

2008
HOSPITAL SECTOR
NURSING PLAN REPORT

Sara Lankshear RN, PhD (c)

Janet Rush RN, PhD

TABLE OF CONTENTS

HEADING	PAGE
Acknowledgements	2
Report Summary	3
Introduction	6
Provincial Results	9
Results according to Hospital Type/Bed Size	
Type 1: 50 beds or less	32
Type 2: 50 – 200 beds	48
Type 3: 201 – 500 beds	66
Type 4: 500 beds or greater	84

ACKNOWLEDGEMENTS

This report was funded by the Ontario Ministry of Health and Long-Term Care.

This research has been generously funded by a grant from the Government of Ontario. The views expressed in this report do not necessarily reflect those of the Government of Ontario.

Appreciation also extended to Sam Rush, Research Assistant for his significant contributions to the various stages of the Nursing Plan project.

This report is in the public domain and may be used and reprinted without special permission. Any references to the Nursing Plan Report should utilize the following citation:

Lankshear, S. & Rush, J.(2010). 2008 Hospital Sector Nursing Plan Report, Ontario Ministry of Health & Long Term Care, Toronto, Ontario.

Questions or comments regarding this report can be directed to:

Sara Lankshear RN, PhD (c)

Project Lead

Relevé Consulting Services

Email: sara@releveconsulting.ca

Phone: 705-533-0778

Reference: RFP#FFS-1997.01 Research and Development of the 2008 Nursing Plans

Date of Report: May 2010

REPORT SUMMARY

The purpose of the Hospital Sector Nursing Plan Report is to provide senior nurse leaders and their colleagues with a valuable source of information depicting the current state of nursing within their organizations. The indicators, included in the 2008 Hospital Sector Nursing Plan, were derived from consultations with Chief Nursing Executives/Officers who expressed a need to have access to data that went beyond nursing human resources (i.e. FTEs and head counts) and included important areas such as nursing leadership infrastructure, access to advanced practice nursing roles, manager span of control and strategies to address the orientation and education needs of current and future nursing staff. It is hoped that this broader collection of information can better inform current and future strategies for nursing at the organizational, professional, and provincial levels. Upon review of the 2008 Hospital Sector Nursing Plan submissions, three areas emerged that would benefit from reflection and ongoing dialogue within individual organizations, the Hospital Sector, as well as with nursing colleagues in the education, research and policy arenas:

1. Changes to Staff Mix: Fifty-four percent of the Hospitals included in the 2008 Nursing Plan Report indicated they had undertaken changes to their existing skill mix. The reasons cited as drivers for the changes included fiscal pressures, changes in patient populations, and changes to educational programs and basic competencies (e.g. RPN Diploma preparation). There was also an increase in the presence of unregulated care provider roles within the Hospital Sector, with 92% of hospitals reporting the presence of unregulated care provider roles as part of the staffing complement. This represents a significant increase from 2005/06 Nursing Plan data where 35% of Hospitals indicated the presence of unregulated care provider roles. The changes to skill mix and care provider roles create opportunities for organizational strategies focusing on areas such as: team functioning, role clarity, scope of practice, professional accountability (e.g. supervision of unregulated care providers) and care delivery models as well as the

- monitoring of indicators to determine impacts on patient outcomes and staff satisfaction.
2. Utilization Patterns (Agency, Overtime, and Casual): Based on the information provided, there continues to be a significant amount of nursing hours provided through overtime, use of agency and casual resources. Based on the hours provided, an equivalent of 3875 Full-time equivalents (FTE) for Registered Nurses and an equivalent of 1163 Full-time equivalents (FTE) for Registered Practical Nurses were attributed to overtime, agency and casual utilization. In order to optimize existing fiscal and human resources, organizations may benefit from conducting root cause analyses to identify strategies to minimize the utilization of agency, overtime, and casual hours.
 3. Leadership Succession Planning: The 2008 Nursing Plan Report includes information specific to challenges related to nursing leadership succession planning. Comments provided included: Insufficient qualifications of applicants, diversity of role/excessive workload associated with manager positions, limited ‘transition’ roles to prepare staff, more non-nurses than nurses applying (therefore recruiting social workers, Occupational Therapists (OTs) and unregulated staff) and competition with other sectors. Strategies to support those interested in formal leadership roles (e.g. educational preparation, “try-it-out” experiences, and project leadership opportunities to enable skill development) may be helpful to address current challenges for leadership succession planning. In addition to development and transition opportunities, there is merit in also reviewing the current scope of a “typical” manager role as the expanding depth and breathe of accountabilities of the role are viewed as a deterrent to potential candidates.

This report contains the results of the initial analysis conducted. There may be further opportunities for ongoing data collection and analysis of any or all of these items in order to continue building a valuable source of information to assist with future planning and evidence-based decision making.

Nursing leaders are encouraged to utilize the information contained in this report to initiate dialogue regarding the current and future opportunities and challenges for the nursing profession within individual organizations, and throughout our complex health care environment.

We hope you find the information contained here a useful resource for future planning within your individual hospital and within the Hospital Sector.

INTRODUCTION

The Nursing Plan was first implemented in 1999 as a result of recommendations made in the Nursing Task Force Report: *Good Nursing, Good Health: An investment for the 21st Century*. The initial aim of the Nursing Plan was to collect meaningful data regarding the status of nursing services within the Hospital Sector. In order to ensure the indicators being collected were relevant to nursing leadership, a series of consultations were undertaken with Chief Nursing Executives and other senior nursing leadership roles. The Hospital Sector Nursing Plan was first implemented in 2005.

This report represents the fourth iteration of Nursing Plan data collection and reporting process. This report contains the results of the data collected from the 2008 Hospital Sector Nursing Plan. We are pleased to report that 102 hospitals submitted Nursing Plan data, representing 70% of the total number of Hospitals, across all 14 Local Health Integrated Networks (LHINs) in Ontario.

Table 1, below, depicts the number of Nursing Plan submissions according to LHIN:

TABLE #1: NUMBER AND PERCENTAGE OF HOSPITAL NURSING PLAN SUBMISSIONS BY LHIN			
LHIN #	LHIN Region	# of hospitals who submitted Nursing Plans	% of Nursing Plans submitted in total
1	Erie St. Clair	6	6%
2	South West	10	10%
3	Waterloo Wellington	8	8%
4	Hamilton Niagara Haldimand Brant	8	8%
5	Central West	2	2%
6	Mississauga Halton	3	3%
7	Toronto Central	18	18%

TABLE #1: NUMBER AND PERCENTAGE OF HOSPITAL NURSING PLAN SUBMISSIONS BY LHIN

LHIN #	LHIN Region	# of hospitals who submitted Nursing Plans	% of Nursing Plans submitted in total
8	Central	5	5%
9	Central East	6	6%
10	South East	4	4%
11	Champlain	10	10%
12	North Simcoe Muskoka	5	5%
13	North East	13	13%
14	North West	4	4%
Total		102	100.0

Description of Hospitals

To enable hospitals to better compare their results, based on overall size, the analysis of 2008 Hospital Sector Nursing Plans has been done according to “bed size” categories (see Table 2). Bed size categories, established for this analysis, are as follows:

- a. Type 1 = 50 beds or less;
- b. Type 2 = 51–200 beds;
- c. Type 3 = 201–500 beds; and
- d. Type 4 = Greater than 500 beds.

TABLE 2: NUMBER AND PERCENTAGE OF NURSING PLANS SUBMITTED BY “BED SIZE” CATEGORY

Hospital Type	Number of Nursing Plans submitted	Percentage of total Nursing Plans submitted
Type 1: 50 beds or less	13	12.7%
Type 2: 51 – 200 beds	35	34.3%

Type 3: 201 – 500 beds	32	31.4%
Type 4: Greater than 500 beds	22	21.6%
Total *	102	100%

* Included in the overall total are Nursing Plans submitted by 24 designated teaching hospitals, representing 23.5% of Nursing Plans submitted. Due to the diverse characteristics of these teaching hospitals (e.g. specialty areas, size and client populations), a separate analysis and report was not generated for the teaching hospitals.

Data Analysis

Data were analyzed using SPSS software (version 16.0). Initial descriptive statistics and frequency distributions were generated for each item. To enhance data quality, items with significant outliers were identified and requests for clarification were forwarded to the relevant organizations.

How to Use and Read This Report

The information in this report reflects the **2008/09 fiscal year**. The report describes a wide range of nursing human resource, service delivery and quality of work life issues. It is intended that this report will supply data that will be useful in planning, communicating and forecasting nursing and in identifying related infrastructure supports required to deliver client care. To aid in this, the information included in this report provides a variety of perspectives regarding the state of nursing in Ontario’s hospitals. Nursing leaders are encouraged to discuss the report widely, and consider the current and future opportunities and challenges being presented by our complex health care environment.

Missing Data

For items where a significant amount of data was missing, the degree of missing data will be indicated throughout the report.

2008
HOSPITAL SECTOR
NURSING PLAN REPORT
OVERALL PROVINCIAL
RESULTS

Overall Provincial Results

Section A: Facility Description and Nursing Leadership Structure

Beds in service

This report represents a total of 31,052 inpatient beds. The number of beds per organization responding ranged from 16 to 1,204 (mean 307.4, Standard Deviation (SD) 271.4). Approximately half of the organizations (48/102, 47%) reported that they were merged organizations with an average number of three sites and the largest of the merged organizations encompassing nine sites.

Nursing Leadership

Almost all (101/102, 99%) of the participating hospitals, reported having a designated Chief Nursing Executive/Officer (CNE/O). The CNE/O was defined as the senior nurse employed by the hospital reporting directly to the administrator and responsible for nursing services provided in the hospital. The titles of the senior nurse leader varied, from a sole CNE/O title, to a combination of CNE and Vice-President (VP), and also included the roles at a Director and other levels (see Table 1).

Most senior nursing leaders (n = 94, 93.1%) reported directly to the CEO/President. The vast majority of the regulated nursing staff (93.4%) reported to a manager who is a nurse.

TABLE 1: SENIOR NURSING LEADERSHIP TITLES	
Title*	N
Chief Nursing Executive/Officer (sole title)	13
CNE / VP (Professional program)	23
CNE / VP (Operational program)	27

TABLE 1: SENIOR NURSING LEADERSHIP TITLES

Director role	6
Other roles specified: VP or Senior VP (2), VP (program)/CNE (14), Senior or Executive VP (professional program)/CNE (11), sole title without ‘nurse’ in role (6), Director or Assistant Director (program)/CNE (5), Leader/CNE (1), CNE/Assistant Executive Director (1), Chief Operating Officer (COO) (1), Chief Clinical Officer (1), Assistant Administrator (patient services) (1), Manager (patient care services) (1)	
<i>*Multiple answers provided on some submissions result in titles adding up to >101.</i>	

Advanced Practice Roles

Respondents were asked to provide the numbers and full time equivalents (FTEs) of advanced practice roles that supported nursing care in terms of practice, education and research. Wide variations were observed in the numbers, means and standard deviations, with the presence of advanced practice resources being the lowest in Type 1 hospitals and highest in Type 4 hospitals. A review of the previous Nursing Plan Reports (e.g. 2004/05 to present) reveals a slight increase in the average number of Nurse Practitioner (NP) and Nurse Researcher positions, while the average number of Educator and Clinical Nurse Specialist positions has remained fairly consistent.

TABLE 2: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

Advanced Practice Roles	N	Min.	Max.	Sum	Mean	Standard Deviation
Nurse Educators (FTEs)	102	.00	45.00	716.22	7.02	8.78
Nurse Educators (head count)	102	.00	47.00	800.50	7.84	9.73
Clinical Nurse Specialist (FTEs).	101	.00	71.71	396.81	3.92	9.43

TABLE 2: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

Advanced Practice Roles	N	Min.	Max.	Sum	Mean	Standard Deviation
Clinical Nurse Specialist (head count)	101	.00	87.00	405.50	4.01	10.26
Nurse Practitioner (FTEs)	102	.00	53.60	388.58	3.80	7.94
Nurse Practitioner (head count)	102	.00	57.00	439.00	4.30	8.981
Nurse Researcher* (FTEs)	97	.00	27.00	72.33	.74	3.43
Nurse Researcher (head count)	97	.00	40.00	88.50	.91	4.64

**defined as predominantly hired into a formal position dedicated to nursing research*

Section B: Nursing Human Resources

Registered Nurse and Registered Practical Nurse Characteristics

The average age of both Registered Nurses (RNs) and Registered Practical Nurses (RPNs) is about 44 years, with close to 20% in each category being over the age of 55 years. The respondents reported, on average, 23.8% of RNs have a BScN degree (see Table 3).

TABLE 3: RN and RPN CHARACTERISTICS

Characteristic	Mean (%)	SD
Average Age: RNs	44.2	3.50
Percent of RNs >55 years*	19.7%	11.22
Percent of RNs with BScN degree **	23.6%	18.28

TABLE 3: RN and RPN CHARACTERISTICS

Average Age: RPNs	43.8	3.28
Percent of RPNs >55 years*	19.3%	12.32

* Review of previous Nursing Plan data reveals a steady rise in the number of RNs and RPNs who are 55 years of age or older. The percentage of RNs that are 55 years/older has risen from 13.3% (2005/06 data) to 19.7% (2008/09 data). The percentage of RPNs that are 55 years or older has risen from 14.3% (2005/06 data) to 19.3% (2008/09 data).

** Regarding the percentage of degree-prepared RNs, 54 (53%) hospitals provided this information with a range of responses from 0.24% - 85%. Type 3 hospitals employed the highest overall percentage of degree-prepared RNs.

Full-Time/Part-Time Employment Classification of Registered Nurses and Registered Practical Nurses

In total, this Nursing Plan represents 62,846.2 regulated staff in full-time and part-time positions, the equivalent of 52,018.14 full time equivalents (FTEs).

TABLE 4: RNS and RPNS BY EMPLOYMENT CLASSIFICATION

Employment Classification	N	Min	Max	Sum	Mean
Full Time Registered Nurses (RNs): Total number	101	8.00	2285.00	35445.90	350.94
Full Time RNs: Total FTEs	100	8.00	2222.50	33514.05	335.14
Part Time RNs: Total number	100	2.00	1152.00	16144.30	161.44

TABLE 4: RNS and RPNS BY EMPLOYMENT CLASSIFICATION					
Employment Classification	N	Min	Max	Sum	Mean
Part Time RNs: Total FTEs	95	.00	538.92	8749.87	92.10
Full Time Registered Practical Nurses (RPNs): Total number	101	.00	386.00	6437.00	63.73
Full Time RPNs: Total FTEs	99	.00	368.41	6037.40	60.98
Part Time RPNs: Total number	101	.00	212.00	4819.00	47.71
Part Time RPNs: Total FTEs	96	.00	132.67	2716.82	28.30

Job Share Positions

Approximately 73% of those responding, stipulated that they had formal job-share positions; defined as two nurses sharing one full time ‘line’ in the schedule.

Unregulated Care Providers (UCP)

The average number of unregulated care providers per organization was 44 (see Table 5). Review of the previous Nursing Plan data reveals a marked increase from 35% (2005/06 data) to 92% (2008/09 data) in the number of hospitals reporting the inclusion of UCPs as part of their staffing compliment.

TABLE 5: UNREGULATED CARE PROVIDERS						
UCPs	N	Min	Max	Sum	Mean	Standard Deviation
Total Number	94	.00	552.00	4126.00	43.89	82.63
FTEs	89	.00	366.30	2736.55	30.74	59.29

Float Pool/Resource Team

Fifty-three percent (n =54) of the organizations reported the presence of a float pool of nurses that could be called upon to act as interim resources during crises, peak periods or in situations of special need.

Nursing Students

Hospitals provide valuable clinical practice settings for students in baccalaureate nursing and practical nursing programs. Various questions were posed regarding the presence and numbers of students (groups and preceptored practicum students), as well as issues pertaining to student volumes, organizational needs, and other concerns.

All (96, 94.1%) but four of the responding organizations reported that students were placed in their units and programs. The volume of students is represented in Table 6. Overall, the sum total of Nursing (BScN) students in Ontario's organizations where Nursing Plan data were reported was 18,728, and the total number of Practical Nursing students was 8,238. Eighty-eight organizations reported the presence of 4,006 consolidation (practicum) Nursing (BScN) student placements

TABLE 6: NURSING (BScN), PRACTICAL NURSING AND NURSING (BScN) CONSOLIDATION STUDENTS						
Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Nursing (BScN) Students	95	.00	1305.00	18727.87	197.13	246.23

TABLE 6: NURSING (BScN), PRACTICAL NURSING AND NURSING (BScN) CONSOLIDATION STUDENTS

Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Practical Nursing Students	94	.00	443.00	8328.00	88.59	101.22
Total number of consolidation/practicum Nursing (BScN) students (precepted, practicum experience)	88	.00	214.00	4006.00	45.52	53.08

Issues identified relating to student placements:

- 60.6% would like more students;
- 39.4% would prefer fewer students;
- 71.6% reported affirmatively that they require more staff to function as preceptors;
- 9 organizations (9.2%) felt that they were too far from nursing schools;
- 9 organizations reported that they did not receive requests for student nurse placements;
- 56 organizations (57.1%) answered affirmatively that they needed more formal preceptor programs;
- Desire to have Masters-level nursing graduate students;
- Size of organization (small hospitals have limited space); and
- Consider adding information about other learners, e.g., ‘refresher’ students.

Other comments regarding students, included:

- Registered Practical Nursing students have consolidation practicum placements, too;
- Placements are challenged by program changes/transfers;
- Students could be placed on ‘evening’ shifts;
- There are transportation and accommodation issues;
- Nurses must accept their obligation to precept students; and
- Strengthened collaboration with schools would be valued.

Although 94% of the hospitals indicated that they enjoy having students, and would like to accommodate more student placements, there is a significant amount of “in kind”

nursing resources, in the form of nurse preceptors, provided by hospitals to adequately support nursing student placements and creating optimal learning experiences for our future nursing colleagues. Based on the total number of consolidation placements provided (e.g. 4006), this would equate to approximately 230 Nursing FTEs of “in kind” direct preceptor support. This calculation is based on the following assumptions: 6 week consolidation placement, requiring varying degree of preceptor direct support (minimum of 112 hours/placement) X 3140 placements÷1950 hours. Upon review of previous Nursing Plan reports, supports for nurses functioning in the role as preceptor is a constant theme expressed by hospital CNEs.

New Graduates

In total, 2,617 new RNs and 669 new RPNs were reported as being hired in 2008/09. Of these, 62% of new RN graduates were hired into full time positions and 13% of new RPN graduates were hired into full time positions (see Table 7).

TABLE 7: RN and RPN NEW GRADUATE HIRES						
New Graduates	N	Min	Max	Sum	Mean	Standard Deviation
RN new graduates hired	99	.00	279.00	2617.00	26.43	49.92
RN new graduates: hired into permanent full time positions	99	.00	275.00	1634.00	16.50	41.33
RPN new graduates hired	96	.00	65.00	669.00	6.96	9.76
RPN new graduates: hired into permanent full time positions	94	.00	26.00	87.00	.92	3.11

Upon review of the previous Nursing Plan data, there is a marked increase in the percentage of new RNs who are hired into full time positions from 34% (2005/06 data) to 62% (2008/09 data). During the same time frame, there is a slight increase in the number of RPNs who are hired into full time positions in the Hospital Sector, from 11% (2005/06 data) to 13% (2008/09 data) (see Table 8).

TABLE 8: PERCENTAGE OF NEW RNS AND RPNS HIRED INTO FULL TIME POSITIONS				
Designation	2004/05	2005/06	2006/07	2008/09
RN	33.8%	29.4%	50%	62%
RPN	11%	10%	13%	13%

Section C: Utilization

Budgeted and Worked Hours, Agency, Casual and Overtime Hours

TABLE 9: BUDGETED AND WORKED HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Total Budgeted RN hours	93	216.78	4578687.00	73837648.71	793953.21	9.93
Total Worked RN Hours	101	185.20	3933208.20	70062735.67	693690.45	8.26
Total Budgeted RPN hours	91	.00	932137.00	14654430.01	161037.69	1.53

TABLE 9: BUDGETED AND WORKED HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Total Worked RPN Hours	99	.00	1079034.00	15569337.08	157266.03	1.52

TABLE 10: AGENCY, CASUAL AND OVERTIME HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Agency Hours Used: RNs	95	.00	163016.00	867659.08	9133.25	24318.16
Agency Hours Used: RPNs	90	.00	38515.00	133560.62	1484.00	5167.18
Casual Hours: RN	96	.00	335017.00	4081675.19	42517.44	59924.25
Casual Hours: RPN	92	.00	334108.00	1663492.59	18081.44	43031.55
Total Number of Overtime Hours: RN	102	44.80	158031.79	2608263.25	25571.20	31856.87
Total Number of Overtime Hours: RPN	101	.00	25737.00	472155.54	4674.80	5612.49

Reasons for Overtime

From a list of five common reasons for overtime, respondents were requested to stipulate their rank order. Table 11 depicts the placement of the ranked responses. Replacement of staff was the key priority in terms of the number of respondents who ranked the issue as their ‘number one’. Following this, were workload, filling vacancies, coverage for

education and bringing on additional staff for infection control. Respondents entered ‘other’ reasons and the predominant reasons were: for constant care/patient observation, transfers and transporting patients, the ‘consecutive weekend’ clause in the ONA contract, need for special skills, leaves, overcapacity (ALC patients) and limitations in the part time pool.

TABLE 11: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)					
Issue	#1 Rank	#2 Rank	#3 Rank	#4 Rank	#5 Rank
Replacement, sick	64 (64.0%)	31 (31.0%)	2 (2.0%)	1 (1.0%)	2 (2.0%)
Workload	26 (26.0%)	31 (31.0%)	27 (27.0%)	12 (12.0%)	4 (4.0%)
Vacancies	8 (8.1%)	22 (22.2%)	35 (35.4%)	27 (27.3%)	7 (7.1%)
Education/Orientation	1 (1.1%)	6 (6.5%)	13 (14.0%)	30 (32.3%)	43 (46.2%)
Infection Control (outbreaks/isolation)	0	7 (7.4%)	20 (21.3%)	27 (28.7%)	40 (42.6%)
Other Comments: Constant care, transports and transfers, replacement for ‘leaves’, overcapacity (due to high ALC volumes), need for specific skill or certified staff, limited casual and/or part time pool, the ONA contract (consecutive weekend rule).					

Sick Time and Turnover Rates

Documented sick time hours for nursing staff is found in Table 12.

- The overall sick time hours for RNs equates to 1,991.33 FTEs;
- The overall sick time hours for RPNs equates to 442.5 FTEs; and
- The turnover rate was provided as a percentage where respondents were asked to calculate turnover rate by adding both the full time and part time terminations (RN or

RPN) divided by the total number in that category. Terminations were defined as actual exits from the organization, not unit terminations for internal transfer purposes. Turnover rates were roughly the same for both categories of nursing staff.

TABLE 12: SICK TIME AND TURNOVER RATE (RN AND RPN)						
	N	Min	Max	Sum	Mean	Standard Deviation
Total RN sick hours	102	601.00	316886.00	3883096.14	38069.57	51888.27
Total RPN sick hours	101	.00	62289.00	862827.51	8542.84	9942.97
Turnover rate: RN (percentage)	99	.00	63.30	773.14	7.80	7.30
Turnover rate: RPN (percentage)	98	.00	37.00	780.81	7.96	6.84

Reasons for Turnover

A list was provided for staff to identify (yes/no) if the item represented a reason for turnover at their organization. Table 13 is a summary of the number (and %) of respondents who chose the particular item listed. Retirement, relocation, and job advancement at another organization were the top reasons. Other comments were solicited to identify additional reasons and these included, family, personal, medical and quality of life issues. More than one-quarter (28.6%) of hospitals indicated that they did not know the reason(s) for turnover.

TABLE 13: REASONS FOR NURSING TURNOVER	
Reasons	Total Number/Percentage
Retirement	83 (83.8)
Relocating out of district	72 (72.7)

TABLE 13: REASONS FOR NURSING TURNOVER	
Reasons	Total Number/Percentage
Job advancement elsewhere	62 (62.0)
Termination	29 (29.3)
Do not know	28 (28.6)
Returning to school	26 (26.3)
Work Stress	17 (17.3)
Death	8 (8.1)
Other reasons specified: Commuting, family/personal reasons, medical reasons, quality of life, geographic setting (remote, northern), license rescinded or failed CNO exam, not 'active', resignation, left for full time employment.	

Upon review of the Nursing Plan data for 2004/05 to 2008/09, there is a marked increase in the amount of overtime for both RNs and RPNs (see Table 14 and Table 15), with a significant increase between 2006/07 and 2008/09. Agency utilization has fluctuated over the past four years, with the highest agency utilization for both RNs and RPNs during 2006/07 fiscal year.

TABLE 14: COMPARISON OF RN CASUAL, AGENCY AND OVERTIME (CALCULATED AS FTES)				
	2004/05	2005/06	2006/07	2008/09
Casual	2119	1810	1241	2093
Overtime	811	976	967	1337.5
Agency	471	328	580	445
Total (FTEs)	2671	3114	2788	3875.5

TABLE 15: COMPARISON OF RPN CASUAL, AGENCY AND OVERTIME (CALCULATED AS FTES)				
	2004/05	2005/06	2006/07	2008/09
Casual	615	522	478	853
Overtime	142	157	165	242
Agency	74	72	153	68.5
Total FTEs	831	751	796	1163.5

Retired Staff – Returning to Work

Of growing interest is the presence of “retired nurses” (RNs and RPNs) returning to the workplace in a variety of capacities (see Table 16). Ninety-one percent (n= 92) of organizations indicated that this was their experience. Options were provided for respondents to identify the roles, paid and unpaid, usually assumed by the returning, retired nurses. Table 16 provides the data and identifies that returning to direct care is most usual for returning retirees, with others assuming project work, volunteer roles or providing education support. Upon review of previous Nursing Plan data, this item was included for the first time in the 2005/06 Nursing Plan. At that time, 78% of hospitals reported the presence of retired nurses as compared to 2008/09, where this has increased to 92% of all reporting hospitals. The roles assumed across the various reporting periods remain the same: direct care followed by project work and educational roles (e.g. preceptors). In light of the growing number of nurses approaching retirement (see Table 3: RN and RPN Characteristics), the experiences of the “retired nurse cohort” may be a valuable source of information regarding retaining experienced nurses within the practice setting.

TABLE 16: ROLES ASSUMED BY RETIRED NURSES, UPON RETURN TO THE WORKPLACE

Returning Roles	Yes (%)
Direct Care	90 (95.7%)
Project Work	36 (38.3%)
Volunteer Role	32 (34.8%)
Educator/Mentor/Preceptor	20 (21.3%)
Other roles: Patient transfers (RPN), Pharmacy (RN), acting clinical manager, administrative work, employee health, new hospital transition, part time and casual roles	

Section D: Education and Orientation

Owing to the rapid changes in acuity and technology, continuing nursing education is needed to address organizational accountability for safe, high quality care. Most organizations allocate hours for education in their forecasted budgets. This section of the Nursing Plan details hours of nursing education and orientation.

Inservice hours, i.e., time when an on-duty staff member may attend a teaching session or rounds, is not included, given that most organizations do not capture these hours. . It was understood that orientation hours may vary, unit to unit, however, respondents were asked to provide the average number of hours for categories of ‘new’ graduate nursing staff (see Table 17). Education hours for Unregulated Care Providers (UCP) are also included in Table 17. Wide variations were observed.

- Minimum RN orientation hours: 29 hours, about 4 days; and
- Minimum RPN orientation hours: 25.5 hours, about 3.5 days.

TABLE 17: EDUCATION AND ORIENTATION ALLOCATED HOURS						
Allocated Hours	N	Min	Max	Sum	Mean	Standard Deviation
Total hours: Nursing staff education*	63	.00	124309.00	722611.93	11470.03	21086.88
Paid education hours: RN*	99	.00	118687.00	1078617.98	10895.13	21096.52
Paid education hours: RPN*	98	.00	20754.00	166121.56	1695.11	3119.64
Number of paid education hours: UCP	80	.00	2069.00	17410.97	217.63	454.16
Approximate minimum number of orientation days for one new staff: RN	99	2.000	450.000	2859.200	28.88	59.12
Approximate minimum number of orientation days for one new staff: RPN	99	.00	450.00	2528.20	25.53	56.30

**does not include in-service education hours*

Section E: Manager Span of Control

This section focuses on describing the nurse middle manager in terms of average age, numbers of sites, units and direct reports (see Table 18). Based on the information provided, the average age of the nurse manager was 48 years of age, with 61% being degree prepared. The vast majority of nurse managers (83%) report to administrators who are also nurses. In terms of span of responsibility, the average number of units per manager is 5.2 and 38% of respondents noted that managers have responsibilities at more

than one site (applicable to merged organizations). The number of direct reports per manager ranged from a minimum mean of 27 (*range 0-125*) to a maximum mean of 104 (*range 1-339*).

TABLE 18: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
Average age of nurse managers	94	28.00	56.00	4506.76	47.94	4.34
Managers who are degree (BN/BScN) prepared (%)	79	.00	100.00	4812.93	60.92	32.80
Number of managers who have RNs and RPNs as direct reports	100	1	100	1743	17.43	19.02
Of that total number of managers in the above question, indicate the number of managers who are not nurses	101	.00	100.00	523.00	5.17	14.88
% of nurse managers who report to a nurse who functions in an administrative capacity (i.e. Director level position)	101	.00	100.00	8378.90	82.95	25.95
Average number of units per manager at your facility	90	1.00	96.00	459.21	5.10	14.73
Lowest number of direct reports per manager	98	0	125	2629	26.82	26.44
Highest number of direct reports per manager	97	1	339	10057	103.69	59.77

On Call and Off-hours Organization/Unit Supervision

On-call (off-site) nurse manager responsibilities for after hours and weekends is expected in 64% of responding organizations. In 65 of the responding organizations (65%), there are on-site individuals (managers, coordinators, supervisors) for after hours and weekends.

Recruitment Challenges (Middle Manager Roles)

Leadership roles in management and administration have been cited as a challenge over the past several years. In order to scan for information and explanation, questions were asked about the challenges. From a list of recruitment challenges, the respondents were asked to indicate any, as applicable in their organization. Space was left for the respondent to indicate other comments. Table 19 details the responses. The predominant challenge was identified as few external and internal applicants. Other comments, also reported in Table 19, are issues primarily related to:

- Qualifications of applicants (internal and external);
- Financial remuneration; and
- Role demands.

TABLE 19: RECRUITMENT CHALLENGES (MIDDLE MANAGER ROLES)

Recruitment Challenge	Yes	No
Few External Applicants	67 (65.7%)	28 (29.5%)
Few Internal Successors	63 (65.6%)	33 (34.4%)
Role Attributes	49 (52.1%)	45 (47.9%)
Other written comments include: Insufficient qualifications (applicant quality), wages/salary/compensation/pay inequity, shift work (shift co-ordinators), uncertainty/fiscal situation, positions are 'non union', diversity of role/excessive workload, geographic setting (hard to attract to remote/northern areas), limited 'transition' roles to prepare staff, limited movement, more non-nurses than nurses applying (therefore recruiting social workers, OTs and unregulated staff) and competition with other sectors.		

Section F: Issues and other comments

This section asked respondents, from a list of current nursing issues, to rank in order of priority (1 being the most important to 5 being the least important), those most critically important at this time. Table 20 details the ranking. Recruitment and retention, along with patient acuity/complexity were the priority issues, followed by an aging workforce, retention and technology complexity. Space was allocated for the respondent to add other key issues.

TABLE 20: CRITICAL ISSUES IN NURSING (AS RANKED BY RESPONDENTS)					
Critical Issue	#1	#2	#3	#4	#5
Recruitment /Retention	36 (36.7%)	18 (18.4%)	18 (18.4%)	17 (17.3%)	9 (9.2%)
Patient Acuity/Complexity	32 (32.7%)	13 (13.3%)	28 (28.6%)	18 (18.4%)	7 (7.1%)
Aging Workforce	21 (21.0%)	33 (33.0%)	23 (23.0%)	13 (13.0%)	10 (10.0%)
Retention/Turnover	4 (4.0%)	19(19.2%)	17 (7.2%)	29 (29.3%)	30 (30.3%)
Technology/Complexity	2 (2.1%)	15 (15.8%)	13 (13.7%)	22 (23.2%)	43 (45.3%)
Other specified issues: Workload, overcapacity>100% , educational support, research capacity, new initiatives (support for projects, staff development, 'dealing' with the complexity), career advancement, work life issues (morale, attitude, respect from others), scheduling (devising creative schedules to meet expectations), balancing budget, increasing capacity for student placements and retirements.					

Programs/Units with Current Staff Shortages

To ascertain the staffing recruitment challenges by unit or specialty, respondents were provided with a list of 4 areas (see Table 21), and asked to indicate if there were current shortages of staff. Key areas identified were critical care and emergency departments. Space was left for respondents to identify other areas not listed, but important, in terms of shortages in their organizations. Obstetrics and medical/surgical were identified as other key areas.

TABLE 21: AREAS/UNITS WITH CURRENT NURSING SHORTAGES

Units/Programs	Yes	No
Emergency Department	53 (59.6%)	36 (40.4%)
Critical Care Unit(s)	46 (51.7%)	43 (48.3%)
Mental Health	21 (25.0%)	63 (75.0%)
Complex Continuing Care	20 (23.0%)	67 (77.0%)
Other areas specified: Obstetrics (OBS) (14), Medical/Surgical (13), Peri-Operative/Operating Room (7), Rehabilitation/Long-Term Care (5), Oncology (2), Float Pool, Primary and Prevention Care and Mental Health. <i>(Numbers in brackets identify the tally of like responses).</i>		

Staff-mix Changes and Drivers for Staff-mix Changes

Respondents were asked to identify if changes had occurred in the mix of staff (the proportions of the staff categories, such as RN, RPN and UCP or other care giving staff) in their organization. If staff-mix changes were made, the respondents were asked to identify the key drivers for the change. Over half (54.5%) of the organizations noted that staff-mix changes had been undertaken. Drivers for the changes were identified as:

- Fiscal pressures (43/54, 79%);
- Changes in the patient population (33/54, 61%); and

- Other factors, such as:
 - RN issues – shortages, strengthening the role, operate at full scope, research study results;
 - RPN issues – introduction of RPNs, change in scope (increased) and curriculum;
 - UCP issues – decreased the numbers to improve quality of care; and
 - System issues – ALC complement, nursing model review, development of transitional care unit.

The Mid-Career and Late Career Nurse

While emphasis has focused on the new nursing graduate, attention is also required for the mid (age 35-55 years) and late career (>55 years) nurses. To scan the Hospital Sector, respondents were asked if any initiatives for these cohorts of nurses had been initiated. The number and percentage replying in the affirmative are as follows:

- Mid-Career Initiatives: Initiatives in place, 38/99 (38.4%); and
- Late Career Initiatives: Initiatives in place, 78/100 (78%).

Other, Additional Comments

Space was left for the respondent to add any comments that, in their opinion, were relevant to the Nursing Plan. The comments are summarized as follows:

- Support needed: for targeted initiatives for mid-career nurses, leadership development, mentoring, unsuccessful in obtaining funding for late-career strategy (MOH application with disappointing results) owing to fiscal issues in the organization; the target for late-career (>55) is considered too late by many nurses (suggest reconsidering late career to be >50 years);
- Support acknowledged: that the NGG had a tremendously positive effect; continued support for late-career initiatives requested;
- Documentation of nursing resource data: budget software issues, difficulty with figures for BScN preparation;
- Patient mix: increased acuity and complexity;

- Challenges: fiscal restraints, recruitment/retention to/in northern and remote areas; union classifications for part time nurses (resulting in part time shortages and casual status increases); absenteeism, respect issues among nurses and between teams (a current high priority); and
- Individual initiatives showcased: Nursing Excellence Grant; Nursing Excellence Awards (discovery, clinical, healthy work environment, nursing informatics); Nursing Fellowships; Nursing Mentorship Capacity Building, Nursing Research Advanced Practice roles; Strategy for Skill Mix change (to replace UCPs with RPNs); implementation of a professional nursing care delivery model; achieving a 'community affiliate' hospital status with the Uof T.

2008
NURSING PLAN
HOSPITAL SECTOR REPORT
Type 1 Hospitals (≤ 50 beds) Results

Hospital Sector Analysis: Type 1 Hospital Results

Section A: Facility Description and Nursing Leadership Structure

This report represents a secondary analysis of the **Type 1 hospitals (50 beds or less)**. A total of 13 Type 1 hospitals are included, with representation from 7/14 (50%) of all LHINs. The LHIN jurisdictions reporting Nursing Plan data are illustrated in Table 1.

TABLE 1: TYPE 1 HOSPITALS REPORTING BY LHIN JURISDICTION	
LHIN #	Hospital Count
2	3
3	2
4	1
7	1
11	2
13	3
14	1
Total	13

Beds in Service

The total number of beds in service represented by this report is 414 and the number of beds per responding organization ranged from 16 to 50 (mean 34.5, Standard Deviation (SD) 8.74). Four organizations reported that they were merged with no more than 2 sites.

Nursing Leadership

All but one organization (12/13, 92.3%) reported that they had a designated Chief Nursing Executive (CNE)/Officer. The titles of the senior nurse leader varied, from a sole CNE title, to a combination of CNE and Vice-President (VP), and also included the roles at a Director and other levels (see Table 2).

All but one senior nursing leader reported directly to the CEO/President, and the other reported to a Chief Operating Officer (COO).

TABLE 2: SENIOR NURSING LEADERSHIP TITLES	
Title	N
CNE/Officer (sole title)	4
CNE / VP (Professional program)	0
CNE / VP (Operational program)	2
Director	3
Other roles specified: Integrated VP/CNO, Senior VP Professional Services & Program Development, Assistant Executive Director, Patient Care, VP clinical services, Manager Patient Care.	

Advanced Practice Roles

Respondents were requested to provide the numbers and full time equivalents (FTEs) of advanced practice roles that supported nursing care in terms of practice, education and research (see Table 3).

TABLE 3: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES						
Advanced Practice Roles	N	Min	Max	Sum	Mean	Standard Deviation
Nurse Educators: FTE.	13	.00	2.00	4.30	.33	.57
Nurse educators: Head count	13	.00	2.00	9.00	.69	.75
Clinical Nurse Specialist: FTE.	13	.00	7.40	7.90	.60	2.04
Clinical Nurse Specialists: Head count	13	.00	8.00	9.00	.69	2.21
Nurse Practitioners : FTE	13	.00	3.00	13.01	1.00	1.22
Nurse Practitioners: Head count	13	.00	3.00	11.00	.84	1.06
Nurse Researchers:	13	.00	.00	.00	.00	.00

TABLE 3: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

Advanced Practice Roles	N	Min	Max	Sum	Mean	Standard Deviation
FTE*						
Nurse Researchers: Head Count	13	.00	.00	.00	.00	.00

*predominantly hired into a formal position dedicated to nursing research.

Section B: Nursing Human Resources

The average age of both Registered Nurses (RNs) and Registered Practical Nurses (RPNs) is about 45 years of age. Close to 20% of RNs are over the age of 55 years and approximately 25% of RPNs are aged 55 years or older. This high percentage of nurses over the age of 55 years may have significant implications for small hospitals in terms of the overall proportion of staff that may retire within the next 5 years. In smaller hospitals, the attrition of small numbers of nurses can have a significant impact on ability to meet patient care needs. The respondents reported that, on average, 23.8% of RNs have a BScN degree with a range of less than one percent of RNs to 40% of RNs who are degree prepared (see Table 4).

TABLE 4: RN and RPN CHARACTERISTICS

Characteristic	Average / percent	Standard Deviation
Average age: RNs	44.1	2.89
Percent of RNs >55 years	18.9%	11.55
Percent of RNs with BScN degree (54 responses)	17.5 (Range 0.5-40%)	13.49
Average age: RPNs	45.8	4.01
Percent of RPNs >55 years	24.9%	13.24

Numbers of RNs and RPNs by full/part time classification is presented below in Table 5. In total, this supplementary report for Type 1 hospitals represents 786 regulated staff in full and part time positions (632.8FTEs).

TABLE 5: FTEs AND COUNTS							
RNs	N	Range	Min	Max	Sum	Mean	Standard Deviation
Full time: total number	13	71.00	8.00	79.00	338.00	26.00	17.72
Full time: total FTEs	13	67.71	8.00	75.71	344.42	26.49	17.56
Part time: total number	13	39.00	2.00	41.00	207.00	15.92	9.97
Part Time: total FTEs	12	23.73	.00	23.73	115.96	9.66	6.64
RPNs	N	Range	Min	Max	Sum	Mean	Standard Deviation
Full time: total number	13	22.00	.00	22.00	109.00	8.38	5.63
Full time : total FTEs	13	14.90	.00	14.90	94.57	7.27	3.60
Part time: total number	13	18.00	2.00	20.00	132.00	10.15	5.35
Part time: total FTEs	12	20.00	.00	20.00	77.85	6.48	5.28

Job Share Positions

Five hospitals (38.5%) stipulated that they had formal job-share positions (where two nurses shared one full time 'line' in the schedule).

Unregulated Care Providers (UCPs)

Eleven (11/13) organizations reported that they employ UCPs. The mean number of UCPs per organization was 3.17 (SD 6.21).

Float Pool/Resource Team

One organization reported that there was a float pool in place. Generally the float pool team of nurses is called upon to act as interim resources during crises, peak periods or in situations of special need.

Nursing and Practical Nursing Students

Hospitals provide valuable clinical practice settings for students in baccalaureate nursing and practical nursing programs. Various questions were posed about the presence and numbers of students (groups and precepted practicum students), as well as issues pertaining to student volumes, organizational needs and other concerns.

All but 2 of the responding organizations reported that students were placed in their units and programs. The volume of student placements is represented in Table 6. For participating Type 1 organizations, the total number of students for the 2008/09 period was 110.

TABLE 6: NURSING (BScN) PRACTICAL NURSING, AND NURSING (BScN) CONSOLIDATION STUDENTS							
Student Numbers	N	Range	Min	Max	Sum	Mean	Standard Deviation
Total number: Nursing (BScN) Students	13	31.00	.00	31.00	53.00	4.07	8.65
Total number: Practical Nursing Students	13	12.00	.00	12.00	27.00	2.07	3.25
Total number of consolidation/practicum Nursing (BScN) students	12	13.00	.00	13.00	30.00	2.50	4.16

Based on the total number of consolidation placements provided (e.g. 30), this would equate to approximately *1.72 Nursing FTEs of “in kind” direct preceptor support*. This calculation is based on the following assumptions: 6 week consolidation placement, requiring varying degree of preceptor direct support (minimum of 112 hours/placement) x 30 placements /1950 hours. When taking into consideration the average number of formal educator roles reported within Type 1 Hospitals (e.g. mean .33FTE), the impact of student placements may be greater in smaller hospitals.

Student related issues include:

- 11 organizations would like more students;
- 0 organizations indicated that they would prefer fewer students;
- 6 organizations (46.2%) reported affirmatively that they require more staff to function as preceptors;
- 5 organizations (38.5%) felt that they were too far from nursing schools which impacted ability to have student placements;
- 6 organizations reported that they did not receive requests for student nurse placements;
- 10 organizations (76.5%) answered affirmatively that they needed more formal preceptor programs; and
- Other comments offered about students included:
 - There are transportation and accommodation issues; and
 - Limited space on the units presents challenges.

New Graduates

New graduate numbers and full time role classification were requested and all of the organizations provided data (see Table 7). In total, 19 new RNs and 12 new RPNs were reported as being hired in 2008/09. The percent of RNs hired into full time positions was 42%; no RPNs were hired into full time positions.

TABLE 7: RN and RPN NEW GRADUATE HIRES						
New Graduate Hires	N	Min	Max	Sum	Mean	Standard Deviation
New RN graduates hired	13	.00	5.00	19.00	1.46	1.61
New RN graduates: hired into permanent full time positions: total number	13	.00	3.00	8.00	.61	1.12
New RPN graduates hired	13	.00	4.00	12.00	.92	1.44
New RPN graduates*: hired into permanent full time positions: total number	13	.00	.00	.00	.00	.00

Section C: Utilization

Budgeted and Worked Hours, Agency, Casual and Overtime

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Total budgeted RN hours	13	216.78	86342.00	715707.03	55054.38	24798.40
Total worked RN hours	13	185.20	78126.00	630421.61	48493.96	20452.01
Total budgeted RPN hours	12	13.28	43353.00	304272.78	25356.06	11107.69
Total worked RPN hours	12	11.00	54121.00	299763.06	24980.25	13022.10
Total agency hours used : RNs	13	.00	5995.00	8190.75	630.05	1683.99
Total agency hours	13	.00	.00	.00	.0000	.00

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
used: RPNs						
Total agency hours used: UCP	13	.00	.00	.00	.0000	.00
Total number of overtime hours: RN (includes full time and part time)	13	44.80	8663.00	36171.41	2782.41	2420.70
Total number of overtime hours: RPN (includes full time and part time)	12	149.00	1276.00	7879.83	656.65	421.39
Number of casual hours: RN	13	.00	187267.00	231468.10	17805.23	51263.26
Number of casual hours: RPN	13	.00	334108.00	358207.33	27554.41	92161.68

From a list of five common reasons for overtime, respondents were requested to stipulate their rank order. Table 9 depicts the ranked responses. Replacement of staff was the key priority in terms of the number of respondents who ranked the issue as their ‘number one’. Following this, was workload, vacancies, coverage for education and additional staff for infection control. Respondents identified ‘other’ reasons as transporting patients and the ‘consecutive weekend’ clause in the ONA contract.

TABLE 9: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)					
	#1 Rank	#2 Rank	#3 Rank	#4 Rank	#5 Rank
Replacement, sick	7	5	5	0	0
Workload	5	4	4	0	0
Vacancies	1	3	4	3	1
Infection Control (outbreaks/isolation)	1	0	0	4	5
Education/Orientation	0	1	3	5	3
Other (Comments:					

TABLE 9: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)

Transports, provisions of the collective agreement (consecutive weekend rule).
--

Sick Time and Turnover Rates

Turnover rate was provided as a percentage. Respondents were asked to calculate the rate by adding both the full time and part time terminations (RN and RPN) divided by the total number in that category. Terminations were identified as actual exits from the organization, not unit terminations for internal transfer purposes. Turnover rates for RNs were more than 3% higher than for RPNs in the reporting Type 1 hospitals.

- RN Turnover Rate: **11%** (SD 18.33, range 0-63%); and
- RPN Turnover Rate **7.3%** (SD, 11.95, range, 0-37%).

Reasons for Turnover

A list was provided for staff to identify (yes/no) if the item represented a reason for turnover at their organization. Table 10 is a summary of the number (and %) of respondents who chose the particular item listed. Staff member's death, retirement, relocation, and job advancement at another organization were the top reasons.

TABLE 10: REASONS FOR NURSING TURNOVER

Reason for Turnover	Yes (%)
Death	12 (100%)
Retirement	8 (66.7%)
Relocating out of district	8 (66.7%)
Job advancement elsewhere	6 (50%)
Do not know	3 (25%)
Termination	3 (25%)
Returning to school	2 (18.2%)
Work Stress	2 (18.2%)
Other Comments: nil received	

Full Time Equivalents: Overtime, Agency, Sick Time and Casual Utilization

Based on the information provided, the total hours reported for agency, casual, sick time and overtime utilization have been converted into full time equivalents (FTEs) to provide an additional lens with which to review utilization (see Table 11).

TABLE 11: OVERTIME, AGENCY, SICK TIME AND CASUAL HOURS (FTEs)						
	N	Agency	Overtime	Sick time	Casual	Total
RN	13	4.2	18.5	17	118	157.7
RPN	13	0.0	4.0	6.12	183	197

Retired staff – Returning to Work

Organizations were asked if retired nursing staff were returning to the workplace. All but one organization responded in the affirmative (92.3%). Options were provided for respondents to identify the roles, paid and unpaid, usually assumed by the returning, retired nurses. Table 12 identifies that returning to direct care is most usual for returning retirees, with others assuming project work, volunteer roles, or providing education support.

TABLE 12: RETIRED NURSES: ROLES ASSUMED UPON RETURN TO THE WORKPLACE	
Roles for Returning Retirees	Yes
Direct Care	11 (91.7%)
Project Work	2 (16.7%)
Volunteer Role	2 (16.7%)
Educator/Mentor/Preceptor	2 (16.7%)

Section D: Education and Orientation

Owing to the rapid changes in acuity and technology, continuing nursing education is needed to address organizational accountability for safe, high quality care. Most organizations allocate hours for education in their forecasted budgets. Table 13 details the hours for nursing education and orientation. In-service hours, i.e., time when an on-duty staff member may attend a teaching session or rounds is not included, given that most organizations do not capture these hours. Education hours for Unregulated Care Providers (UCPs) are also included in Table 13. It was noted that orientation hours may vary, unit to unit, however, respondents were asked to provide the average number of hours in the particular category of ‘new’ staff. Wide variations were observed.

Conversion of reported hours, to number of orientation “days”, provides the following

Type 1 hospital data:

- Minimum Registered Nurses (RNs) orientation hours: 5.5 days; and
- Minimum Registered Practical Nurses (RPNs) orientation hours: 3.62 days.

TABLE 13: EDUCATION AND ORIENTATION ALLOCATED HOURS						
Allocated Hours	N	Min	Max	Sum	Mean	Standard Deviation
Total hours: Nursing staff education*	10	.00	5063.00	9754.00	975.40	1571.68
Paid education hours: RN*	13	.00	1666.00	7281.75	560.13	564.11
Paid education hours: RPN*	13	.00	356.00	909.25	69.94	97.21
Number of paid education hours: UCP	10	.00	450.00	468.00	46.80	141.78
Approximate minimum number of orientation days for one new staff RN	13	2.000	245.000	542.500	41.730	66.321
Approximate minimum number of orientation days for one new staff RPN	13	4.00	160.00	353.00	27.15	42.85

**does not include in-service education hours.*

Section E: Manager Span of Control

Table 14 describes the nurse middle manager in terms of average age, numbers of sites, units and direct reports.

- The average age of the nurse manager was 45.5 years (SD 6.54);
- The percent of nurses managers who are degree prepared was 56.3.9% (Range 0-100%);
- The percent of managers who are not nurses was 8.2%;
- A large majority (87.7%) of managers report to administrators who are nurses;
- The average number of units per manager is 7.82 (SD 14.88, range 1-50 units);
- One organization noted that manager(s) had responsibilities at more than one site; and
- The number of direct reports per manager ranged from a minimum mean of 23 to a maximum mean of 41, with wide standard deviations.

TABLE 14: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
Average age of nurse managers*	12	35.00	56.00	546.10	45.50	6.54
Managers who are degree (BN/BScN) prepared (%)	12	.00	100.00	676.00	56.33	41.77
Number of managers who have RNs and RPNs as direct reports	13	1	100	138	10.62	26.995
Of that total number of managers in the above question, indicate the number of managers who are not nurses.	13	.00	100.00		8.15	27.63
% of nurse manager that report to a nurse who functions in an administrative capacity (i.e. Director level position)	13	.00	100.00		87.69	29.76
Average number of units per manager	10	1.00	50.00	77.50	7.75	15.13

TABLE 14: MANAGER SPAN OF CONTROL						
Lowest number of direct reports per manager	12	2	82	275	22.92	24.50
Highest number of direct reports per manager	11	3	65	447	40.64	15.68

On-call and Off-hours Unit Supervision

On-call (off-site) manager responsibility for after hours and weekends is expected in 61.5% of responding organizations. In 6 of the responding organizations (46.2%), there are on-site individuals (managers, coordinators, supervisors) for after hours and weekends.

Recruitment Challenges (Middle Manager Roles)

Leadership roles in management and administration have been cited as a challenge over the past several years. In order to scan for information and explanation, questions were asked about the challenges. From a list of recruitment challenges, the respondents were asked to indicate any, as applicable in their organization. Space was left for the respondent to indicate other comments. Table 15 details the responses with the predominant challenge identified as “few external applicants”. Other comments reported in Table 20 demonstrate issues that relate primarily to:

- The current fiscal pressures and the uncertainty within health care;
- The diversity of the role; and
- Little movement [advancement].

TABLE 15: RECRUITMENT CHALLENGES (MIDDLE MANAGER ROLES)	
Recruitment Challenge	Yes (%)
Few External Applicants	9 (69.2)
Role Attributes	6 (46.2)
Few Internal Successors	6 (46.2)
Other written comments: Current fiscal pressures, uncertainty in health care, the diversity of the role, little movement.	

Section F: Issues and Other Comments

From a list of current nursing issues, respondents were asked to rank in order of priority (from 1 being the most important, to 5 being the least important), those most critically important at this time. Table 16 details the ranking. Recruitment and retention, was ranked as the “#1” issue, followed by an aging workforce, turnover, patient acuity and technology complexity.

TABLE 16: CRITICAL ISSUES (AS RANKED BY RESPONDENTS)					
Critical Issue	#1	#2	#3	#4	#5
Recruitment /Retention	6	2	2	2	0
Aging Workforce	3	4	2	0	3
Patient Acuity/Complexity	2	0	4	4	2
Technology/Complexity	1	2	3	4	2
Retention/Turnover	0	4	1	2	5
Other specified issues: No additional comments offered.					

Programs/Units with Current Staff Shortages

To ascertain the staffing recruitment challenges by unit or specialty, respondents were provided with a list of 4 areas (see Table 17), and asked to indicate if there were current shortages of staff. The key areas were critical care and the emergency departments. Space was left for respondents to identify other areas not listed, but important in terms of shortages in their organizations. ‘Other’ key areas were obstetrics and medical/surgical.

TABLE 17: AREAS/UNITS WITH CURRENT NURSING SHORTAGES	
Units/Programs	<u>Yes (9%)</u>
Emergency Department	9 (75)
Critical Care Unit(s)	3 (27.3)
Complex Continuing Care	1 (9.1)
Mental Health	1 (9.1)
Other areas specified: Obstetrics (OBS), Operating Room (OR), Primary and Prevention Care,	

Staff-mix Changes and Drivers for Staff-mix Changes

Respondents were asked to identify if changes had occurred in the mix of staff (the proportions of staff categories, such as RN, RPN and UCP or other care giving staff) in their organization. If staff-mix changes were made, the respondents were asked to identify the key drivers for the change. About half (6, 46.2%) of the Type 1 organizations noted that staff-mix changes had been undertaken. Drivers for the changes included:

- Fiscal pressures (3, 50%);
- Changes in the patient population (1, 16.7%); and
- Other factors:
 - UCP changes – decreased the numbers to improve quality of care; and
 - System issues – coverage for absenteeism.

The Mid-Career and Late Career Nurse

While emphasis has been focused on the new graduate cohort, attention is also required for mid-career (age 35-55 years) and late career (>55 years) nurses. To scan the Hospital Sector, respondents were asked if any initiatives for these nursing cohorts had been initiated and the number and percent replying in the affirmative are as follows:

- Mid-Career nurse initiatives: initiatives in place, 3 (25%); and
- Late Career nurse initiatives: initiatives in place, 6 (69.2%).

Other, Additional Comments

Space was left for the respondent to add any comments that, in their opinion, were relevant to the Nursing Plan. No additional comments were received in this section.

2008
NURSING PLAN
HOSPITAL SECTOR REPORT

Type 2 Hospitals (1-200 beds) Results

Hospital Sector Analysis: Type 2 Hospitals Results

Section A: Facility Description and Nursing Leadership Structure

This report represents a secondary analysis of the **Type 2 organizations (51-200 beds)**. A total of 35 Type 2 hospitals are included here, with representation from all 14 LHINs. The LHIN jurisdictions, reporting Nursing Plan data are illustrated in Table 1.

TABLE 1: TYPE 2 HOSPITALS REPORTING BY LHIN JURISDICTION		
LHIN #	N	Percent
1	1	3
2	4	11
3	3	9
4	3	9
5	1	3
7	3	9
8	1	2
9	2	6
10	1	3
11	4	11
12	4	11
13	7	20
14	1	3
Total	35	100%

Beds in Service

The total number of beds in service represented by this report is **3,944** and the number of beds per responding organization, ranged from 51-200 (mean 112.75, Standard Deviation (SD) 50.17). Eight (8) organizations reported that they were merged with no more than 4 sites (mean 2.25, SD 0.71).

Nursing Leadership

All but one organization reported that they had a designated Chief Nursing Executive (CNE)/Officer. The titles of the senior nurse leader varied, from a sole CNE title, to a combination of CNE and Vice-President (VP), and also included the roles at a Director and other levels (see Table 2). All senior nursing leaders reported directly to the Chief Executive Officer/President.

TABLE 2: SENIOR NURSING LEADERSHIP ROLES	
Title*	N
Chief Nursing Executive/Officer (sole title)	7
CNE / VP (Professional program)	7
CNE / VP (Operational program)	6
Director	2
Other roles specified: Integrated VP/CNO, Senior VP (patient care)/CNE, VP (patient services)/CNE, VP and Professional Practice Leader, Senior Executive Leader/CNE, Chief Operational Officer (COO), CNO and Director, CNO/Assistant Executive Director, Chief Clinical Officer, Assistant Administrator Nursing Services	

Advanced Practice Roles

Respondents were requested to provide the numbers and full time equivalents (FTEs) of advanced practice roles that supported nursing care in terms of practice, education and research. Variations among the reporting organizations were observed in the numbers, means and standard deviations (see Table 3).

TABLE 3: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES						
Nursing Resources	N	Min	Max	Sum	Mean	Standard Deviation
Nurse Educators: FTE	35	.00	12.60	67.72	1.93	2.60
Nurse Educators: Total	35	.00	18.00	82.50	2.35	3.29

TABLE 3: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

number						
Clinical Nurse Specialist: FTE	35	.00	7.30	30.64	.87	1.75
Clinical Nurse Specialists: Total number	35	.00	12.00	37.00	1.05	2.41
Nurse Practitioners: FTE	35	.00	11.00	44.95	1.28	2.35
Nurse Practitioners: Total number	35	.00	15.00	57.00	1.62	2.94
Nurse Researchers: FTE*	34	.00	1.00	1.00	.02	.17
Nurse Researchers: Total number	33	.00	1.00	1.00	.03	.17

*predominantly hired into a formal position dedicated to nursing research.

Section B: Nursing Human Resources

The average age of both Registered Nurses (RNs) and Registered Practical Nurses (RPNs) is about 44 years, with close to 20% in each category over the age of 55 years. The respondents reported that, on average, 20.8% of RNs have a Baccalaureate of Science in Nursing (BScN) degree, with percentages reported, ranging from 2% - 72% (see Table 4).

TABLE 4: RN and RPN CHARACTERISTICS

Characteristic	Average & %s	Standard Deviation
Average age: RNs	44.7	2.76
Percent of RNs >55 years	22.3%	14.54%
Percent of RNs with BScN degree	20.8%	16.66%
Average age: RPNs	43.3	3.49

TABLE 4: RN and RPN CHARACTERISTICS		
Characteristic	Average & %s	Standard Deviation
Percent of RPNs >55 years	18.1%	11.75%

Numbers of RNs and RPNs by full/part time classification is captured in Table 5. In total, this Nursing Plan represents 7,789 regulated staff in full and part time positions (6,177.5 FTEs). Most (95.4%, SD 9.2) regulated nursing staff report to a manager who is a nurse.

TABLE 5: COUNTS and FTES						
RNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time RNs: Total number	35	11.00	315.00	3484.00	99.54	81.28
Full time RNs: Total FTEs	35	11.00	292.07	3325.92	95.02	77.00
Part time RNs: Total number	35	6.00	188.00	2245.00	64.14	50.51
Part Time RNs: Total FTEs	33	2.00	112.36	1186.47	35.95	28.31
RPNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time RPNs: Total number	35	8.00	60.00	1053.00	30.08	14.31
Full time RPNs: Total FTEs	35	8.00	55.10	979.14	27.97	13.24
Part time RPNs: Total number	35	3.00	62.00	1007.00	28.77	16.01
Part time RPNs: Total FTEs	34	1.50	37.25	554.86	16.31	9.52

Job Share Positions

Twenty-seven of the 35 hospitals (77.1%) stipulated that they had formal job-share positions (where two nurses shared one full time ‘line’ in the schedule).

Unregulated Care Providers

Thirty-one (88.6%) organizations reported that they employ Unregulated Care Providers (UCPs). The total overall number of FTE positions was 144.5. The mean number of UCPs per organization was 4.98 (SD 9.27).

Float Pool/Resource Team

Float pool teams were in place in 16 (47.5%) organizations. Generally a float pool team is called upon to act as interim resources during crises, peak periods or in situations of special need.

Nursing Students

Hospitals provide valuable clinical practice settings for students in baccalaureate nursing and practical nursing programs. Various questions were posed about the presence and numbers of students (groups and preceptored practicum students), as well as issues pertaining to student volumes, organizational needs and other concerns.

All (93.4%) but 2 of the responding Type 2 organizations reported that students were placed in their units and programs. The volume of students is represented in Table 6.

Overall, the number of Nursing (BScN) students in Ontario's organizations where Nursing Plan data were reported is 18,728 (mean 197.14, SD 246.24) and the number of Practical Nursing students is 8,238 (mean 88.6, SD 101.322). In the provincial report, eighty-eight organizations offered their numbers of consolidation (nursing (BScN) practicum) students (total number 4,006, mean 45.5, SD 53.08).

For Type 2 organizations, the total number of students for the 2008/09 period was **2,786**.

TABLE 6: NURSING (BSCN) , PRACTICAL NURSING AND NURSING (BSCN) CONSOLIDATION STUDENTS

Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Nursing (BScN) students	31	.00	340.00	1461.87	47.15	73.75

TABLE 6: NURSING (BSCN) , PRACTICAL NURSING AND NURSING (BSCN) CONSOLIDATION STUDENTS

Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Practical Nursing students	30	.00	130.00	893.00	29.76	37.46
Total number of consolidation/practicum Nursing (BScN) students	27	.00	84.00	431.00	15.96	19.48

Based on the total number of consolidation placements provided (e.g. 431), this would equate to approximately 25 Nursing FTEs of “in kind” direct preceptor support. This calculation is based on the following assumptions: 6 week consolidation placement, requiring varying degree of preceptor direct support (minimum of 112 hours/placement) x 431 placements ÷ 1950 hours.

Student issues identified in the Nursing Plan:

- 20 organizations (59%) would like more nursing students;
- 2 organizations (5.9%) noted that they would prefer fewer students;
- 24 organizations (68.6%) reported affirmatively that they require more staff to function as preceptors;
- 4 organizations (11.4%) felt that they were too far from nursing schools;
- 1 organization reported that they did not receive requests for student nurse placements;
- 20 organizations (57.1%) answered affirmatively that they needed more formal preceptor programs; and
- Other comments offered about students included:
 - Nurses must understand their professional obligation to precept students;
 - Small hospital – cannot accommodate too many students;
 - Would like master’s level students; and
 - Had fewer students, but they stayed for longer periods of time.

New Graduates

New graduate numbers and full time role classification were requested and all of the organizations provided data (see Table 7). In total, 178 new RNs and 124 new RPNs were reported as being hired in 2008/09. 30% of RNs were hired into full time positions, while 6.5% of RPNs were hired into full time positions.

TABLE 7: NEW GRADUATE HIRES						
New Graduates	N	Min	Max	Sum	Mean	Standard Deviation
New RN graduates hired	33	.00	28.00	178.00	5.39	6.49
Total number of new RN graduates: hired into permanent full time positions	33	.00	8.00	53.00	1.60	2.22
New RPN graduates hired	31	.00	17.00	124.00	4.00	4.00
Total number of new RPN graduates*: hired into permanent full time positions	30	.00	3.00	8.00	.26	.78

Section C: Utilization

Budgeted and Worked Hours, Agency, Casual and Overtime

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS.						
	N	Min	Max	Sum	Mean	Standard Deviation
Total budgeted RN hours	30	27505.00	716533.00	6789171.06	226305.70	1.76
Total worked RN hours	35	25350.00	850845.00	8094950.43	231284.29	1.83
Total budgeted	30	21730.50	192121.00	2431085.17	81036.17	43318.60

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS.

	N	Min	Max	Sum	Mean	Standard Deviation
RPN hours						
Total worked RPN hours	35	18525.00	153496.00	2804510.70	80128.87	37768.22
Total agency hours used: RNs	31	.00	10380.00	30786.30	993.12	2473.12
Total agency hours used: RPNs	29	.00	5231.50	6566.50	226.43	977.55
Total agency hours used: UCP	31	.00	9767.00	18353.30	592.04	2002.46
Number of casual hours: RN	32	.00	50633.40	416065.46	13002.05	13783.87
Number of casual hours: RPN	32	.00	28581.00	176889.07	5527.78	6548.27

Overtime

The total number of overtime hours for both RNs and RPNs were provided along with the most common reasons for overtime. Table 9 depicts the total number of overtime hours for RNs and RPNs in the reporting hospitals.

TABLE 9: RN and RPN OVERTIME HOURS

	N	Min	Max	Total Sum	Mean	Standard Deviation
Total number of overtime hours: RN (includes full time and part time)	35	148.67	42118.00	363249.43	10378.56	10267.74
Total number of overtime hours: RPN	35	187.00	11990.00	86579.82	2473.71	2645.65

TABLE 9: RN and RPN OVERTIME HOURS						
	N	Min	Max	Total Sum	Mean	Standard Deviation
(includes full time and part time)						

From a list of five common reasons for overtime, respondents were requested to stipulate their rank order. Table 10 depicts the ranked responses. Replacement of staff was the key priority in terms of the number of respondents who ranked the issue as ‘number one’. Following this were workload, vacancies, additional staff for infection control and coverage for education. Respondents also entered ‘other’ reasons.

TABLE 10: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)					
Issue	#1 Rank	#2 Rank	#3 Rank	#4 Rank	#5 Rank
Replacement, sick	23	10	0	1	1
Workload	8	9	11	5	2
Vacancies	3	9	12	9	2
Education/Orientation	1	1	4	10	16
Infection Control (outbreaks/isolation)	0	4	7	9	13
Other Comments: Area-specific reasons, skill/certification requirements, coverage for other leaves, vacation relief, transfers of patients.					

Sick Time and Turnover Rates

Documented sick time hours for both designations of nursing staff is depicted in Table 11. Turnover rate was provided as a percentage, where respondents were asked to calculate the turnover rate by adding both the full time and part time terminations (RN or RPN) divided by the total number in that category. Terminations were defined as actual exits from the organization, not unit terminations for internal transfer purposes. Turnover rates were 2% higher for RPNs than RNs.

- RN Turnover Rate: 8.4% (SD 6.38, range 0.09-31%); and
- RPN Turnover Rate: 10.7% (SD, 6.97, range, 0.07-24%).

TABLE 11: SICK TIME AND TURNOVER RATE						
	N	Min	Max	Sum	Mean	Standard Deviation
Total RN sick hours	35	1278.50	35515.00	379657.58	10847.35	9667.25
Total RPN sick hours	35	486.00	8620.00	130437.59	3726.78	2589.82
Turnover rate: RN (percentage)	34	.09	31.00		8.4303	6.38
Turnover rate: RPN (percentage)	34	.07	24.05		10.7174	6.97

Full time Equivalents: Overtime, Agency, Sick Time and Casual Utilization

Based on the information provided, the total hours reported for agency, casual, sick time and overtime utilization were then converted into full time equivalents to provide an additional lens with which to review utilization patterns (see Table 12).

TABLE 12: OVERTIME, AGENCY, SICK TIME AND CASUAL HOURS (EXPRESSED AS FTEs)						
	N	Agency	Overtime	Sick time	Casual	Total
RN	13	15.78	186.3	195	213	610
RPN	13	3.36	44.4	67	90.7	205.46

Reasons for Turnover

A list was provided to identify (yes/no) if the item represented a reason for turnover at their organization. Table 13 is a summary of the number (and %) of respondents who chose the particular item listed. Retirement and relocation out of the district, along with job advancement elsewhere, were the predominant reasons for turnover within the Type 2 organizations.

TABLE 13: REASONS FOR TURNOVER	
Reason for Turnover	Yes (%)
Retirement	29 (83)
Relocating out of district	25 (75.8)

TABLE 13: REASONS FOR TURNOVER	
Reason for Turnover	Yes (%)
Job advancement elsewhere	22 (63)
Do not know	7 (20)
Termination	6 (17.1)
Returning to school	6 (17)
Work Stress	2 (5.7)
Death	1 (3)
Other specified: Casuals leaving, medical reasons, noactivity x6 months, relocating within district, voluntary resignation, licence rescinded, full time elsewhere.	

Retired Staff – Returning to Work

Organizations were asked if retired nursing staff were returning to the workplace. Thirty-one (89%) organizations responded in the affirmative. Options were provided for respondents to identify the roles, paid and unpaid, usually assumed by the returning, retired nurses. Table 14 identifies that direct care is the most common role for returning retirees, with others assuming project work, volunteer roles or providing education support.

TABLE 14: ROLES RETIRED NURSES ASSUME UPON RETURN TO THE WORKPLACE	
Roles for retirees returning	Yes (%)
Direct Care	29 (93.5)
Educator/Mentor/Preceptor	8 (26.7)
Project Work	6 (19.4)
Volunteer Role	6 (19.4)
Other roles specified: RPN doing transfers, RN in pharmacy	

Section D: Education and Orientation

Owing to the rapid changes in acuity and technology, continuing nursing education is needed to address organizational accountability for safe, high-quality care. Most organizations allocate hours for education in their forecasted budgets. Table 15 details the hours for nursing education and orientation. In-service hours, i.e. time when an on-duty staff member may attend a teaching session or rounds, is not included, given that most organizations do not capture these hours. Education hours for Unregulated Care Providers (UCPs) are also included in Table 15. It was noted that orientation hours may vary, unit to unit, however, respondents were asked to provide the average number of hours, in particular categories of ‘new’ staff. Wide variations were observed.

TABLE 15: EDUCATION AND ORIENTATION ALLOCATED HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Total hours: Nursing staff education*	19	.00	23503.00	59128.17	3112.01	5126.37
Paid education hours: RN*	33	67.00	20305.00	78093.36	2366.46	3712.20
Paid education hours: RPN*	33	24.00	3198.00	19718.24	597.52	686.39
Number of paid education hours: UCP	24	.00	1129.00	1526.50	63.60	228.54
Approximate minimum number of orientation days for one new staff: RN	34	2.000	112.500	533.700	15.697	18.41
Approximate minimum number of orientation days for one new staff: RPN	34	2.00	112.50	493.70	14.5206	18.28435

**does not include in-service education hours*

Section E: Manager Span of Control

This section focuses on describing the nurse middle manager in terms of average age, numbers of sites, units and direct reports (see Table 16).

- The average age of the nurse manager was 47.8 years (SD 5.7, range, 28-55 years);
- The percent of nurses managers who are degree prepared was 54.6% (SD 34, range 0-100%);
- The percent of managers who are not nurses was 45% overall;
- The vast majority (93%, SD 19.9) of managers reporting to administrators who are nurses;
- The average number of units per manager is 5.3 (SD 16.5, range 1-96 units);
- Six (17%) organizations noted that manager(s) had responsibilities at more than one site; and
- The number of direct reports per manager ranged from a minimum mean of 23 to a maximum mean of 41, with wide standard deviations.

TABLE 16: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
Average age of nurse managers	29	28.00	55.00	1386.17	47.79	5.66
Managers who are degree (BScN) prepared (%)	32	.00	100.00	1747.46	54.60	34.00
Number of managers who have RNs and RPNs as direct reports	33	1	100	286	8.68	16.80
Of that total number of managers who have RNs and RPNs as direct reports, indicate the number of managers who are not nurses.	34	.00	100.00	129.00	3.79	17.05
% of nurse managers	35	.00	100.00	3257.00	93.05	19.89

TABLE 16: MANAGER SPAN OF CONTROL

	N	Min	Max	Sum	Mean	Standard Deviation
that report to a nurse who functions in an administrative capacity (i.e. Director level position)						
Average number of units per manager at your facility	32	1.00	96.00	169.90	5.30	16.58
Lowest number of direct reports per manager	34	1	125	1306	38.40	32.959
Highest number of direct reports per manager	34	1	125	2428	71.40	34.686

On-call and Off-hours Unit Supervision

On-call (off-site) responsibilities for after hours and weekends, is expected in 61.5% of responding organizations. In 6 of the responding organizations (46.2%), there are on-site individuals (managers, coordinators, supervisors) for after hours and weekends.

Recruitment Challenges (Middle Manager Roles)

Leadership roles in management and administration have been cited as a challenge over the past several years. In order to scan for information and explanation, questions were asked about the challenges. From a list of recruitment challenges, the respondents were asked to indicate any, as applicable in their organization. Space was left for the respondent to indicate other comments. Table 17 details the responses. The predominant challenges identified were few external and internal applicants. Other comments related primarily to:

- The financial remuneration compared to the front line staff;
- Role requirements, e.g. on call;
- Role diversity; and
- Attracting qualified candidates, especially to rural, northern, small communities.

TABLE 17: RECRUITMENT CHALLENGES (MIDDLE MANAGER ROLES)	
Recruitment Challenge	Yes (%)
Few External Applicants	24 (72.7)
Few Internal Successors	22 (66.7)
Role Attributes	17 (53.1)
Other written comments: Compensation, pay inequities, pay close to line RN staff, role diversity, on-call requirement, qualifications, geography and difficult to attract candidates to small, rural, northern community.	

Section F: Issues and Other Comments

From a list of current nursing issues, respondents were asked to rank in order of priority (from 1 being the most important, to 5 being the least important), those issues most critically important at this time. Table 18 details the ranking. Recruitment and retention and the aging workforce were the top priority issues.

TABLE 18: RANKED CRITICAL ISSUES (AS RANKED BY RESPONDENTS)					
Critical Issue	#1	#2	#3	#4	#5
Recruitment /Retention	16	9	6	3	1
Patient Acuity/Complexity	9	4	10	7	4
Aging Workforce	8	18	6	2	1
Technology/Complexity	1	2	1	9	18
Retention/Turnover	0	1	10	13	10
Other specified issues: Workload, schedules (that meet the requests of new/young nurses), distance from university/access to education, skill mix, attitudes – respect for others.					

Programs/Units with Current Staff Shortages

To ascertain the staffing recruitment challenges by unit or specialty, respondents were provided with a list of 4 areas (see Table 19) and asked to indicate if there were current shortages of staff in these areas. Key areas identified were critical care and emergency departments. Space was left for respondents to identify other areas not listed, but

important in terms of shortages in their organizations. Obstetrics (OBS) and medical/surgical were identified as other ‘key’ areas.

TABLE 19: CURRENT NURSING SHORTAGES BY UNIT/AREA	
Units/programs	<u>Yes (%)</u>
Emergency Department	20 (64.5)
Critical Care Unit(s)	18 (58)
Complex Continuing Care	7 (25)
Mental Health	3 (12.5)
Other areas specified: OBS (6), Medical/Surgical (6), Operating Room/Peri-operative (3) and Paediatrics (1).	

Staff-mix Changes and Drivers for Staff-mix Changes

Respondents were asked to identify if changes had occurred in the mix of staff (the proportions of staff categories, such as RN, RPN and UCP or other care giving staff) in their organization. If staff-mix changes were made, the respondents were asked to identify the key drivers for the change. About half (17, 46%) of the organizations noted that staff-mix changes had been undertaken. Drivers for the changes were:

- Fiscal pressures (17, 48.6%);
- Changes in the patient population (10, 58.8%); and
- Other factors:
 - RPN scope of practice [increased]; and
 - System issues – unable to fill vacancies.

The Mid-Career and Late Career Nurse

While emphasis has focused on the new graduate cohort, attention is also required for the mid (age 35-55 years) and late career (>55 years) nurses. To scan the Hospital Sector, respondents were asked if any initiatives for these cohorts of nurses had been initiated and the number and percent replying in the affirmative are noted as follows:

- Mid-Career Nurse Initiatives: Initiatives in place, 9 (25.7%); and
- Late Career Nurse Initiatives: Initiatives in place, 22, (64.7%).

Other, Additional Comments

Space was left for the respondent to add any comments that, in their opinion, were relevant to the Nursing Plan. Additional comments included:

- Absenteeism and issues of respect are high priorities at this time;
- Funding application unsuccessful (Late Career Nurse Initiative), disappointed that application was not awarded;
- Would like to report other supportive roles (infection control, discharge planner, intake nurse, occupational health nurses);
- Suggest funding opportunity for mid-career nurses; and
- Suggest maintaining funding for late-career nurses.

2008NURSING PLAN HOSPITAL SECTOR REPORT

Type 3 Hospitals (201-500 beds) Results

Hospital Sector Analysis: Type 3 Hospitals Results

Section A: Facility Description and Nursing Leadership Structure

This report represents a secondary analysis of the **Type 3 organizations (201 – 500 beds)**. A total of 32 Type 3 hospitals are included here, with representation from 13/14 LHINs. The LHIN jurisdictions reporting Nursing Plan data are illustrated in Table 1.

TYPE 3 HOSPITALS REPORTING BY LHIN JURISDICTION		
LHIN #	Number	Percent
1	3	9.4
2	1	3.1
3	2	6.3
4	2	6.3
6	2	6.3
7	8	25
8	2	6.3
9	2	6.3
10	3	9.4
11	3	9.4
12	1	3.1
13	2	6.3
14	1	3.1
Total	32	100.0

Beds in Service and Number of Merged Organizations

The total number of beds in service represented by this report is **10,804**, and the number of beds per organizations responding ranged from 221-479 (mean 337.6, SD 77.81).

Fifteen (**15**) organizations reported that they were **merged** with no more than 6 sites (mean 3.0, SD 1.13).

Nursing Leadership

All organizations reported that they had a designated Chief Nursing Executive/Officer. The titles of the senior nurse leader varied, from a sole Chief Nursing Executive (CNE) title, to a combination of CNE and Vice-President (VP) and also included the roles at a Director and other levels (see Table 2). Most senior nursing leaders reported directly to the CEO/President (29, 90.6%). Other reporting relationships were to the VP Clinical Services, VP/Chief Operating Officer (COO) and a dual relationship to the CEO and the Senior Vice President.

TABLE 2: SENIOR NURSING LEADERSHIP TITLES	
Title	N
Chief Nursing Executive/Officer (sole title)	1
CNE / VP (Professional program)	11
CNE / VP (Operational program)	6
Director	2
Other roles specified: Chief Nurse/Health Professions Officer, CNE/Chief Interprofessional Practice, CNO/Professional Practice Leader; VP/CNE (VP = Clinical Administration, Professional Practice, Strategy, Quality, Organizational Performance, Client Care); Senior VP Clinical Administration/Professional Practice/CNE, Director of Patient Care and CNE	

Advanced Practice Roles

Respondents were requested to provide the numbers and full time equivalents (FTEs) of advanced practice roles that supported nursing care in terms of practice, education and research. Variations among the reporting organizations were observed (see Table 3).

TABLE 3: NURSING RESOURCES (FTES AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

Advanced Practice Roles	N	Min	Max	Sum	Mean	Standard Deviation
Nurse Educators: FTE	32	.00	23.06	243.65	7.61	5.88
Nurse Educators: Head count	32	.00	26.00	273.00	8.53	6.74
Clinical Nurse Specialist: FTE.	32	.00	71.71	147.33	4.60	12.56
Clinical Nurse Specialists: Head count	32	.00	87.00	169.50	5.29	15.31
Nurse Practitioners: FTE	32	.00	14.27	98.35	3.07	3.64
Nurse Practitioners: Head count	32	.00	18.00	118.00	3.68	4.36
Nurse Researchers: FTE*	30	.00	27.00	33.30	1.11	4.94
Nurse Researchers: Head count	31	.00	40.00	48.50	1.56	7.20

**predominantly hired into a formal position dedicated to nursing research*

Section B: Nursing Human Resources

The average age of both Registered Nurses (RNs) and Registered Practical Nurses (RPNs) is about 43 years, with 18% of RNs and 17% of RPNs at age 55 years or older.

The respondents reported that, on average, 30.48% of RNs have a Baccalaureate of Science in Nursing (BScN) degree, with a wide variation in responses ranging from 4% to 41% of degree prepared RNs (see Table 4).

TABLE 4: RN and RPN CHARACTERISTICS

Characteristic	Averages & %s	Standard Deviation
Average age: RNs	43.8	4.90
Percent of RNs >55 years	18.3	8.45

TABLE 4: RN and RPN CHARACTERISTICS		
Characteristic	Averages & %s	Standard Deviation
	<i>Range, 4-41%</i>	
Percent of RNs with BScN degree	30.4% <i>Range, 1-85%</i>	26.37
Average age: RPNs	43.3	2.75
Percent of RPNs >55 years	16.8 <i>Range, 0-51%</i>	11.45

Numbers of RNs and RPNs by full/part time classification can be found in Table 5 (below). In total, this Nursing Plan represents 20,107 regulated nursing staff in full and part time positions (16,306.1 FTEs). Most (89.8%) regulated nursing staff report to a manager who is a nurse.

TABLE 5: COUNTS and FTEs						
RNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time: Total number	31	24.00	1300.90	11126.90	358.93	274.62
Full time: Total FTEs	30	24.00	1169.20	10447.70	348.25	260.18
Part time: Total number	30	9.00	408.00	5313.30	177.11	108.82
Part Time: Total FTEs	29	6.53	238.00	2953.60	101.84	65.98
RPNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time: Total number	31	.00	158.00	2158.00	69.61	43.17
Full time: Total FTEs	29	.00	177.04	2056.58	70.91	45.30
Part time: Total number	31	.00	125.00	1509.00	48.67	29.62
Part time: Total FTEs	28	.00	83.40	848.22	30.29	21.14

Job Share Positions

Twenty-five of the 32 hospitals (**78.1%**) stipulated that they had formal job-share positions (where two nurses shared one full time ‘line’ in the schedule).

Unregulated Care Providers (UCPs)

All Type 3 hospitals reported that they employ UCPs. The total overall number of FTE positions was 966.5 (overall sum 1,389 UCP staff). The mean number of UCPs per reporting organization was 32.21 (SD 47.81).

Float Pool/Resource Team

Float pool teams were in place in 19 (59.4%) organizations. Generally the float pool team of nurses are called upon to act as interim resources during crises, peak periods or in situations of special need.

Nursing Students

Hospitals provide valuable clinical practice settings for students in baccalaureate nursing and practical nursing programs. Various questions were posed about the presence and numbers of students (groups and preceptored practicum students), as well as issues pertaining to student volumes, organizational needs, and other concerns.

All (93.4%) but 2 of the responding organizations reported that students were placed in their units and programs (see Table 6).

The volume of students is represented in Table 6. Overall, the number of Nursing (BScN) students in Ontario’s organizations where Nursing Plan data were reported is 18,728 (mean 197.14, SD 246.24), and the number of Practical Nursing students is 8,238 (mean 88.6, SD 101.322). In the provincial report, eighty-eight organizations reported their numbers of consolidation (practicum) Nursing (BScN) students (total number 4,006, mean 45.5, SD 53.08).

For **Type 3** organizations, the total number of students for the 2008/09 period was 11,400

TABLE 6: NURSING (BScN), PRACTICAL NURSING, AND NURSING (BScN) CONSOLIDATION STUDENTS						
Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Nursing (BScN) students	30	9.00	500.00	6448.00	214.93	137.73
Total number: Practical Nursing students	30	.00	321.00	3473.00	115.76	86.90
Total number of consolidation/practicum (BScN Nursing students)	29	2.00	173.00	1488.00	51.31	43.09

Based on the total number of consolidation placements provided (e.g. 1488), this would equate to approximately *85.5 Nursing FTEs of “in kind” direct preceptor support*. This calculation is based on the following assumptions: 6 week consolidation placement, requiring varying degree of preceptor direct support (minimum of 112 hours/placement) x 1488 placements/1950 hours.

Student issues identified included:

- 16 organizations (51.6%) would like more nursing students;
- 0 organizations noted that they would prefer fewer students;
- 24 organizations (77.4%) reported affirmatively that they require more staff to function as preceptors;
- Distance from the nursing school was not an issue among Type 3 organizations;
- 1 organization reported that they did not receive requests for student nurse placements;
- 16 organizations (51.6%) answered affirmatively that they needed more formal preceptor programs; and
- Other comments offered about students included:
 - Accommodating all requests for senior placements was difficult owing to the lack of preceptors;
 - Need increased collaboration with the schools of nursing;

- Would be able to accommodate more students on the evening shift; and
- [We also have] Refresher students.

New Graduates

New graduate numbers, along with full time status classification were requested (see Table 7). In total, 875 new RNs and 262 new RPNs were reported as being hired in 2008/09. The percent of RNs hired into full time positions was 61%; and for RPNs, 13% were hired into full time positions.

TABLE 7: NEW GRADUATE HIRES						
New Graduates	N	Min	Max	Sum	Mean	Standard Deviation
New RN graduates hired	32	1.00	159.00	875.00	27.34	32.91
Total number of new RN graduates: hired into permanent full time positions	32	.00	158.00	534.00	16.68	30.93
New RPN graduates hired	31	.00	36.00	262.00	8.45	7.89
Total number of new RPN graduates hired into permanent full time positions	31	.00	11.00	34.00	1.09	2.41

Section C: Utilization

Budgeted and Worked Hours, Agency and Casual

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS						
	N	Min	Max	Sum	Mean	Standard Deviation
Total budgeted RN hours	29	46367.00	2120860.69	23402676.25	806988.83	5.8586
Total worked RN hours	32	60669.00	2003889.00	23876124.41	746128.88	4.86661
Total budgeted RPN hours	28	.00	355979.00	4823206.91	172257.38	93412.38
Total worked RPN hours	31	.00	361141.03	5542959.20	178805.13	91041.56
Total agency hours used: RNs	32	.00	78297.80	282541.33	8829.41	17726.27
Total agency hours used: RPNs	29	.00	10669.50	21238.97	732.37	2113.68
Total agency hours used: UCP	28	.00	78854.60	120912.58	4318.30	14947.96
Number of casual hours: RN	30	.00	140138.10	1407473.91	46915.79	38674.937
Number of casual hours: RPN	28	.00	131371.00	510405.73	18228.77	29290.397

Overtime

Table 9 represents the overtime hours for RNs and RPNs in Type 3 organizations.

TABLE 9: OVERTIME HOURS						
	N	Min	Max	Total Sum	Mean	Standard Deviation
Total number of RN overtime hours (includes full time and part time)	32	572.00	65200.27	759392.47	23731.01	19137.35
Total number of RPN overtime hours (includes full time and part time)	32	.00	21783.00	156338.59	4885.58	4795.06

From a list of five common reasons for overtime, respondents were requested to stipulate their rank order. Table 10 depicts the placement of the ranked responses. Replacement of staff was the key priority, in terms of the number of respondents who ranked the issue as their 'number one'. Following this were workload, vacancies, additional staff for infection control, and coverage for education.

TABLE 10: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)					
Issue	#1 Rank	#2 Rank	#3 Rank	#4 Rank	#5 Rank
Replacement, sick	19	9	1	0	1
Workload	8	6	9	5	2
Vacancies	2	7	10	9	2
Education/Orientation	0	4	2	6	15
Infection Control (outbreaks/isolation)	0	3	7	9	8
Other Comments: Constant care, transports/escorts, overcapacity, high ALC numbers, collective agreement clause and vacation relief.					

Sick Time and Turnover Rates

Turnover rate was provided as a percentage (see Table 11). Respondents were asked to calculate the rate by adding both the full time and part time terminations (RN or RPN)

divided by the total number in that category. Terminations were defined as actual exits from the organization, not unit terminations for internal transfer purposes.

TABLE 11: SICK TIME AND TURNOVER RATE						
	N	Min	Max	Sum	Mean	Standard Deviation
Total RN sick hours	32	1350.00	127636.00	1212521.36	37891.29	28328.74
Total RPN sick hours	31	.00	27692.00	303629.56	9794.50	6224.85
Turnover rate: RN (percentage)	32	.14	15.00		7.10	2.72
Turnover rate: RPN (percentage)	31	.00	21.50		6.39	5.40

Full time Equivalents: Overtime, Agency, Sick Time and Casual Utilization

Based on the information provided, the total hours reported for agency, casual, sick time, and overtime utilization were then converted into full time equivalents to provide an additional lens with which to review utilization patterns (see Table 12).

Table 12: FTEs (Overtime, Agency, Sick Time and Casual Hours)						
	N	Agency	Overtime	Sick time	Casual	Total
RN	13	124	389	622	721	1856
RPN	13	11	80	156	261	508

Reasons for Turnover

A list was provided for staff to identify (yes/no) if the item represented a reason for turnover at their organization. Table 13 is a summary of the number (and %) of respondents who chose the particular item listed. Retirement and relocation out of the district, along with job advancement elsewhere were the predominant reasons for turnover within the responding Type 3 organizations.

TABLE 13: REASONS FOR NURSING TURNOVER	
Reason for Turnover	Yes (%)
Retirement	26 (81.3)
Relocating out of district	23 (71.9)
Job advancement elsewhere	19 (59.4)
Termination	12 (37.5)
Do not know	10 (32.3)
Returning to school	9 (81.3)
Work Stress	5 (15.6)
Death	2 (6.3)
Other specified: Personal reasons, family reasons, commuting, scheduling (days preferred) and leave to accept a role with specialized skills.	

Retired Staff – Returning to Work

Organizations were asked if retired nursing staff were returning to the workplace. Twenty-eight organizations responded in the affirmative (87.5%). Options were provided for respondents to identify the roles, paid and unpaid, usually assumed by the returning, retired nurses. Table 14 identifies that returning to direct care is most usual for returning retirees, with others assuming project work, volunteer roles, or providing education support. Note that respondents could choose from all options, therefore total percentages may be greater than 100%.

TABLE 14: RETIRED NURSES (ROLES ASSUMED UPON RETURN TO THE WORKPLACE)	
Roles for retirees returning	Yes (%)
Direct Care	28 (96.6)
Project Work	15 (51.7)
Volunteer Role	13 (44.8)
Educator/Mentor/Preceptor	5 (17.2)
Other roles specified: Administration, employee health, new hospital transitions and acting clinical manager.	

Section D: Education and Orientation

Owing to the rapid changes in acuity and technology, continuing nursing education is needed to address organizational accountability for safe, high quality care. Most organizations allocate hours for education in their forecasted budgets. Table 15 details the hours for nursing education and orientation. In-service hours, i.e. time when an on-duty staff member may attend a teaching session or rounds, is not included, given that most organizations do not capture these hours. Education hours for UCPs are also included in Table 15. It was noted that orientation hours may vary, from unit to unit, however, respondents were asked to provide the average number of hours in particular categories of ‘new’ staff. Wide variations were observed.

- Minimum RN orientation days: 3.5 days; and
- Minimum RPN orientation days: 3.25 days.

TABLE 15: EDUCATION AND ORIENTATION ALLOCATED HOURS						
Allocated Hours	N	Min	Max	Sum	Mean	Standard Deviation
Total hours: Nursing staff education*	19	300.00	32996.00	171235.35	9012.38	8263.12
Paid education hours: RN*	31	388.50	61473.00	263125.57	8487.92	12134.57
Paid education hours: RPN*	30	.00	8699.00	46040.43	1534.68	1921.40
Number of paid education hours: UCP	27	.00	1898.00	4986.75	184.69	380.78
Approximate minimum number of orientation days for one new staff RN	31	4.000	150.000	802.500	25.887	38.140
Approximate minimum number of orientation days for one new staff RPN	31	.00	150.00	756.50	24.40	38.71

**does not include in-service education hours*

Section E: Manager Span of Control

Focusing on describing the nurse middle manager in terms of average age, numbers of sites, units and direct reports, the following data was reported (see Table 16):

- The average age of the nurse manager was 48.6 (SD 2.7, range, 43-55 years);
- The percent of nurses managers who are degree prepared was 68% (SD 32.47, range 4.3-100%);
- The percent of managers who are not nurses was 26.6%, overall;
- Three quarters (75.7%, SD 30.25) of managers report to administrators who are nurses;
- The average number of units per manager is 5.3 (SD 16.5, range 1-96 units);
- Thirteen (41.917%) organizations noted that manager(s) had responsibilities at more than one site; and
- The number of direct reports per manager ranged from a minimum mean of 21 to a maximum mean of 126, with wide standard deviations.

TABLE 16: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
Average age of nurse managers	31	43.28	55.00	1508.30	48.65	2.73
Managers who are degree (BScN) prepared (%)	21	4.30	100.00	1429.07	68.05	32.47
Number of managers who have RNs and RPNs as direct reports	32	2	48	553	17.28	9.22
Of that total number of managers who have RNs and RPNs as direct reports, the number of managers who are not nurses.	32	.00	48.00	149.00	4.65	8.41
% of nurse managers that report to a nurse who functions in an administrative capacity (i.e. Director level position)	32	.00	100.00	2422.33	75.69	30.25
Average number of units per manager at your facility	29	1.00	30.00	82.98	2.86	5.28
Lowest number of direct reports	31	1	65	659	21.26	20.72

TABLE 16: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
per manager						
Highest number of direct reports per manager	31	2	339	3901	125.84	58.56

On-Call and Off-hours Unit Supervision

On-call (off-site) responsibilities, for after hours and weekends is reported in 68.85% of responding organizations. In 21 of the responding organizations (65.6%), there are on-site individuals (managers, coordinators, supervisors) for after hours and weekends.

Recruitment Challenges (Middle Manager Roles)

Leadership roles in management and administration have been cited as a challenge over the past several years. In order to scan for information and explanation, questions were asked about the challenges. From a list of recruitment challenges, the respondents were asked to indicate any, as applicable in their organization. Space was left for the respondent to indicate other comments. Table 17 details the responses. The predominant challenges identified were few external and internal applicants. Other comments, also reported in Table 17, identify issues that relate primarily to:

- Role realities – workload, wages/compensation;
- Geography/isolated community; and
- Attracting qualified, experienced, candidates.

TABLE 17: RECRUITMENT CHALLENGES; (MIDDLE MANAGER ROLES)	
Recruitment Challenge	Yes (%)
Few External Applicants	23 (79.3)
Few Internal Successors	22 (73.3)
Role Attributes	15 (51.7)
Other written comments: Compensation,/wage, excessive workload, geography (isolated community), need to recruit from other regulated and non-regulated professionals to fill vacancies, restrictions in the advertisement budget	

Section F: Issues and Other Comments

From a list of current nursing issues, respondents were asked to rank, in order of priority (from 1 being the most important to 5 being the least important), those most critically important at this time. Table 18 details the ranking. Acuity/complexity of care, recruitment and an aging workforce were the top priority issues.

TABLE 18: CRITICAL ISSUES (AS RANKED BY RESPONDENTS)					
Critical Issue	#1	#2	#3	#4	#5
Patient Acuity/Complexity	14	5	8	2	1
Recruitment /Retention	9	3	5	9	3
Aging Workforce	4	9	10	5	3
Retention/Turnover	1	6	3	10	11
Technology/Complexity	0	2	6	5	13
Other specified issues: Workload, balancing the budget, funding for education and ALC patients (resulting in over-capacity and ‘corridorng’.)					

Programs/Units with Current Staff Shortages

To ascertain the staffing recruitment challenges by unit or specialty, respondents were provided with a list of 4 areas (see Table 19), and asked to indicate if there were current shortages of staff. The key areas were critical care and the emergency departments. Space was left for respondents to identify other areas not listed, but important in terms of shortages in their organizations. ‘Other’ key areas were obstetrics and medical/surgical.

TABLE 19: AREAS/UNITS WITH CURRENT NURSING SHORTAGES	
Units/programs	<u>Yes (%)</u>
Critical Care Unit(s)	13 (44.8)
Emergency Department	12 (42.9)
Mental Health	10 (33.3)
Complex Continuing Care	7 (23.3)

TABLE 19: AREAS/UNITS WITH CURRENT NURSING SHORTAGES

Other areas specified: Parent/child (obstetrics, paediatrics, Neo-natal Intensive Care Unit), medical/surgical (with rural focus), float pool, palliative care and rehabilitation.

Staff-mix Changes and Drivers for Staff- mix Changes

Respondents were asked to identify if changes had occurred in the mix of staff (the proportions of staff categories, such as RN, RPN and UCP or other care giving staff) in their organization. If staff-mix changes were made, the respondents were asked to identify the key drivers for the change. About half (15, 58%) of the organizations noted that staff-mix changes had been undertaken. Drivers for the changes were:

- Fiscal pressures (15, 83.3%);
- Changes in the patient population (14, 77.8%); and
- Other factors:
 - RPN scope of practice [increased];
 - Unable to recruit RNs/fill vacancies; and
 - ALC population increases.

The Mid-Career and Late Career Nurse

While emphasis has focused on the new graduate cohort, attention is also required for the mid (age 35-55 years) and late career (>55 years) nurses. To scan the Hospital Sector, respondents were asked if any initiatives for these cohorts of nurses had been initiated and the number and percent replying in the affirmative are noted as follows:

- Mid-Career Nurse Initiatives: Initiatives in place, 16 (50%); and
- Late Career Nurse Initiatives: Initiatives in place, 27 (84.47%).

Other, Additional Comments

Space was left for the respondent to add any comments that, in their opinion, were relevant to the Nursing Plan. The following comments were received:

- Fiscal and timing issues have limited the feasibility for late career funding;
- Suggest rolling funding for the late-career initiative;
- Value professional practice;
- Program management model where nurse managers indirectly report to CNO for professional issues; and
- Data limited by budgeting software.

2008
NURSING PLAN
HOSPITAL SECTOR REPORT

Type 4 Hospitals
(Greater than 500 beds) Results

Hospital Sector Analysis: Type 4 Hospitals Results

Section A: Facility Description and Nursing Leadership Structure

This report represents a secondary analysis of the **Type 4 hospitals (greater than 500 beds)**. A total of 22 Type 4 hospitals are included, with representation from 12/14 LHINs. The LHIN jurisdictions reporting Nursing Plan data are illustrated in Table 1.

TABLE 1: TYPE 4 HOSPITALS BY LHIN JURISDICTION		
LHIN #	Number	Percent
1	1	4.5
2	2	9.1
3	1	4.5
4	3	13.6
5	1	4.5
6	1	4.5
7	6	27.3
8	2	9.1
9	2	9.1
11	1	4.5
13	1	4.5
14	1	4.5
Total	22	100.0

Beds in Service

The total number of beds in service represented by this report is 15,890 and the number of beds per organizations responding ranged from 507-1204 (mean 722.27, SD 224.38). Twenty-one (21) organizations reported that they were merged with up to 9 sites (mean 3.6, SD 1.90).

Nursing Leadership

All organizations reported that they had a designated Chief Nursing Executive/Officer. The titles of the senior nurse leader varied, from a sole Chief Nursing Executive (CNE) title, to a combination of CNE and Vice-President (VP). There were no senior leadership portfolios described at the Director or Manager level (see Table 2). Most senior nursing leaders (19/22, 86.4%) reported directly to the CEO/President. The other reporting relationships were to: the Chief Operating Officer (COO); Executive VP, Clinical Operations; a dual reporting relationship to the CEO and the COO. Most (87%) staff nurses, report to a manager who is a nurse (SD, 18.50, range, 26-100%).

TABLE 2: SENIOR LEADERSHIP NURSING TITLES	
Title	N
Chief Nursing Executive/Officer (sole title)	1
CNE / VP (Professional program)	7
CNE / VP (Operational program)	6
Director	0
Other roles specified: VP (program)/CNE; CNO/Professional Practice Officer and (program) director; Executive or Senior or Integrated VP/CNE; CNE/VP (operational and professional programs).	

Advanced practice roles

Respondents were requested to provide the numbers and full time equivalents (FTEs) of advanced practice roles that supported nursing care in terms of practice, education and research. Variations among the reporting organizations were observed in the numbers, means and standard deviations (see Table 3).

TABLE 3: NURSING RESOURCES (FTEs AND HEAD COUNT) IN ADVANCED PRACTICE ROLES

Advanced Practice Roles	N	Min	Max	Sum	Mean	Standard Deviation
Nurse Educators: FTE.	22	2.00	45.00	400.55	18.20	10.30
Nurse Educators: Head count	22	2.00	47.00	436.00	19.81	11.72
Clinical Nurse Specialist: FTE.	21	.00	41.28	210.94	10.04	11.38
Clinical Nurse Specialists: Head count	21	.00	43.00	190.00	9.04	9.93
Nurse Practitioners: FTE	22	.00	53.60	232.27	10.55	14.50
Nurse Practitioners: Head count	22	.00	57.00	253.00	11.50	16.46
Nurse Researchers: FTE*	20	.00	19.00	38.03	1.90	4.38
Nurse Researchers: Head count	20	.00	21.00	39.00	1.95	4.82

**predominantly hired into a formal position dedicated to nursing research*

Section B: Nursing Human Resources

The average age of both Registered Nurses (RNs) and Registered Practical Nurses (RPNs) is about 44 years, with 18% of RNs and 21% of RPNs 55 years of age or older. The respondents reported that, on average, 28% of RNs have a Baccalaureate of Science in Nursing (BScN) degree, with responses ranging from 24% to 44%. When compared to other Hospital Types included in this report, Type 4 Hospitals have the highest overall percentage of degree prepared RNs (see Table 4).

TABLE 4: RN and RPN CHARACTERISTICS		
Characteristic	Average	Standard Deviation
Average age: RNs	43.94	2.29
Percent of RNs >55 years	18.12%	7.80
Percent of RNs with BScN degree	27.86	12.43
Average age: RPNs	44.0	2.79
Percent of RPNs >55 years	21.3	13/34

Numbers of RNs and RPNs by full/part time classification is captured in Table 5. In total, this Nursing Plan represents 34,164 regulated staff in full and part time positions (28,032.7 FTEs).

TABLE 5: RN AND RPN COUNTS AND FTEs						
RNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time: Total number	22	147.00	2285.00	20497.00	931.68	596.54
Full time: Total FTEs	22	150.00	2222.50	19396.01	881.63	538.25
Part time: Total number	22	63.00	1152.00	8379.00	380.86	241.83
Part Time: Total FTEs	21	26.50	538.92	4493.84	213.99	132.80
RPNs	N	Min	Max	Sum	Mean	Standard Deviation
Full time: Total number	22	.00	386.00	3117.00	141.68	80.65
Full time: Total FTEs	22	.00	368.41	2907.11	132.14	76.94
Part time: Total number	22	.00	212.00	2171.00	98.68	58.09
Part time: Total FTEs	22	.00	132.67	1235.89	56.17	33.78

Job Share Positions

Seventeen (17) of the organizations (81%) stipulated that they had formal job-share positions (where two nurses shared one full time 'line' in the schedule).

Unregulated Care Providers (UCPs)

Twenty organizations (91%) reported that they employ UCPs. The total overall number of FTE positions was 1,590 for the Type 4 hospitals. The mean number of UCPs per organization was 120 (SD 132.45).

Float Pool/Resource Team

On-site float pool teams were in place in 18 (81.8%) organizations. Generally the float pool is called upon to act as an interim resource during crises, peak periods, or in situations of special need. The mean number of FTEs per organization was 28.6 (SD 30.49).

Nursing Students

Hospitals provide valuable clinical practice settings for students in baccalaureate nursing and practical nursing programs. Various questions were posed about the presence and numbers of students (groups and preceptored practicum students), as well as issues pertaining to student volumes, organizational needs, and other concerns. All of the responding organizations (100%) reported that students were placed in their units and programs. The volume of students is represented in Table 6. Overall, the number of Nursing (BScN) students in Ontario's organizations where Nursing Plan data were reported is 18,728 (mean 197.14, SD 246.24), and the number of Practical Nursing students is 8,238 (mean 88.6, SD 101.322). In the provincial report, eighty-eight organizations offered their numbers of consolidation (Nursing BScN practicum) students (total number 4,006, mean 45.5, SD 53.08). For Type 4 hospitals, the total number of students for the 2008/09 period was **16,757**. Given the data from this Nursing Plan's sample, the Type 4 hospitals provide close to 90% of Nursing (BScN) student clinical placements, and about 47% of Practical Nursing student clinical placements.

TABLE 6: NUMBER OF STUDENTS (NURSING (BScN), PRACTICAL NURSING AND NURSING (BScN) CONSOLIDATION STUDENTS)						
Student Numbers	N	Min	Max	Sum	Mean	Standard Deviation
Total number: Nursing (BScN) Students	21	107.00	1305.00	10765.00	512.61	291.86
Total number: Practical Nursing Students	21	.00	443.00	3935.00	187.38	115.06
Total number of consolidation/practicum Nursing (BScN) students	20	21.00	214.00	2057.00	102.85	60.95

Based on the total number of consolidation placements provided (e.g. 2057), this would equate to approximately *118 Nursing FTEs of “in kind” direct preceptor support*. This calculation is based on the following assumptions: 6 week consolidation placement, requiring varying degree of preceptor direct support (minimum of 112 hours/placement) x 2057 placements / 1950 hours.

Student issues identified included:

- 13 organizations (62%) would like **more** students;
- 0 organizations noted that they would prefer **fewer** students;
- 19 organizations (95%) reported affirmatively that they require more staff to function as preceptors;
- 10 organizations (50%) answered affirmatively that they needed more formal preceptor programs; and
- Other comments offered about students included:
 - An Interprofessional Mentorship Program is in place; and
 - Would like more nurses at the graduate student level.

New Graduates

New graduate numbers and full time role classification were requested and all of the organizations provided data (see Table 7). In total, 1,545 new RNs and 271 new RPNs were reported as being hired in 2008/09. 67% percent of RNs were hired into full time positions and 17.4% of RPNs were hired into full time positions.

TABLE 7: NEW GRADUATE HIRES						
New Graduates	N	Min	Max	Sum	Mean	Standard Deviation
RN new graduates hired	21	.00	279.00	1545.00	73.57	83.62
Total number of RN new graduates hired into permanent full time positions	21	.00	275.00	1039.00	49.47	72.16
RPN new graduates hired	21	.00	65.00	271.00	12.90	16.00
Total number of RPN new graduates hired into permanent full time positions	20	.00	26.00	45.00	2.25	5.85

Section C: Utilization

Budgeted and Worked Hours, Agency, Casual

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS					
	N	Min	Max	Sum	Mean
Total budgeted RN hours	21	376634.70	4578687.00	42930094.37	2044290.2
Total worked RN hours	21	333703.00	3933208.20	37461239.22	1783868.5
Total budgeted RPN hours	21	.00	932137.00	7095865.15	337898.3
Total worked RPN hours	21	.00	1079034.00	6922104.12	329624.0
Total agency hours	19	.00	163016.00	546140.70	28744.2

TABLE 8: BUDGETED, WORKED, AGENCY AND CASUAL HOURS					
	N	Min	Max	Sum	Mean
used: RNs					
Total agency hours used: RPNs	19	.00	38515.00	105755.15	5566.06
Total agency hours used: UCP	16	.00	153852.00	293033.29	18314.5
Number of casual hours: RN	21	.00	335017.00	2026667.72	96507.9
Number of casual hours: RPN	19	.00	125711.00	617990.46	32525.8

Overtime

Table 9 represents the overtime hours for RNs and RPNs in Type 4 hospitals.

TABLE 9: OVERTIME HOURS						
	N	Min	Max	Total Sum	Mean	Standard Deviation
Total number of overtime hours: RN (includes full time and part time)	22	9728.66	158031.79	1449449.94	65884.08	41862.40
Total number of overtime hours: RPN (includes full time and part time)	22	.00	25737.00	221357.30	10061.69	7540.87

Full time Equivalents: Overtime, Agency, Sick time and Casual Utilization

Based on the information provided, the total hours reported for agency, casual, sick time and overtime utilization were then converted into full time equivalents to provide an additional lens with which to review utilization patterns (see Table 12).

**TABLE 10 : OVERTIME, AGENCY, SICK TIME AND CASUAL HOURS
(EXPRESSED AS FTEs)**

	N	Agency	Overtime	Sick time	Casual	Total
RN	22	280	743	950	1039	3012
RPN	22	54	11	214	316	649

From a list of five common reasons for overtime, respondents were requested to stipulate their rank order. Table 11 depicts the placement of the ranked responses. Replacement of staff was the key priority in terms of the number of respondents who ranked the issue as their ‘number one’. Following this were workload, covering vacancies, education replacement, and additional staff for infection control.

TABLE 11: REASONS FOR OVERTIME (AS RANKED BY RESPONDENTS)

Issue	#1 Rank	#2 Rank	#3 Rank	#4 Rank	#5 Rank
Replacement, sick	15	7	0	0	0
Workload	5	12	3	2	0
Vacancies	2	3	9	6	2
Education/Orientation	0	0	4	9	9
Infection Control (outbreaks/isolation)	0	0	6	5	11
Other written comments: Constant care, observation, limited part time and casual pool, consecutive weekend (ONA collective agreement stipulation)					

Sick Time and Turnover Rates

Documented sick time hours for nursing staff is represented in Table 12. Turnover rates for RN and RPN staff were provided as percentages for the 2008/09 period. Respondents were asked to calculate the rate by adding both the full time and part time terminations (RN or RPN) divided by the total number in that category. Terminations were defined as actual exits from the organization, not unit terminations for internal transfer purposes.

Turnover rates were about the same for each category, that is:

- RN Turnover Rate: 6.3% (SD, 2.24, range 3-11%); and
- RPN Turnover Rate: 6.2% (SD, 3.35, range, 0-13.7%).

TABLE 12: RN AND RPN SICK TIME AND TURNOVER RATES						
	N	Min	Max	Sum	Mean	Standard Deviation
Total RN sick hours	22	16252.00	316886.00	2257674.12	102621.55	72323.54
Total RPN sick hours	22	.00	62289.00	416823.36	18946.54	14630.20
Turnover rate: RN (percentage)	22	3.00	11.00		6.3205	2.24
Turnover rate: RPN (percentage)	22	.00	13.70		6.2300	3.35

Reasons for Turnover

A list was provided for staff to identify (yes/no) if the item represented a reason for turnover at their organization. Table 13 is a summary of the number (and %) of respondents who chose the particular item listed. Retirement and relocation out of the district, along with job advancement elsewhere were the predominant reasons for turnover within Type 4 hospitals.

Table 13: REASONS FOR NURSING TURNOVER	
Reason for Turnover	Yes (%)
Retirement	20 (90.9)
Relocating out of district	16 (72.2)
Job advancement elsewhere	15 (68.2)
Returning to school	9 (40.9)
Work Stress	8 (38.1)
Do not know	8 (36.4)
Termination	8 (36.4)
Death	5 (22.7)
Other specified: Lifestyle (family reasons, returning to school), quality of life, failed CNO exam, program transfer, voluntary resignation.	

Retired Staff – Returning to Work

Organizations were asked if retired nursing staff are returning to the workplace. All but one organization responded in the affirmative (95.5%). Options were provided for respondents to identify the roles, paid and unpaid, usually assumed by the returning, retired nurses. Table 14 identifies that returning to direct care is most usual for returning retirees, with others assuming project work, volunteer roles, or providing education support.

TABLE 14: RETIRED NURSES: ROLES ASSUMED UPON RETURN TO THE WORKPLACE	
Roles for retirees returning	Yes (%)
Direct Care	22 (100)
Project Work	13 (51.9)
Volunteer Role	9 (40.9)
Educator/Mentor/Preceptor	7 (31.8)
Other roles specified: casual and part time work	

Section D: Education and Orientation

Owing to rapid changes in acuity and technology, continuing nursing education is needed to address organizational accountability for safe, high quality care. Most organizations allocate hours for education in their forecasted budgets. Table 15 details the hours for nursing education and orientation. In-service hours, i.e., time when an on-duty staff member may attend a teaching session or rounds is not included, given that most organizations do not capture these hours. Education hours for UCPs are also included in Table 15. It was noted that orientation hours may vary, from unit to unit, however, respondents were asked to provide the average number of hours in particular categories of ‘new’ staff. Wide variations were observed.

- Minimum RN orientation hours: 6.2 days; and
- Minimum RPN orientation hours: 5.8 days.

TABLE 15: EDUCATION AND ORIENTATION ALLOCATED HOURS

Allocated Hours	N	Min	Max	Sum	Mean	Standard Deviation
Total hours: Nursing staff education*	15	26.25	124309.00	482494.41	32166.29	34719.26
Paid education hours: RN*	22	18.75	118687.00	730117.30	33187.15	33702.38
Paid education hours: RPN*	22	.00	20754.00	99453.64	4520.62	5215.69
Paid education hours: UCP	19	.00	2069.00	10429.72	548.93	673.59
Approximate, minimum number of orientation days for one new staff RN	21	2.000	450.000	980.500	46.69	104.88
Approximate, minimum number of orientation days for one new staff RPN	21	.00	450.00	925.00	44.04	105.17

**does not include in-service education hours*

Section E: Manager Span of Control

This section focused on describing the nurse middle manager in terms of average age, numbers of sites, units and direct reports (see Table 16).

- The average age of the nurse manager was 48.5 years (SD 1.77, range, 45-52 years);
- The percent of nurses managers who are degree prepared (BScN) was 68.6% (SD 18.39, range 0-95%);
- The percent of managers with nurses as direct reports, who are not nurses was 18%, overall ;
- The majority (74%, SD 19.7) of managers reporting to administrators who are nurses;
- The average number of units per manager is 6.7 (SD 20.66, range 1-92 units);
- Eighteen (82%) organizations noted that manager(s) had responsibilities at more than one site; and

- The number of direct reports per manager ranged from a minimum mean of 18.5 staff (*range 0-70*) to a maximum mean of 156 staff (*range 43-235*) with wide standard deviations.

TABLE 16: MANAGER SPAN OF CONTROL						
	N	Min	Max	Sum	Mean	Standard Deviation
Average age of nurse managers	22	45.83	52.00	1066.19	48.46	1.77758
Managers who are degree (BScN) prepared (%)	14	40.00	95.00	960.40	68.60	18.39444
Number of managers who have RNs and RPNs as direct reports	22	14	82	766	34.82	16.364
Of that total number of managers who have RNs and RPNs as direct reports, the number of managers who are not nurses	22	.00	27.00	139.00	6.31	6.80606
% of nurse managers that report to a nurse who functions in an administrative capacity (i.e. Director level position)	21	33.00	100.00	1559.57	74.26	19.70599
Average number of units per manager at your facility	19	1.00	92.00	128.83	6.78	20.66297
Lowest number of direct reports per manager	21	0	70	389	18.52	16.311
Highest number of direct reports per manager	21	43	235	3282	156.29	47.705

On-Call and Off-hours Organization/Unit Supervision

On-call (off-site) responsibilities, for after hours and weekends is expected in 63.6% of responding hospitals. In 18 (85.7%) of the responding organizations, there were on-site individuals (managers, coordinators, supervisors) for after hours and weekends

Recruitment Challenges (Middle Manager Roles)

Leadership roles in management and administration have been cited as a challenge over the past several years. In order to scan for information and explanation, questions were asked about the challenges. From a list of recruitment challenges, the respondents were asked to indicate any, as applicable in their organization. Space was left for the respondent to indicate other comments. Table 17 details the responses. The predominant challenges were few, qualified external and internal applicants. Other comments also reported in Table 17 include:

- Quality of Applicants;
- Role requirements in complex teaching organization; and
- More non-nurses than nurse applicants.

TABLE 17: RECRUITMENT CHALLENGES (MIDDLE MANAGER ROLES)	
Recruitment Challenge	Yes (%)
Few Internal Successors	13 (65)
Few External Applicants	11 (55)
Role Attributes	11 (55)
Other written comments: Quality of external applicants, insufficient experience/competency for complexities of teaching hospital operations, work schedule (evening/weekend coordinator roles), more non-nurses than nurses applying for management/leadership roles	

Section F: Issues and Other Comments

From a list of current nursing issues, respondents were asked to rank, in order of priority (from 1 being the most important to 5 being the least important), those issues most critically important at this time. Table 18 details the ranking. Recruitment and retention, patient acuity/complexity, and the aging workforce were the top priority issues.

TABLE 18: CRITICAL ISSUES IN NURSING (RANKED IN ORDER OF IMPORTANCE)

Critical Issue	#1	#2	#3	#4	#5
Patient Acuity/Complexity	7	4	6	5	0
Aging Workforce	6	2	5	6	3
Recruitment /Retention	5	4	5	3	5
Retention/Turnover	3	8	3	4	4
Technology/Complexity	0	4	3	4	10
Other specified issues: Nursing leadership, educational support, enhancing research capacity, increased capacity for nursing students, morale, sensitivity to culturally diverse workforce and patient population, overcapacity and workload.					

Programs/Units with Current Staff Shortages

To ascertain the staffing recruitment challenges by unit or specialty, respondents were provided with a list of 4 areas (see Table 19), and asked to indicate if there were current shortages of staff. The key areas identified were critical care and the emergency departments. Space was left for respondents to identify other areas not listed, but important in terms of shortages in their organizations. Other areas identified were obstetrics and medical/surgical.

TABLE 19: AREAS/UNITS WITH CURRENT NURSING SHORTAGES

Units/programs	<u>Yes (%)</u>
Critical Care Unit(s)	12 (66.7)
Emergency Department	12 (66.7)
Mental Health	7 (36.8)
Complex Continuing Care	5 (27.8)
Other areas specified: Oncology, medical/surgical, Long-Term Care, Operating Room, Neonatal Intensive Care Unit, nephrology satellites, paediatric mental health (program expansion).	

Staff-mix Changes and Drivers for Staff-mix Changes

Respondents were asked to identify if changes had occurred in the mix of staff (the proportions of the staff categories, such as RN, RPN and UCP or other care giving staff) in their organization. If staff mix changes were made, the respondents were asked to identify the key drivers for the change. Fourteen (66.7%) of the organizations noted that staff mix changes had been undertaken. Drivers for the changes were:

- Changes in the patient population (18, 61.5%);
- Fiscal pressures (18, 61.5%); and
- Other factors:
 - RPN curriculum, scope of practice [increased];
 - System issues – unable to fill vacancies, recruitment challenges, availability of RNs;
 - Annual staff mix tool/assessment;
 - Nursing model review;
 - Development of transitional care unit;
 - Increase in RNs and decrease in UCPs (medicine) to improve quality and satisfaction; and
 - Skill mix changed to strengthen the nursing workforce.

The Mid-Career and Late Career Nurse

While emphasis has focused on the new graduate cohort, attention is also required for mid (age 35-55 years) and late career (>55 years) nurses. To scan the Hospital Sector, respondents were asked if any initiatives for these cohorts of nurses had been initiated and the number and percent replying in the affirmative are noted as follows:

- Mid-Career Nurse Initiatives: Initiatives in place, 10 (45.5%); and
- Late Career Nurse Initiatives: Initiatives in place, 20 (91.7%).

Other, Additional Comments

Space was left for the respondent to add any comments that, in their opinion, were relevant to the Nursing Plan. The following comments were received:

- Need to provide leadership opportunities for those interested in leadership roles in the future;
- Data on BScN status, not available for some areas of the organization;
- Fiscal constraints are a constant challenge;
- NGG funding made a tremendous, positive impact;
- Have developed several internal strategies to reward nursing excellence and provide opportunities for mentorship and development (e.g., fellowships);
- Suggest targeted funding opportunity for mid-career nurses; and
- Suggest maintaining funding for late-career nurses.