	849
Unknown	106	4	21	10	2	19	0	162
Total	27600	117	3738	2114	278	3074	205	37126

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 40**  
**Practising RNs Employed in Nursing in Province/Territory Aged 35-44 Years in 1990,**  
**Place of Employment in 1990<sup>1</sup> by Place of Employment in 1997**

1990				1997				
	Total	Nursing	Total	Physician's	Educational	Total	Unknown	Total
	Hospital	home	Community	Office/Family Practice Unit	Institution	Other		
Hospital	28764	66	2729	681	203	1863	350	34656
Nursing Home/								
Home for the Aged	145	3	2505	51	16	150	42	2912
Community Health	288	32	1870	1998	90	589	16	4883
Physician's Office/								
Family Practice Unit	139	3	107	60	19	1232	5	1565
Educational Institution	175	2	73	62	22	943	7	1284
Other	301	20	274	115	318	1040	12	2080
Unknown	135	0	31	16	2	54	4	242
Total	29947	126	7589	2983	670	5871	436	47622

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 41**  
**Practising RNs Employed in Nursing in Province/Territory Aged 45-54 Years in 1990,**  
**Place of Employment in 1990<sup>1</sup> by Place of Employment in 1997**

1990				1997				
	Total	Nursing	Total	Physician's	Educational	Total	Unknown	Total
	Hospital	home	Community	Office/Family Practice Unit	Institution	Other		
Hospital	12877	39	1906	265	81	926	383	16477
Nursing Home/								
Home for the Aged	87	2	2417	35	10	131	54	2736
Community Health	106	25	1092	1161	71	321	11	2787
Physician's Office/								
Family Practice Unit	55	1	57	24	13	922	7	1079
Educational Institution	65	2	31	16	3	816	3	936
Other	155	12	189	62	347	843	17	1625
Unknown	52	5	33	7	2	44	5	148
Total	13397	86	5725	1570	527	4003	480	25788

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 42**  
**Practising RNs Employed in Nursing in Province/Territory Aged 55-64 Years in 1990,**  
**Place of Employment in 1990<sup>1</sup> by Place of Employment in 1997**

1990				1997				
	Total	Nursing	Total	Physician's	Educational	Total	Unknown	Total
	Hospital	home	Community	Office/Family Practice Unit	Institution	Other		
Hospital	1004	6	277	34	10	134	57	1522
Nursing Home/								
Home for the Aged	9	0	450	4	2	35	14	514
Community Health	12	4	105	131	11	42	4	309
Physician's Office/								
Family Practice Unit	1	3	4	1	4	163	0	176
Educational Institution	2	0	4	1	1	86	3	97
Other	29	3	47	9	51	168	5	312
Unknown	11	1	12	3	0	12	3	42
Total	1068	17	899	183	79	640	86	2972

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Tables 43 through 47 examine the relationship between area of responsibility in 1990 and in 1997 for 'stable' RNs. Here there is more variation by age group, so that the RNs who were under 25 years in 1990 seem to have been very likely to begin and end the period working in Direct Patient Care (95.75%), as were those aged 25-34 who were working in that area in 1990 (92.80%). While the 25-34 year olds who were in Direct Patient Care in 1990 were still in that area in 1997, those who had been working in Administration or Education in 1990 seem to have moved away from those respective categories in 1997. Only 38.14% remained in Administration and 33.40% in Education 1997 for this age group. Nearly half of those in each of Administration and Education in 1990 were in Direct Patient Care in 1997 (47.30% and 49.90%). The pattern seen among the 25-34 year olds held for the 35-44 year olds and the 45-54 year olds as well. Interestingly, some 85.67% of those 55-64 year olds employed in Direct Patient Care in 1990 were still in those areas in 1997, which suggests that the likelihood of moving between areas of responsibility was lower for Direct Patient Care than for Administration or Education.

**Table 43**  
**Practising RNs Employed in Nursing in Province/Territory Aged <25 Years**  
**in 1990, Area of Responsibility in 1990<sup>1</sup> by Area of Responsibility in 1997**

1990	1997					
	Total Direct Patient Care	Total Administration	Total Education	Total Research	Unknown	Total
Direct Patient Care	4032	42	39	21	77	4211
Administration	8	1	0	0	0	9
Education	16	0	1	0	1	18
Research	1	0	0	1	0	2
Other	6	0	0	0	0	6
Unknown	36	0	1	0	2	39
Total	4099	43	41	22	80	4285

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 44**  
**Practising RNs Employed in Nursing in Province/Territory Aged 25-34 Years**  
**in 1990, Area of Responsibility in 1990<sup>1</sup> by Area of Responsibility in 1997**

1990	1997					
	Total Direct Patient Care	Total Administration	Total Education	Total Research	Unknown	Total
Direct Patient Care	31950	731	638	199	912	34430
Administration	377	304	44	10	62	797
Education	502	99	336	16	53	1006
Research	84	4	15	35	6	144
Other	43	4	2	1	1	51
Unknown	640	14	24	6	14	698
Total	33596	1156	1059	267	1048	37126

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 45**  
**Practising RNs Employed in Nursing in Province/Territory Aged 35-44 Years**  
**in 1990, Area of Responsibility in 1990<sup>1</sup> by Area of Responsibility in 1997**

1997						
1990	Total Direct Patient Care	Total Administration	Total Education	Total Research	Unknown	Total
Direct Patient Care	36846	1221	664	156	1813	40700
Administration	1347	1345	125	26	247	3090
Education	878	233	924	32	112	2179
Research	140	19	12	87	19	277
Other	106	31	9	2	3	151
Unknown	1069	50	28	4	74	1225
Total	40386	2899	1762	307	2268	47622

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 46**  
**Practising RNs Employed in Nursing in Province/Territory Aged 45-54 Years**  
**in 1990, Area of Responsibility in 1990<sup>1</sup> by Area of Responsibility in 1997**

1997						
1990	Total Direct Patient Care	Total Administration	Total Education	Total Research	Unknown	Total
Direct Patient Care	19103	504	261	46	1325	21239
Administration	966	1020	95	16	218	2315
Education	407	127	615	9	71	1229
Research	69	8	7	32	9	125
Other	53	18	2	1	0	74
Unknown	651	24	20	4	107	806
Total	21249	1701	1000	108	1730	25788

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 47**  
**Practising RNs Employed in Nursing in Province/Territory Aged 55-64 Years**  
**in 1990, Area of Responsibility in 1990<sup>1</sup> by Area of Responsibility in 1997**

1997						
1990	Total Direct Patient Care	Total Administration	Total Education	Total Research	Unknown	Total
Direct Patient Care	2051	36	35	7	265	2394
Administration	133	108	17	5	29	292
Education	34	8	67	0	11	120
Research	6	1	0	2	0	9
Other	9	2	0	0	0	11
Unknown	112	8	3	1	22	146
Total	2345	163	122	15	327	2972

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Tables 48 through 52 illustrate 'stable' RNs' likelihood of remaining in the position they held in 1990. While those RNs aged under 25 in 1990 were still working largely as staff/community nurses, the older RN groups were much more likely to have moved into positions of supervision or speciality. For RNs 25 and older, there seems to have been some likelihood of moving out of staff/community positions into supervisory, clinical specialist, or teaching positions, suggesting that there were opportunities available to experienced RNs between 1990 and 1997 that may not have been available to the youngest cohort.

**Table 48**  
Practising RNs Employed in Nursing in Province/Territory Aged <25 Years in 1990, Position in 1990<sup>1</sup> by Position in 1997

1990	1997								Total
	Chief Nursing Officer/Director/Asst Director	Supervisor/Coordinator	Clinical Nurse Specialist	Head Nurse/Unit Manager	Staff Nurse/Comm Health Nurse	Instructor/Professor	Total Other	Unknown	
Director, Assistant/Associate Director	0	0	0	0	3	0	0	1	4
(Assistant) Supervisor/Coordinator	0	2	0	0	6	1	0	0	9
Clinical Specialist	0	0	0	0	3	0	2	0	5
Head Nurse	1	1	0	2	10	0	1	0	15
General Duty/ Staff Nurse	17	62	19	26	3796	32	146	78	4176
Instructor/Professor	0	0	1	0	1	0	1	0	3
Other	0	1	0	0	21	3	5	1	31
Unknown	0	0	0	0	36	0	4	2	42
Total	18	66	20	28	3876	36	159	82	4285

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 49**  
Practising RNs Employed in Nursing in Province/Territory Aged 25-34 Years in 1990, Position in 1990<sup>1</sup> by Position in 1997

1990	1997								Total
	Chief Nursing Officer/Director/Asst Director	Supervisor/Coordinator	Clinical Nurse Specialist	Head Nurse/Unit Manager	Staff Nurse/Comm Health Nurse	Instructor/Professor	Total Other	Unknown	
Director, Assistant/Associate Director	93	21	1	12	31	2	48	11	219
(Assistant) Supervisor/Coordinator	52	228	15	92	233	19	131	36	806
Clinical Specialist	7	15	39	15	69	6	73	11	235
Head Nurse	41	60	23	235	270	14	130	33	806
General Duty/ Staff Nurse	159	654	167	425	28570	332	1651	798	32756
Instructor/Professor	13	38	20	33	154	6	365	27	656
Other	18	64	18	32	494	61	317	93	1097
Unknown	8	23	6	12	368	24	56	54	551
Total	391	1103	289	856	30189	464	2771	1063	37126

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Table 50

Practising RNs Employed in Nursing in Province/Territory Aged 35-44 Years in 1990, Position in 1990<sup>1</sup> by Position in 1997

1990	1997								Total
	Chief Nursing Officer/Director/ Asst Director	Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Comm Health Nurse	Instructor/ Professor	Total Other	Unknown	
Director, Assistant/ Associate Director	522	68	5	47	128	11	255	74	1110
(Assistant) Supervisor/ Coordinator	220	896	36	240	503	61	400	172	2528
Clinical Specialist	27	29	94	26	124	11	147	24	482
Head Nurse	161	213	40	904	642	40	352	60	2412
General Duty/ Staff Nurse	228	824	187	637	30452	688	1649	1009	35674
Instructor/Professor	41	82	40	51	206	15	1046	50	1531
Other	108	187	36	98	898	325	1094	225	2971
Unknown	18	34	14	27	548	55	108	110	914
Total	1325	2333	452	2030	33501	1206	5051	1724	47622

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Table 51

Practising RNs Employed in Nursing in Province/Territory Aged 45-54 Years in 1990, Position in 1990<sup>1</sup> by Position in 1997

1990	1997								
	Chief Nursing Officer/Director/ Asst Director	Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Comm Health Nurse	Instructor/ Professor	Total Other	Unknown	Total
Director, Assistant/ Associate Director	472	80	3	33	89	22	215	57	971
(Assistant) Supervisor/ Coordinator	118	726	18	164	335	71	251	132	1815
Clinical Specialist	5	20	64	2	47	17	62	9	226
Head Nurse	71	148	17	710	502	54	205	60	1767
General Duty/ Staff Nurse	97	331	73	302	15050	390	700	535	17478
Instructor/Professor	27	25	6	8	77	1	685	30	859
Other	75	132	28	59	461	261	856	151	2023
Unknown	20	26	6	20	315	55	99	108	649
Total	885	1488	215	1298	16876	871	3073	1082	25788

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

Table 52

Practising RNs Employed in Nursing in Province/Territory Aged 55-64 Years in 1990, Position in 1990<sup>1</sup> by Position in 1997

1990	1997								
	Chief Nursing Officer/Director/ Asst Director	Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Comm Health Nurse	Instructor/ Professor	Total Other	Unknown	Total
Director, Assistant/ Associate Director (Assistant) Supervisor/ Coordinator	55	17	1	3	24	0	24	13	137
Clinical Specialist	12	98	2	24	48	10	28	20	242
Head Nurse	0	2	3	3	3	2	7	1	21
General Duty/ Staff Nurse	2	18	3	81	86	13	22	14	239
Instructor/Professor	10	40	8	33	1479	43	112	84	1809
Other	1	1	1	0	5	0	72	3	83
Unknown	6	27	2	5	78	42	136	25	321
Total	2	8	1	5	51	9	24	20	120
	88	211	21	154	1774	119	425	180	2972

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).



The relationship between hours worked in 1990 and in 1997 is examined in Tables 53 through 57. For those under 25 years in 1990, it would seem that a goodly proportion of those who had worked less than full-time were able to gain hours during the ensuing seven years, and about one-third were working full-time hours in 1997. The proportion who were working fewer than 500 hours in both years was about 12% for the under 25's, almost 19% for the 25-34's, about 16% for the 35-44's, 18% for the 45-54's, and almost 34% for the 55-64's, indicating no age-related trends except for the oldest group. These proportions suggest some degree of voluntarism among those RNs who worked very few hours over time. The proportion who began and ended in full-time work increased steadily with age until the oldest age group, where the proportions working under 1000 hours climb appreciably, indicating that older RNs were much more likely to be working part-time hours, and again suggesting that they may have been choosing those reduced hours. It is striking that the proportion working over 2000 hours in 1990 and 1500-1999 hours in 1997 was around 54% for the under 25 year olds, and it stayed in that range for the age groups between 35 and 54; with the 55-64 year olds, the proportion working more than 2000 hours in 1990 and 1500-1999 hours in 1997 was about 34%. Thus about half of those RNs who were working 'overtime' in 1990 indicated that they were still working long hours in 1997, except for the oldest age group.

**Table 53**  
**Practising RNs Employed in Nursing in Province/Territory Aged <25 Years**  
**in 1990, Hours Worked in 1990<sup>1</sup> by Hours Worked in 1997**

1990	1997						Total
	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	
< 500	15	22	26	40	2	20	125
500 -999	16	47	45	67	1	25	201
1000 - 1499	39	76	77	172	5	48	417
1500 - 1999	71	145	226	540	27	115	1124
2000 +	3	4	5	23	1	7	43
Unknown	235	468	459	904	37	272	2375
Total	379	762	838	1746	73	487	4285

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 54**  
**Practising RNs Employed in Nursing in Province/Territory Aged 25-34 Years**  
**in 1990, Hours Worked in 1990<sup>1</sup> by Hours Worked in 1997**

1990	1997						Total
	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	
< 500	298	442	395	265	16	186	1602
500 -999	254	706	792	647	43	286	2728
1000 - 1499	272	678	806	1873	40	443	4112
1500 - 1999	355	925	1613	4523	183	1147	8746
2000 +	9	35	35	151	10	52	292
Unknown	1717	3500	4804	6675	328	2622	19646
Total	2905	6286	8445	14134	620	4736	37126

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 55**  
**Practising RNs Employed in Nursing in Province/Territory Aged 35-44 Years**  
**in 1990, Hours Worked in 1990<sup>1</sup> by Hours Worked in 1997**

		1997					
1990	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	Total
< 500	420	705	680	504	32	325	2666
500 -999	298	1300	1654	1223	50	556	5081
1000 - 1499	115	324	795	3870	78	720	5902
1500 - 1999	200	326	947	6251	264	1433	9421
2000 +	9	17	21	180	23	65	315
Unknown	1069	2965	6033	10521	394	3255	24237
Total	2111	5637	10130	22549	841	6354	47622

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 56**  
**Practising RNs Employed in Nursing in Province/Territory Aged 45-54 Years**  
**in 1990, Hours Worked in 1990<sup>1</sup> by Hours Worked in 1997**

		1997						
1990		< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	Total
< 500		171	278	185	165	7	137	943
500 -999		218	756	569	364	11	308	2226
1000 - 1499		101	230	475	2491	31	591	3919
1500 - 1999		160	216	469	3385	141	918	5289
2000 +		9	4	11	91	13	49	177
Unknown		713	1619	2941	5547	183	2231	13234
Total		1372	3103	4650	12043	386	4234	25788

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

**Table 57**  
**Practising RNs Employed in Nursing in Province/Territory Aged 55-64 Years**  
**in 1990, Hours Worked in 1990<sup>1</sup> by Hours Worked in 1997**

		1997					
1990	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	Total
< 500	49	46	13	9	2	26	145
500 -999	45	108	59	16	1	32	261
1000 - 1499	49	49	81	193	5	86	463
1500 - 1999	37	44	50	239	17	119	506
2000 +	3	3	2	10	2	9	29
Unknown	213	253	292	421	13	376	1568
Total	396	503	497	888	40	648	2972

<sup>1</sup> This table excludes data from both the Yukon Territory (as no nursing association existed in 1990), and Quebec (as detailed data on employment were not available in 1990).

## 6. Supply and Deployment of LPNs and RPNs

In this last section, some very basic supply data describing LPNs and RPNs (Registered Psychiatric Nurses) are offered. To reiterate, as there is no national database system for either of these nursing groups (since the RPNs are licensed only in the four western provinces, they are not considered to have a 'national' status at all), the data collected by the jurisdictional regulatory bodies are not uniform. For LPNs, no data were received from Quebec because no contact could be made with the provincial regulatory body, whether by the Centre or by the B.C. College of Licensed Practical Nurses, and the Manitoba regulatory body refused to participate. Data were obtained from Nova Scotia, but they could not be used in the tables as formulated below. With the RPNs, the data supplied by Saskatchewan did not include individual-level information about employment status or age. In addition, data collection was not as common or as comprehensive in the earlier part of this decade as it is now, so we were unable to obtain two years' worth of data from all provinces. In the end, we chose to present only employment status and age distributions for those jurisdictions with comparable data for the most recent year of record, which has been 1997 in most cases. The paucity of the information underscores the urgency of efforts to develop a comprehensive national nursing database.

Tables 58a and 58b below illustrate employment status among LPNs in seven provinces. Overall, of the total number who are registered, 83.08% are employed in nursing, with another 7.07% employed other than in nursing, and a total of 9.86% Not Employed or Unknown. For the 1997 RNs (Table 2a), the comparative figures are 82.90% employed in nursing and resident in the jurisdiction, 2.37% employed outside nursing, and 11.00% unemployed or unknown. Of those LPNs employed in nursing, 47.35% work in full-time positions, compared with 49.75% among RNs (see Table 2b), 32.41% in part-time positions (31.83% for RNs), and 17.60% on a casual basis (18.30% for RNs).

**Table 58a**  
**Number of Practising LPNs by Province<sup>1</sup> and Employment Status, 1997**

Province	Employment Status								
	Employed in Nursing					Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis		Casual Basis	Unknown	Total				
	Full Time	Part Time							
Newfoundland*	1657	292	700		2649	0	36	10	2695
PEI	241	196	96		533	0	3	7	543
New Brunswick	948	604	401		1953	0	183	60	2196
Ontario	12312	8643	3705	1046	25706	3012	2117	1613	32448
Saskatchewan+	674	501	458	42	1675	12	18	119	1824
Alberta	1455	2084	732		4271	143	287	20	4721
B.C.	2255	1057	1173		4485	344	400	23	5252
Total	19542	13377	7265	1088	41272	3511	3044	1852	49679

<sup>1</sup> Data on employment status were not available from Nova Scotia. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes 94 non-practising members. Full-time, Part-time, and Employed-unknown were estimated using data supplied on hours worked.

**Table 58b**  
**Percent of Practising LPNs by Province<sup>1</sup> and Employment Status, 1997**

Province	Employment Status (%)								
	Employed in Nursing					Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis Full Time	Part Time	Casual Basis	Unknown	Total				
Newfoundland*	61.48	10.83	25.97		98.29	0.00	1.34	0.37	100.00
PEI	44.38	36.10	17.68		98.16	0.00	0.55	1.29	100.00
New Brunswick	43.17	27.50	18.26		88.93	0.00	8.33	2.73	100.00
Ontario	37.94	26.64	11.42	3.22	79.22	9.28	6.52	4.97	100.00
Saskatchewan+	36.95	27.47	25.11	2.30	91.83	0.66	0.99	6.52	100.00
Alberta	30.82	44.14	15.51		90.47	3.03	6.08	0.42	100.00
B.C.	42.94	20.13	22.33		85.40	6.55	7.62	0.44	100.00
Total	39.34	26.93	14.62	2.19	83.08	7.07	6.13	3.73	100.00

<sup>1</sup> Data on employment status were not available from Nova Scotia. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes non-practising members. Full-time, Part-time, and Employed-unknown were estimated using data supplied on hours worked.

Ontario accounts for 62.28% of the LPNs employed in nursing included in this table. Although the proportions are skewed by missing data, it is nonetheless important to examine the relative contributions of LPNs to the different jurisdictions, relative to RN numbers. Ratios are provided in Table 59 below, and their size and range indicate the very different extent to which different provinces deploy LPNs relative to RNs. The gradient moves from east to west; the Atlantic provinces have the lowest ratios of RNs to LPNs (indicating the highest rate of deployment of LPNs), while B.C. has the highest ratio.

**Table 59**  
**Ratio of Practising RNs to Practising LPNs**  
**by Province<sup>1</sup> and Employment Status, 1997**

Province	Employment Status								
	Employed in Nursing					Employed in Other than Nursing	Not Employed	Unknown	Total
	Regular Basis Full Time	Part Time	Casual Basis	Unknown	Total				
Newfoundland*	1.86	3.02	1.80		1.97		5.83	0.00	2.02
PEI	2.38	2.44	2.44		2.41		15.67	3.29	2.52
New Brunswick	4.14	3.15	3.96		3.98		2.49	1.10	3.83
Ontario	3.25	3.10	3.07	0.03	3.30	1.84	2.81	5.76	3.26
Saskatchewan+	5.80	5.97	3.43	0.00	5.10	8.75	9.06	0.91	4.89
Alberta	7.20	2.66	7.45		5.24	3.37	5.10	33.00	5.29
B.C.	6.14	6.99	6.28		6.73	0.08	0.17	157.09	6.45
Total	3.88	3.44	3.97	0.05	3.88	1.80	2.75	7.43	3.80

<sup>1</sup> Data on LPN employment status were not available from Nova Scotia. No data were provided by Quebec, or Manitoba.

+ Excludes 94 non-practising members. Full-time, Part-time, and Employed-unknown were estimated using data supplied on hours worked.

Table 60 shows the age distribution among LPNs for those provinces included in the study. Relative to the 1997 female RNs (Table 4), the LPNs demonstrate a slightly larger proportion of members under age 25 (2.66% vs 1.89%), a slightly lower proportion of 25-34 year olds (19.01% vs 21.64%), an almost identical

percentage of 35-44 year olds (33.82% vs 33.42%), a larger proportion in the 45-54 age group (34.14% vs 31.35%), and a smaller group aged 55-64 (9.57% vs 10.97%).

**Table 60**  
**Practising LPNs by Province<sup>1</sup> and Age Group, 1997**

Province	Age Group							Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+	Unknown	
Newfoundland*	95	666	966	882	84	1	1	2695
PEI	1	119	193	173	55	2	0	543
New Brunswick	109	457	696	690	235	9	0	2196
Ontario	757	6384	10993	11019	3060	219	16	32448
Saskatchewan+	70	299	702	597	142	5	9	1824
Alberta	173	762	1531	1676	554	25	0	4721
B.C.	115	756	1720	1924	622	115	0	5252
Total	1320	9443	16801	16961	4752	376	26	49679
Total %	2.66	19.01	33.82	34.14	9.57	0.76	0.05	100.00

<sup>1</sup> Data on age were not available from Nova Scotia. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes 94 non-practising members.

Tables 61a and 61b below illustrate LPNs' areas of responsibility for those provinces which reported such information. Because there was no standard categorisation for this employment factor, B.C. was used as a model for classification, and specific items have been grouped under headings for all other provinces shown. What is striking is how much variation there is across jurisdictions for areas of responsibility for LPNs. Their deployment in General Medical/Surgical areas varies from a low of 10.72% in Newfoundland to a high of 33.07% in B.C. Similar variation is seen with the Geriatric category, where 58.14% of Newfoundland LPNs are working while only 16.78% of Saskatchewan LPNs are so employed. Ontario and Newfoundland LPNs are much more likely to be working in Psychiatry than are B.C. or Alberta LPNs (7.55% and 6.83% vs 1.45% and 1.43%). It is also of interest that all the jurisdictions included here show some deployment of LPNs in Medical/Surgical Speciality areas such as OR, ER, and Critical Care.

**Table 61a**  
**Number of Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Area of Responsibility, 1997**

Province	Area of Responsibility											Total
	Medical/ Surgical General	Medical/ Surgical Specialties	Maternal/ Newborn	Psych- iatric	Pediatric	Generalized Geriatric	Practice Teaching	Admin- istration	Rehab- ilitation	Other	Unknown	
Newfoundland*	284	8	13	181	45	1540	373	0	22	183	0	2649
New Brunswick	354	94	22	41	23	1101	152	2	34	36	94	1953
Ontario	4326	763	575	1942	317	10597	586	83	184	874	4230	25706
Saskatchewan+	422	62	51	24	58	281	484			214	79	1675
Alberta	1021	235	84	61	68	1095	847	19		145	688	4271
B.C.	1483	173	45	65	58	1369	303	25	31	203	324	4485
Total	7890	1335	790	2314	569	15983	2745	129	215	1278	5675	40739

<sup>1</sup> Data on area of responsibility were not available from Nova Scotia, or Prince Edward Island. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes 94 non-practising members.

**Table 61b**  
**Percent of Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Area of Responsibility, 1997**

Province	Area of Responsibility (%)												Total
	Medical/ Surgical General	Medical/ Surgical Specialties	Maternal/ Newborn	Psych- iatric	Pediatric	Geriatric	Generalized Practice	Teaching	Admin- istration	Rehab- ilitation	Other	Unknown	
Newfoundland*	10.72	0.30	0.49	6.83	1.70	58.14	14.08	0.00	0.00	0.83	6.91	0.00	100.00
New Brunswick	18.13	4.81	1.13	2.10	1.18	56.37	7.78	0.10	0.00	1.74	1.84	4.81	100.00
Ontario	16.83	2.97	2.24	7.55	1.23	41.22	2.28	0.32	0.72	3.40	16.46	4.78	100.00
Saskatchewan+	25.19	3.70	3.04	1.43	3.46	16.78	28.90	0.00	0.00	0.00	12.78	4.72	100.00
Alberta	23.91	5.50	1.97	1.43	1.59	25.64	19.83	0.44	0.00	3.39	16.11	0.19	100.00
B.C.	33.07	3.86	1.00	1.45	1.29	30.52	6.76	0.56	0.69	4.53	7.22	9.05	100.00
Total	19.37	3.28	1.94	5.68	1.40	39.23	6.74	0.32	0.53	3.14	13.93	4.46	100.00

<sup>1</sup> Data on area of responsibility were not available from Nova Scotia, or Prince Edward Island. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes non-practising members.

Tables 62a and 62b provide information on the places of employment listed by LPNs in those jurisdictions which reported such data. Here again, there is no standard for reporting, so B.C.'s categories were used as a template and grouping of information occurred with the other provinces. There is less variation across jurisdictions with place of employment, so that a majority of LPNs were working in a hospital in 1997 and 1998, with significant minorities reporting employment in Extended Care and LTC/Nursing Home. Ontario reported the lowest proportion of LPNs employed in hospitals (38.24%), as opposed to 51.66% in B.C., 66.63% in Saskatchewan, and 44.65% in New Brunswick. Ontario LPNs also appear to have been more likely than other jurisdictions to be working in a Psychiatric Hospital and in Home Care, while Saskatchewan LPNs seem less likely than others to report employment in Extended Care, LTC/Nursing Homes, and Home Care.

**Table 62a**  
**Number of Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Place of Employment, 1997**

Province	Place of Employment												Total
	General Hospital	Rehab	Extended Care	LTC/ Nursing Home	Psychiatric Hospital	Home Care	Community Health	Physician's Office/Family Practice Unit	Education	Industry	Other	Unknown	
New Brunswick	872	5		914	22	82			3	20	35	0	1953
Ontario	9830	571	2456	6244	1725	1714	434	710	91	98	1467	366	25706
Saskatchewan+	1116	97	51	196	7	58	47	41			42	20	1675
B.C.	2317	153	651	632	15	214	100	94	39	8	120	142	4485
Total	14135	826	3158	7986	1769	2068	581	845	133	126	1664	528	33819

<sup>1</sup> Data on place of employment were not available from Newfoundland, Nova Scotia, Prince Edward Island, or Alberta. No data were provided by Quebec, or Manitoba.

+ Excludes 94 non-practising members.

**Table 62b**  
**Percent of Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Place of Employment, 1997**

Province	Place of Employment (%)												Total
	General Hospital	Rehab	Extended Care	LTC/ Nursing Home	Psychiatric Hospital	Home Care	Community Health	Physician's Office/Family Practice Unit	Education	Industry	Other	Unknown	
New Brunswick	44.65	0.26	0.00	46.80	1.13	4.20	0.00	0.00	0.15	1.02	1.79	0.00	100.00
Ontario	38.24	2.22	9.55	24.29	6.71	6.67	1.69	2.76	0.35	0.38	5.71	1.42	100.00
Saskatchewan+	66.63	5.79	3.04	11.70	0.42	3.46	2.81	2.45	0.00	0.00	2.51	1.19	100.00
B.C.	51.66	3.41	14.52	14.09	0.33	4.77	2.23	2.10	0.87	0.18	2.68	3.17	100.00
Total	41.80	2.44	9.34	23.61	5.23	6.11	1.72	2.50	0.39	0.37	4.92	1.56	100.00

<sup>1</sup> Data on place of employment were not available from Newfoundland, Nova Scotia, Prince Edward Island, or Alberta. No data were provided by Quebec, or Manitoba.

+ Excludes 94 non-practising members.

In Table 63 below, position title is described for LPNs resident in the jurisdictions which reported this employment factor. Ontario stands alone as indicating that about 3% of its LPNs hold positions such as Director, Supervisor, Clinical Nurse Specialist, and Head Nurse. By far the largest proportion of LPNs are working under that title for all reporting jurisdictions, and Other titles are also common. Only B.C. has the position title of Orderly, and LPNs are not identified as Nurses' Aides in Ontario.

**Table 63**  
**Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Position, 1997**

Province	Position										
	Director/ Asst	Supervisor/ Co-ordinator	Clinical Nurse	Instructor/ Professor	Head Nurse/ Unit Manager	LPN	Nurses				Total
	Director		Specialist				Aide	Orderly	Other	Unknown	
New Brunswick						1752	4		21	176	1953
Ontario	112	410	58	16	205	18763			4081	2061	25706
B.C.						3269	455	32	461	268	4485
Total	112	410	58	16	205	23784	459	32	4563	2505	32144

<sup>1</sup> Data on position were not available from Newfoundland, Nova Scotia, Prince Edward Island, Saskatchewan, or Alberta. No data were provided by Quebec, or Manitoba.

In contrast to the RNs, all the LPNs organisations provided us with information about hours worked in 1997 or 1998 (Table 64), and the Unknown values (except in Ontario and B.C.) were not as large. Here again there is considerable variation across jurisdictions, with Newfoundland indicating that 22.84% of LPNs reported working fewer than 500 hours in the last year, in contrast to only 6.00% of PEI's LPNs. About 30% of PEI's LPNs worked 500-999 hours in 1997, while only 4.95% of Newfoundland's reported totals in that range. In the full-time range (1500-1999), 66.29% of Newfoundland's LPNs indicated those hours, while only 21.45% of Alberta LPNs were so deployed. However, 19.88% of Alberta LPNs reported working more than 2000 hours in 1997, while the next largest proportion in that category was 6.00% from B.C.

**Table 64**  
**Practising LPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Hours Worked, 1997**

Province	Hours Worked						Total
	< 500	500 -999	1000 - 1499	1500 - 1999	2000 +	Unknown	
Newfoundland*	605	131	151	1756	6	0	2649
PEI	32	164	43	255	5	34	533
New Brunswick	146	400	301	1070	36	0	1953
Ontario	1940	2834	4102	7770	780	8280	25706
Saskatchewan+	253	282	336	709	0	95	1675
Alberta	396	673	1170	916	849	267	4271
B.C.	414	466	722	1764	269	850	4485
Total	3786	4950	6825	14240	1945	9526	41272

<sup>1</sup> Data on hours worked were not available from Nova Scotia. No data were provided by Quebec, or Manitoba.

\* The Newfoundland data shown are for 1998/99.

+ Excludes 94 non-practising members.

Tables 65a, 65b, and 66 below illustrate employment and age information about RPNs. Unfortunately, no data could be obtained from B.C. about full- or part-time status or casual work, and the proportion of missing values for B.C. is very high. Overall, 89.91% of RPNs are employed in nursing, which is a larger proportion of those in practising status than was seen among RNs (82.90%) or LPNs (83.08%) in 1997. In Manitoba and Alberta, RPNs appear to be significantly more likely than RNs to be working in regular full- or part-time positions, and therefore much less likely to be working on a casual basis. Nor do RPNs appear very likely to be working outside nursing.

**Table 65a**  
**Number of RPNs by Province<sup>1</sup> and Employment Status, 1997**

Employment Status									
Province	Employed in Nursing					Empl in Other than Nursing	Not Employed	Unknown	Total
	Full Time	Part Time	Casual	Unknown	Total				
Manitoba+	686	332	54		1072	2	0	67*	1141
Alberta+	718	266	107		1091	9	28	30	1158
B.C.				2211	2211	0	0	355**	2566
Total	1404	598	161	2211	4374	11	28	452	4865

<sup>1</sup> Data on employment status were not available from Saskatchewan.

+ Data from 1998.

\* Employment Status Unknown includes Other=2.

\*\* Data in Employment Status Unknown refer to non-practising members of the RPNABC.



**Table 65b**  
**Percent of RPNs by Province<sup>1</sup> and Employment Status, 1997**

Province	Employment Status (%)								
	Employed in Nursing					Empl in Other than Nursing	Not Employed	Unknown	Total
	Full Time	Part Time	Casual	Unknown	Total				
Manitoba+	60.12	29.10	4.73	0.00	93.95	0.18	0.00	5.87	100.00
Alberta+	62.00	22.97	9.24	0.00	94.21	0.78	2.42	2.59	100.00
B.C.	0.00	0.00	0.00	86.17	86.17	0.00	0.00	13.83	100.00
Total	28.86	12.29	3.31	45.45	89.91	0.23	0.58	9.29	100.00

<sup>1</sup> Data on employment status were not available from Saskatchewan.

+ Data from 1998.

\* Employment Status Unknown includes Other=2.

\*\* Data in Employment Status Unknown refer to non-practising members of the RPNABC.

In comparison to the 1997 RN age distribution (Table 4), RPNs appear to be less likely to be under 25 (1.15% vs 1.89%), aged 25-34 (18.17% vs 21.64%) or aged 35-44 (31.43% vs 33.42%), and show correspondingly larger proportions of 45-54 year olds (34.70% vs 31.35%) and 55-64 year olds (12.48% vs 10.97%).

**Table 66**  
**RPNs by Province<sup>1</sup> and Age Group, 1997**

Province	Age Group							Total
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+	Unknown	
Manitoba+	12	194	486	333	102	14	0	1141
Alberta+	10	240	396	397	103	7	5	1158
B.C.	34	450	647	958	402	29	46	2566
Total	56	884	1529	1688	607	50	51	4865
Total %	1.15	18.17	31.43	34.70	12.48	1.03	1.05	100.00

<sup>1</sup> Data on age were not available from Saskatchewan.

+ Data from 1998.

Table 67 below illustrates place of employment for RPNs in the three jurisdictions for which we obtained data. As with the LPNs, there is no standard format for reporting this employment factor, so B.C.'s classification system was used as template, and some grouping of data from the other provinces occurred. RPNs are unlike both RNs and LPNs in that they appear to be less likely to be concentrated in one single place of employment, the hospital, so that they seem to be working in both General and Psychiatric Hospitals, as well as in LTC and Community Mental Health. There is considerable variation in the likelihood of working with the Mentally Handicapped, with Manitoba indicating the largest proportion of RPNs so employed (12.03%) and B.C. the smallest (1.99%). Manitoba did not report any RPNs working in Group Homes or Substance Abuse, which are fairly routine areas of employment for RPNs in other jurisdictions.

**Table 67**  
**Practising RPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Place of Employment, 1997**

<b>Place of Employment</b>							
<b>Province</b>	Psychiatric Hospital	Mentally Handicapped	Long-Term Care	Corrections	Forensics	Adult Psychiatry	Child Psychiatry
Manitoba+	190	129	169	12			
Alberta+	363	41	86	21	24		12
B.C.	506	44	238	46	152	59	2
Total	1059	214	493	79	176	59	14

... continued below

<b>Province</b>	General Hospital - Psychiatry	General Hospital - Medical	Substance Abuse / Detox	Community Mental Health	Group Home	Education	Geriatric Assessment/ Discharge
Manitoba+	190			258		17	
Alberta+	208	16	20	143	36	8	26
B.C.	299	45	42	269	227	30	34
Total	697	61	62	670	263	55	60

... continued below

<b>Province</b>	Community Health	Physician's Office/Clinic	Self - Employed	Other	Unknown	Total
Manitoba+			12	40	11	1072
Alberta+	17		12	55	3	1091
B.C.	77	6	38	50	47	2211
Total	94	6	62	145	61	4374

<sup>1</sup> Data on place of employment were not available from Saskatchewan.

+ Data from 1998.

Table 68 provides general information about position title for RPNs in 1997. In this case, the categories used by Manitoba formed the basis for classification, as they were limited. Not surprisingly, the majority of RPNs were working as Direct Service Providers. B.C. showed the lowest proportion so classified (68.79%), and had the largest proportion under the heading 'Manager'. Alberta indicated a very small number of Educators, while Manitoba had very few in the Other category.

**Table 68**  
**Practising RPNs Employed In-Province in Nursing,**  
**by Province<sup>1</sup> and Position, 1997**

<b>Province</b>	<b>Position</b>					<b>Total</b>
	Direct Service Provider	Manager	Educator	Other	Unknown	
Manitoba+	916	114	25	8	9	1072
Alberta+	815	119	7	142	8	1091
B.C.	1521	449	33	157	51	2211
<b>Total</b>	<b>3252</b>	<b>682</b>	<b>65</b>	<b>307</b>	<b>68</b>	<b>4374</b>

<sup>1</sup> Data on position were not available from Saskatchewan.

+ Data from 1998.

To conclude, in this section of the report, we have presented in appreciable detail a regional and national picture on the supply of nurses in Canada. There is considerably better information on RNs through the continuous archiving of a core set of data from the regulatory bodies. This has allowed us to undertake extensive analyses around issues of recruitment, retention, and patterns of employment using proxy measures when warranted. The data are robust and study findings are reliable. However, data availability and accessibility factors have posed limitations on the depth of analysis which could otherwise be undertaken.

The information available on LPNs and RPNs is particularly limited and warrants immediate attention. Thus, only simple descriptive analyses have been presented and, where possible, these data are compared to that on the RNs.

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**Volume II**

***The Supply of Nursing Personnel in Canada***

**Appendices**



## Appendix 1

### Provincial and Territorial Regulatory Bodies contacted for Data





## Appendix 1

### Provincial and Territorial Regulatory Bodies contacted for Data

<b>RPN Data</b>	<b>Data Received?</b>
Registered Psychiatric Nurses Association of Manitoba	Y
Registered Psychiatric Nurses Association of Alberta	Y
Registered Psychiatric Nurses Association of Saskatchewan	Y <sup>1</sup>
Registered Psychiatric Nurses Association of British Columbia	Y
<b>LPN Data</b>	
Council for LPN's of Newfoundland	Y
PEI Nursing Assistant Registration Board	Y
NS Practical Nurses Licensing Board	Y <sup>1</sup>
Association of New Brunswick RNA's	Y
Ordre des infirmières et infirmiers auxiliaires du Québec	N
College of Nurses of Ontario	Y
Manitoba Association of LPN's	N
Saskatchewan Association of LPN's	Y
College of LPN's of Alberta	Y
College of LPN's of British Columbia	Y
<b>RN Data <sup>2</sup></b>	
Association of Registered Nurses of Newfoundland	Y
Association of Nurses of Prince Edward Island	Y
Registered Nurses Association of Nova Scotia	Y
Nurses Association of New Brunswick	Y
Ordre des infirmières et infirmiers du Québec	Y
College of Nurses of Ontario	Y
Manitoba Association of Registered Nurses	Y
Saskatchewan Registered Nurses Association	Y
Alberta Association of Registered Nurses	Y
Registered Nurses Association of British Columbia	Y
Yukon Registered Nurses Association	Y
Northwest Territories Registered Nurses Association	Y

<sup>1</sup> These data were incompatible with the unit of analysis (i.e. aggregate data provided).

<sup>2</sup> The Canadian Institute for Health Information (CIHI) supplied the RN data for all the provinces and territories in Canada.



## Appendix 2

### Description of Data Received for RPNs and LPNs

**Appendix 2**  
**Description of Data Received for RPNs and LPNs<sup>1</sup>**

Association & Data Years Received	Reg Date	Reg #	Reg Status	Postal Code	DOB	Gender	Employed or not	Employed other than nsg	Employment Status
<b>RPN Data</b>									
RPN Assn. of Manitoba, 1993 & 1998		x		x	x	x			x
RPN Assn. of Sask., 1990 and 1997 (hard copy, scanned)		(data incompatible with unit of analysis (i.e. aggregate data))							
RPN Assn. of Alb. 1998 Active and Inactive		x	x	x	x	x		x	x
RPN Assn. of BC 1990 and 1997		x	x	x	x	x			x
<b>LPN Data</b>									
Council of LPNs of NF, 1998-99		x		x	x	x	x		x
PEI Nursing Assistants, 1990 and 1997		x		x	x	x			x
NS Practical Nurses' Licensing Board, 1992 and 1997(hard copy)		(data incompatible with unit of analysis (i.e. aggregate data))							
Assn. of New Brunswick RNAs 1990 & 1997		x	x		(Age)	x			x
College of Nurses of Ont. 1992-1998		x		x	x	x	x	x	x
Sask. LPNs, 1990 & 1997		x	x	x	x	x		x	no ft/pt status
College of LPNs of Alb. 1990 and 1997		(reg dates from 1987 up)							
		x	x	x	x	x		x	x
College of LPNs of BC 1990 & 1997	x	x	x	x	x	x		x	x
<b>NO INFORMATION WAS PROVIDED FROM THE FOLLOWING:</b>									
Nursing Assistants of Quebec Manitoba Assn. of LPNs									

... continued

**Appendix 2 (continued)**  
**Description of Data Received for RPNs and LPNs<sup>1</sup>**

Association & Data Years Received	Place of Empl.	Type of Position	Primary Resp.	Hrs Worked	Basic Ed	Post Ed in Nsg	Post Ed in Other than Nsg	Grad Yr.	Yrs of Practice
<b>RPN Data</b>									
RPN Assn. of Manitoba, 1993 & 1998	x	x		x (days)		x		x	
RPN Assn. of Sask., 1990 and 1997 (hard copy, scanned)									
RPN Assn. of Alb. 1998 Active and Inactive	x	x	x	x (hrs/yr)	(only highest level of education available)		x	x	x
RPN Assn. of BC 1990 and 1997	x	x	x	(yes/no)		x	x	x	
<b>LPN Data</b>									
Council of LPNs of NF, 1998-99			x	(hrs/wk)	x	x		x	
PEI Nursing Assistants, 1990 and 1997				(hrs/yr)				x	
NS Practical Nurses' Licensing Board, 1992 and 1997(hard copy)									
Assn. of New Brunswick RNAs 1990 & 1997	x	x	x	(hrs/wk)	x	x		x	x
College of Nurses of Ont. 1992-1998	x	x	x	(hrs/yr)	x	x	x	x	
Sask. LPNs, 1990 & 1997	x	x	x	(hrs/yr)	x				
College of LPNs of Alb. 1990 and 1997			x	(hrs/yr)	x			x	
College of LPNs of BC 1990 & 1997	x	x	x	(hrs/wk)	x			x	
<b>NO INFORMATION WAS PROVIDED FROM THE FOLLOWING:</b>									
Nursing Assistants of Quebec Manitoba Assn. of LPNs									

<sup>1</sup> Note that although two separate years of data were received from most Associations, only the most recent year's data were utilized. Thus, the fields utilized are checked for the most recent year of data provided (except for B.C. where both 1990 and 1997 were checked).



**Health Human Resources Unit  
Centre for Health Services and Policy Research  
The University of British Columbia  
429 - 2194 Health Sciences Mall  
Vancouver, B.C. V6T 1Z3**

Telephone: (604) 822-4810

Fax: (604) 822-5690

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