

North Dakota Nursing Needs Study: Facility Survey Results

Center for Rural Health
North Dakota Center for Health Workforce Data

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Executive Summary

Background

The Nursing Needs study was mandated by the NDCC Nurse Practices Act 43-12.1-08.2 in which the North Dakota Board of Nursing was directed to address issues of supply and demand including issues of recruitment, retention and utilization of nurses. The North Dakota Board of Nursing then contracted with the Center for Rural Health at the School of Medicine and Health Sciences, University of North Dakota to conduct the Nursing Needs study.

This study was designed to collect data in order to present a more accurate picture of nurses in both rural and urban areas of North Dakota and compare these data with existing national data as well as to inform policy. During the first year of the study, data collection includes four projects. The first is a facility survey which was sent to all hospitals, long-term care facilities, clinics, home health and regional public health facilities in order to determine demand for nurses and recruitment and retention efforts. The second project was a survey of RNs and LPNs throughout North Dakota. The third project involved conducting several focus groups separately with students and nurses throughout the state. The nursing (RN and LPN) focus groups centered on determining job satisfaction and identifying changes that would encourage nurses to work in North Dakota facilities especially those in rural areas. The focus groups with nursing students (RN and LPN) included questions such as the reasons for choosing the nursing profession and whether they plan to work in North Dakota. The fourth project was a survey of nursing program faculty and questions included their views on their program's capacity to train a sufficient number of nurses, faculty demographics, job satisfaction and what changes may improve the nursing workforce as a whole.

Facility Survey Results

This report includes the results from the facility survey which was sent to all hospitals, long-term care facilities, regional public health facilities, clinics and home health facilities in North Dakota. A total of 286 facilities returned the survey which was developed to provide a comprehensive picture of the nature of nursing employment and potential shortages throughout the state and to enable comparisons to be drawn between health care facilities; rural and urban areas and North Dakota and national data.

- **Scheduling**
Most of the hospitals and long-term care facilities offer shifts of varying length with the majority offering eight or twelve hour shifts. Very few facilities utilized mandatory overtime.
- **Nurse Participation**
Less than half of the hospitals and long-term care facilities have a formal representation structure in place for nurses to participate in decision-making. This percentage is lower than what was found in the Robert Wood Johnson Study. Nurse participation was most frequently reported by urban hospitals and long-term care facilities. Those facilities that do have participation of nurses within their facilities rated the effectiveness as average to above average.

- Tuition Reimbursement

Most of the hospitals and long-term care facilities offer some form of tuition assistance or reimbursement, whereas less than half of the public health, home health and clinics indicated that they did. Over half of the hospitals, home health facilities and clinics allowed tuition reimbursement for LPN, RN and MSN/PhD programs. Over half of the long-term care facilities also reimbursed for education programs for LPN and RN but only a few long-term care facilities reimbursed for MSN/PhD education programs. None of the Regional Public Health facilities reimbursed for education programs leading to an LPN or RN with only a few facilities reporting that they reimbursed for RNs to attend MSN/PhD programs. All of the home health facilities indicated that they reimbursed for continuing education courses and courses leading to a degree. Fewer than half of the hospital, long-term care and Regional Public Health facilities reimbursed nurses for continuing education and courses leading to a degree. More than half of the clinics indicated that they would reimburse for continuing education credits, but only a third of the clinics would reimburse for courses leading to a degree. Many of the facilities required a minimum service commitment after graduation as a condition for tuition reimbursement.

- Recruitment Issues

More than half of the hospitals reported significant difficulty in recruiting RNs and LPNs, primarily semi-rural and rural hospitals. Many long-term care facilities in semi-rural and rural counties reported difficulty in recruiting RNs along with home health facilities in semi-rural counties. This result is in agreement with the vacancy rates, which indicate that many facilities may have a nursing shortage. Many of the facilities reported using some recruitment/retention strategy for RNs. Many of the hospitals and long-term care facilities also reported using some recruitment/retention strategy for LPNs. Few public health and home health facilities reported using a strategy for recruitment of LPNs. All facilities most frequently reported that they used pay increases as a recruitment and retention strategy for RNs and LPNs. Other frequently reported RN and LPN recruitment/retention strategies included student loan repayment, flexible scheduling, health insurance, improved work environment and sign-on bonuses. Hospitals reported using pay increases, student loan repayment and flexible scheduling, whereas the long-term care facilities reported using pay increases, flexible scheduling and health insurance as strategies for RNs.

- Exit Interview Issues

The majority of the facilities utilized exit interviews and the most frequent reasons for nurses leaving were reported as more money, relocation and another nursing position. For RNs the hospitals cited these three reasons most frequently and for LPNs, hospitals also cited relocation and another nursing position most frequently. However, home health facilities cited more money as a reason for LPNs leaving most frequently as compared to the other facilities.

- Clinical Education Issues

Most urban health care facilities offered clinical education for RN students. In semi-rural and rural counties many hospitals, public health and home health facilities offer RNs clinical education. Hospitals provided clinical education to the greatest average number of RN students each year. Fewer health care facilities offer clinical education for LPNs with hospitals in urban and semi-rural areas and home health facilities in semi-rural counties most frequently offering LPN clinical education. The clinics provided clinical education to the greatest average number of LPN students each year. Some of the hospitals reported that they would be able to increase the number of RN training positions whereas very few of the hospitals reported that they would be able to increase the number of LPN training positions. Very few long-term care facilities reported that they would be able to increase the number of RN or LPN training positions. Many of the clinics reported that they would be able to increase the number of RN and LPN student positions.

- Staffing Issues

There was a small increase in the number of terminations and resignations of RNs across facilities from 2000 to 2001 except home health care which had a slight decrease. There was a small decrease in the number of terminations of LPNs across facilities except long-term care facilities and clinics which had a small increase. There was a small increase in the number of resignations of LPNs across facilities except clinics which had a small decrease. Few facilities have utilized temporary staff with regional public health having the greatest number of LPNs and RNs. The home health facilities have the highest RN turnover rates and the clinics have the highest LPN turnover rates.

Many counties had facility vacancy rates that indicated a shortage. In particular four semi-rural counties (Emmons, Walsh, Williams and Stark) and three rural counties (McKenzie, Mountrail and McIntosh) counties had vacancy rates indicated a severe shortage (> 40%) in at least one type of health care facility. The effects of RN vacancies include higher costs to deliver care, increases in cross-training, increase in number of LPNs and substitution of part-time, per diem or temporary RNs. The effects of LPN vacancies included higher costs to deliver care, increases in cross training, increase in number of patients assigned to LPNs, substitution of part-time, per diem or temporary LPNs and reduced or eliminated services.

North Dakota Nursing Needs Study Introduction

The North Dakota Nursing Needs (NDNN) study was mandated by the NDCC Nurse Practices Act 43-12.1-08.2, in which the North Dakota Board of Nursing was directed to address issues of supply and demand including issues of recruitment, retention and utilization of nurses. The North Dakota Board of Nursing then contracted with the Center for Rural Health at the School of Medicine and Health Sciences, University of North Dakota to conduct the Nursing Needs study.

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Facility Survey Results

Surveys were sent to all ND hospitals, long-term care facilities, regional public health facilities, Home Health facilities, and Clinics. The return-rate of the facility survey was above average for all facility types except Clinics. An overall return rate of 55% was obtained across all facility types.

Data are presented as the percentage of directors of nursing (DON) and facility administrators indicating agreement with a particular item or category. Data were filtered in such a manner that when a facility did not fulfill a necessary requirement to answer a question then data from that facility was not included in the analysis of that item. For example, facilities that indicated they did not hire RNs were excluded from analysis on items relating to the retention of RNs. This method leads to more accurate representation of the percent of facilities in agreement with an item.

When appropriate, data were divided by Urban Influence Codes (Ghelfi & Parker, 1997). Urban Influence Codes are a method of classifying U.S. counties according to the size of metropolitan areas, proximity to metropolitan areas and the population of the largest city within the county. There are nine codes including two metropolitan county categories and seven non-metropolitan county categories. Due to the rural nature of North Dakota, several of the categories include 0 counties and some categories have a small number of counties represented. North Dakota

counties were collapsed as follows into three larger categories based on their original Urban Influence Codes (see Table 1).

- Urban counties: Those small metropolitan counties with fewer than one million residents (4 counties).
- Semi-rural counties: Those non-metropolitan counties adjacent or not adjacent to a small metropolitan county with a town containing at least 2,500 residents (20 counties).
- Rural counties: Those areas not adjacent to a small metropolitan area, which do not contain a town with at least 2,500 residents (29 counties).

Total percentages were obtained by computing the average of all data points rather than by averaging percentages across the rural—urban continuum.

Table 1: Percent of Facilities Classified as Urban, Semi-Rural and Rural

	Urban	Semi-rural	Rural
Hospitals	18%	50%	32%
Long-term care	20%	46%	34%
Public Health	13%	57%	30%
Home Health	29%	42%	29%
Clinics	34%	40%	26%

Eighty-five percent of hospitals; 71% of long-term care facilities; 82% of regional public health facilities; 68% of home health facilities; and 39% of clinics completed surveys.

Although the largest percent of facilities are in the semi-rural category, the largest percent of budgeted full-time employee (FTE) RN positions in hospitals (68%), long-term care facilities (36%), and clinics (87%) are in the urban category. The largest percent of budgeted FTE RN positions in regional public health facilities (56%), and home health facilities (55%) are in the semi-rural category. In contrast, the largest number of budgeted FTE LPN positions in long-term care facilities (42%), regional public health facilities (100%) and home health facilities (65%) are in the semi-rural category. The largest number of budgeted FTE LPN positions in hospitals (66%), and clinics (63%) are in the urban category. **Most (i.e. ≥60%) facilities indicated that they employ RNs and many (i.e. ≥30%) facilities indicated that they employ LPNs** (see Table2).

Table 2: Percentage of Facilities that Employ RNs and LPNs

	<u>Hire RNs</u>	<u>Hire LPNs</u>
Hospitals	100%	93%
Long-term care	88%	92%
Public Health	91%	48%
Home Health	100%	57%
Clinics	63%	63%

Scheduling

Scheduling is a major issue for hospitals and long-term care facilities. DONs of hospitals and long-term care facilities were asked if they offered shifts of various lengths and if they used mandatory overtime. Those who indicated they did offer multiple shifts were asked what shift lengths they offered. **Most of hospitals and the long-term care facilities offered flexibility in scheduling of shifts. Many of the facilities offered multiple shifts (e.g. eight and twelve-hour shifts). Although vacancy rates are high in many areas, very few of the hospitals or of the long-term care facilities used mandatory overtime.** The mandatory overtime question was derived from the Chief Nursing Officer Survey used by the Robert Wood Johnson Foundation “Health Care’s Human Crisis: The American Nursing Shortage” (Kimball & O’Neil, 2002). Kimball & O’Neil (2002) examined the health care industry in 15 states across the country (North Dakota was not included) including a total of 45 chief nursing officers in hospitals. The study found that 24% of the hospitals used mandatory overtime within the last year as a last resort.

Seventy two percent of hospitals and 69% of long-term care facilities offer some flexibility in shift length. Most of the hospitals and long-term care facilities offered shift lengths of eight and twelve hours. When divided into urban-rural categories, 100% of the urban hospitals and 78% of the urban long-term care facilities offered shifts of varying length. Most of the facilities offered eight hour or twelve-hour shifts. Of the semi-rural facilities, 80% of the hospitals and 54% of the long-term care facilities offered shifts of varying length. Most of the hospitals and long-term care facilities offered eight and twelve hour shifts. Of the rural facilities, 46% of the hospitals and 83% of the long-term care facilities offer shifts of varying length; primarily they offer shifts of eight or twelve hours (see Figures 1 and 2).

Figure 1: Shifts Offered by Hospitals

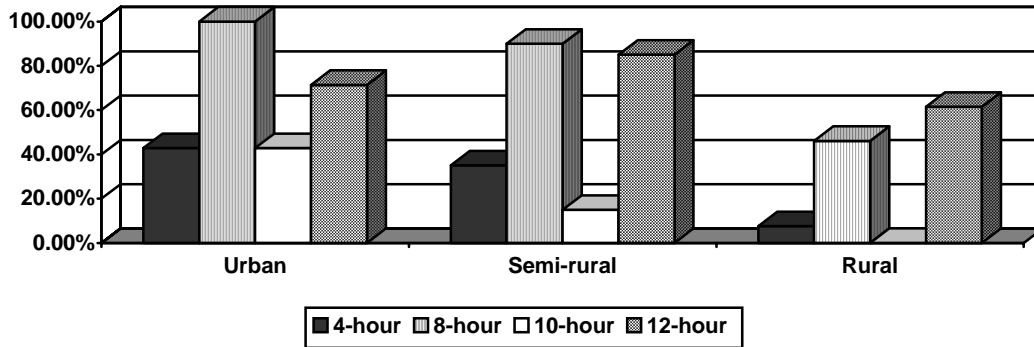
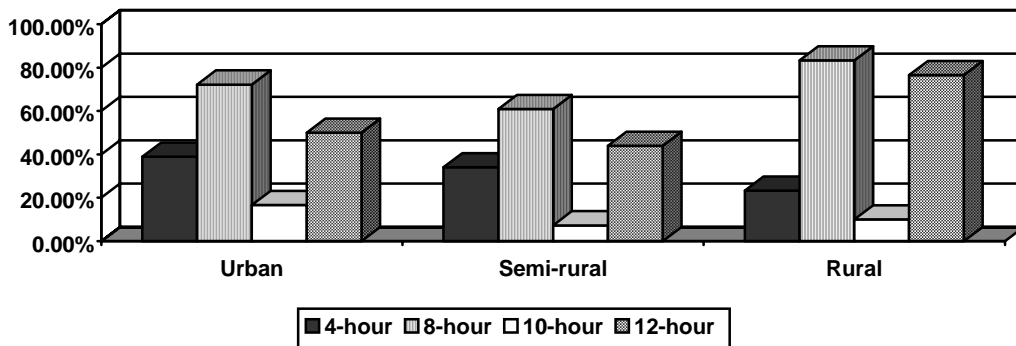


Figure 2: Shifts Offered by Long-term care facilities



The NDNN study found very few ND hospitals or long-term care facilities used mandatory overtime. Use of mandatory overtime by facilities was 5% among the hospitals and 8% among the long-term care facilities. Hospitals using mandatory overtime have been doing so for a median of 3 years. Long-term care facilities using mandatory overtime have been doing so for a median of 4 years.

Nurse Participation in Decision-making

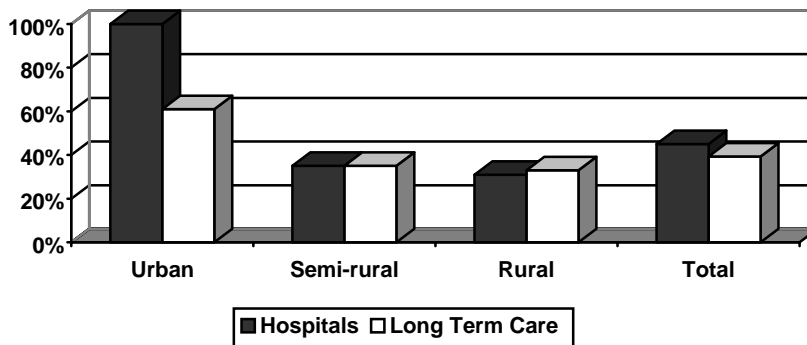
The NDNN hospital and long term care surveys included a question asking if the facility had a formal structure in place for nurses to participate in decision-making, including shared governance, nursing councils or nursing representatives at facility meetings. Those with nurse participation in decision-making were asked how many years this had been in place and how well the process worked. Items were rated on a scale of 1 to 5 with 1 indicating not well and 5 indicating very well. Survey results indicate that there is a formal structure for nurse participation in decision-making at many of hospitals and long-term care facilities. Nurse participation has been ongoing for an average of 14 years at hospitals, and 5 years at long-term

care facilities. The median effectiveness of participation was rated at 3 points at hospitals and at 4 points at long-term care facilities.

The nursing participation question was derived from The Robert Wood Johnson Foundation Chief Nursing Officer Survey (Kimball & O'Neil, 2002). In their study, Kimball and O'Neil (2002) stated that 76% of the Hospital chief nursing officers (CNO) reported some sort of nursing representation structure in place. Their respondents indicated that the representational structures had several names such as Shared Governance, Nursing Advisory and Nursing Practice Council. Kimball and O'Neil, (2002) did not ask respondents to rate the effectiveness of the representation structure.

Results of the NDNN study indicate that there is a formal structure for nurse participation in decision-making at 45% of hospitals and 39% of long-term care facilities. These results are considerably lower than the 76% reported by Kimball and O'Neil (2002). The differences between the observations of Kimball and O'Neil (2002) and the NDNN study could be due to many factors; however, the inclusion of long-term care facilities and the rural nature of ND had a considerable impact on these numbers. Existence of a structure varied dramatically both by region and facility type. Urban facilities have a considerably higher percent of structures in place than semi-rural facilities. Rural facilities lag slightly behind semi-rural facilities in number of structures. In the urban areas hospitals were more likely than long-term care facilities to have a structure in place. In semi-rural and rural areas hospitals and long-term care facilities were equally likely to have a structure in place (see Figure 3).

Figure 3: Formal Nursing Staff Representation in Decision-making



Tuition Reimbursement

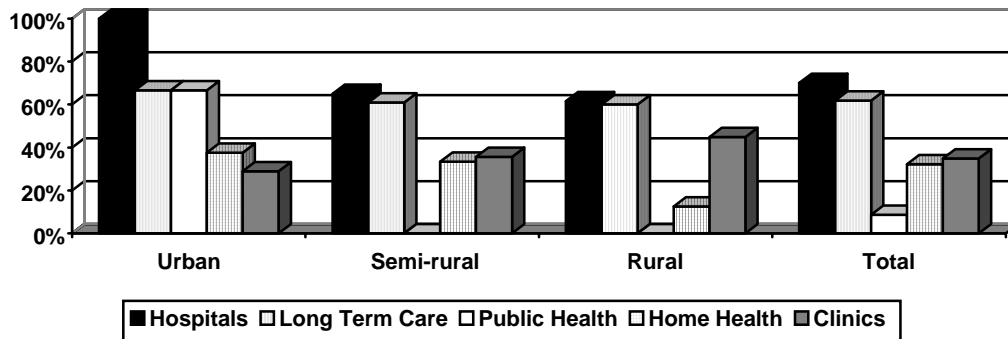
Facilities were asked if they offered tuition reimbursement. For facilities that it a series of questions were asked:

1. Is tuition reimbursement used as a recruitment or retention incentive?
2. Are nurses compensated for pursuing the next higher degree?
3. What is the percentage or dollar amount of tuition that the facility reimbursed?
4. Does the facility reimburse for continuing education courses, single courses, and courses that lead to a degree?

Many of the facilities offered some form of tuition assistance or reimbursement as a recruitment and retention incentive. Many facilities encouraged nurses to advance their education, offering tuition reimbursement for obtaining the next higher degree in the field. Many facilities reimbursed for education whether for degree or for continuing education. A large number of facilities offered reimbursement. There were many stipulations associated with reimbursement. The most prevalent requirement across all types of facilities was a commitment to remain employed by the facility for a year or more after the completion of the reimbursable coursework.

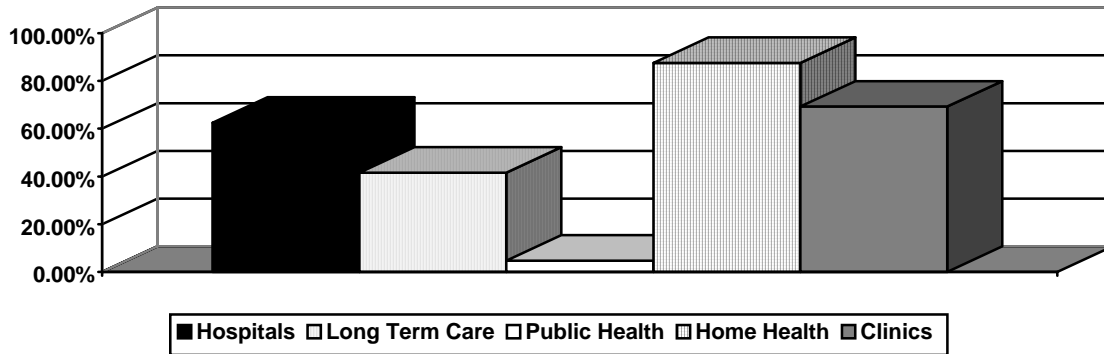
Many facilities offered some form of tuition assistance or reimbursement: 70% of the hospitals, 61% of the long-term care facilities, 9% of regional public health facilities, 32% of home health facilities, and 34% of clinics indicated that they offered tuition reimbursement (see Figure 4). The average percentage of reimbursement varied across facility type: per annum, hospitals offered an average of 64% of tuition, long-term care facilities offered an average of 79% of tuition, regional public health facilities offered an average of 60% of tuition, home health facilities offered an average of 80% of tuition, and Clinics offered an average of 59% of tuition. The average percentage of reimbursement varied across geographic region. Urban facilities in general were more likely to offer tuition reimbursement. Urban hospitals and regional public health were much more likely than their rural counterparts to offer tuition reimbursement (see Figure 4).

Figure 4: Percent of Institutions that Provide Tuition Reimbursement



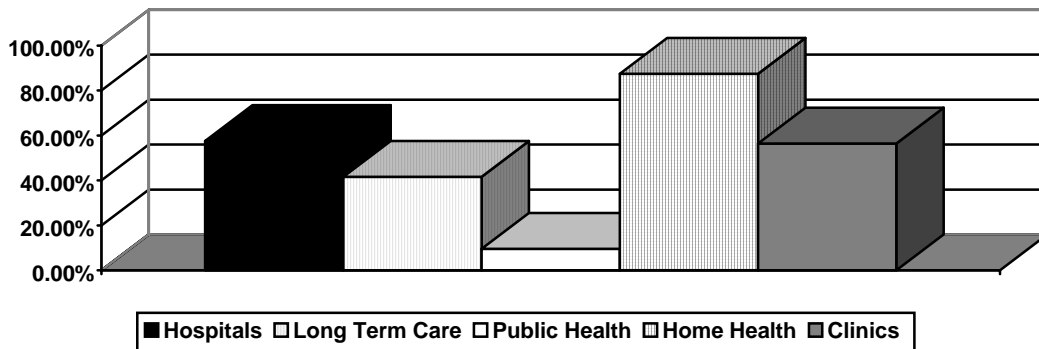
Tuition reimbursement was used as a recruitment and retention tool by many of the facilities: 63% of hospitals, 42% of long-term care facilities, 5% of regional public health facilities, 88% of home health facilities, and 69% of clinics used tuition reimbursement as a recruitment and retention incentive (see Figure 5).

Figure 5: Facilities that Used Tuition Reimbursement as a Recruitment Incentive



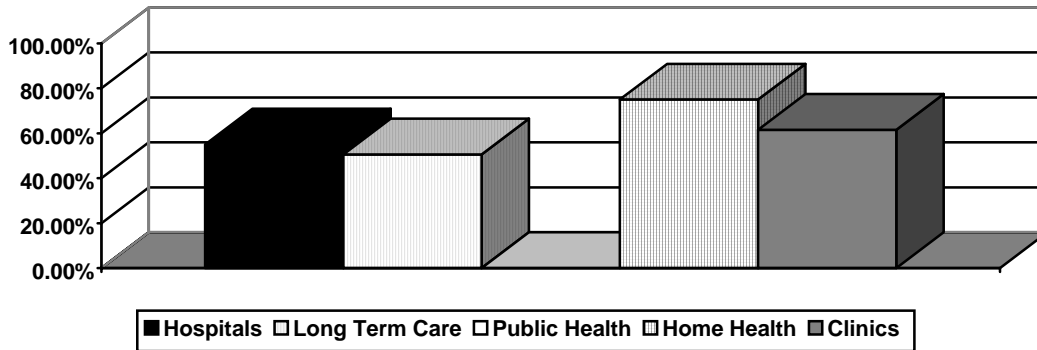
Fifty-eight percent of hospitals, 42% of long-term care facilities, 10% of regional public health facilities, 88% of home health facilities, and 56% of clinics used tuition reimbursement as a retention incentive (see Figure 6).

Figure 6: Facilities that Used Tuition Reimbursement as a Retention Tool



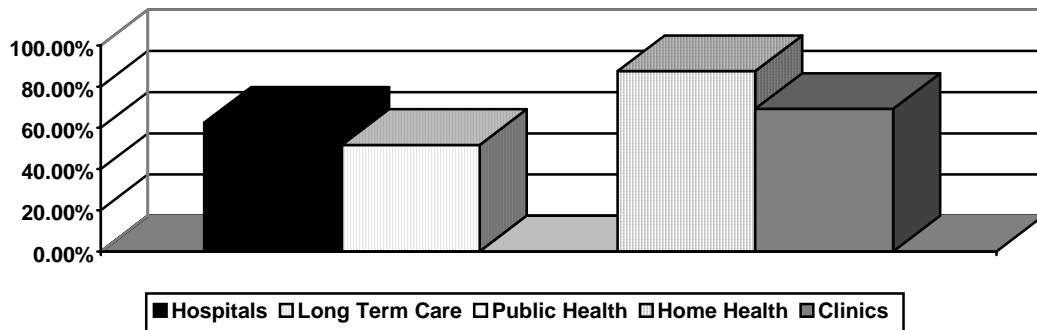
Many facilities encouraged nursing assistants to advance their education by offering tuition reimbursement to those pursuing the next higher degree in the field. 55% of hospitals, 50% of long-term care facilities 0% of regional public health facilities, 75% of home health facilities, and 66% of clinics allowed tuition reimbursement for nursing assistants to pursue LPN education (see Figure 7).

Figure 7: Facilities that Reimburse Nursing Assistants to Pursue LPN Education



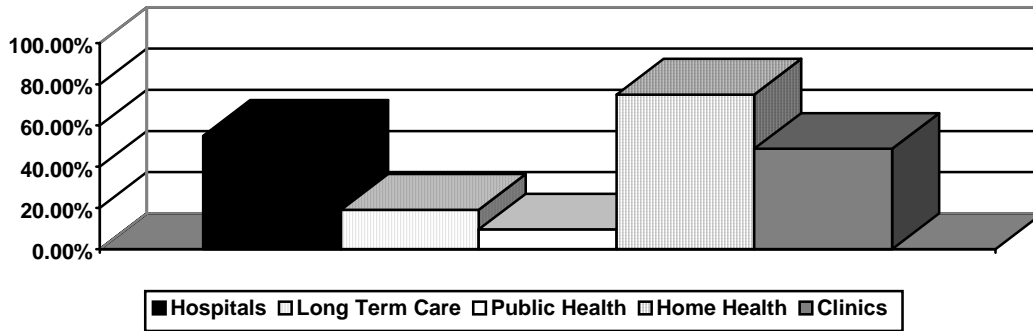
Sixty-two percent of hospitals, 51% of long-term care facilities 0% of regional public health facilities, 87% of home health facilities, and 69% of clinics indicated that their tuition reimbursement allowed LPNs to pursue RN education (see Figure 8).

Figure 8: Facilities that Reimburse LPNs to Pursue RN Education



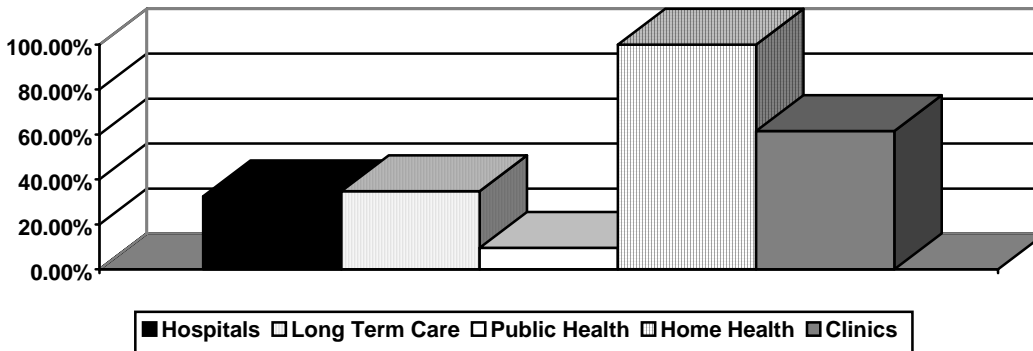
Fifty-five percent of hospitals, 19% of long-term care facilities 10% of regional public health facilities, 75% of home health facilities, and 49% of clinics indicated that their tuition reimbursement for RNs to pursue MSN/PhD education (see Figure 9).

Figure 9: Facilities that Reimburse RNs to Pursue MSN/PhD Education



Many facilities reimbursed for continuing education: 32% of hospitals, 34% of long-term care facilities, 9% of regional public health facilities, 100% of home health facilities, and 62% of clinics reimbursed nurses for continuing education credits (see Figure 10).

Figure 10: Facilities that Reimburse for Continuing Education Credits



There were many requirements associated with tuition reimbursement, which varied across facility type. The most prevalent requirement across all types of facilities was a commitment from the individual to remain employed for a year or more after the completion of the coursework paid for by the facility. Specific conditions, indicated by five percent or more of a facility type, are listed below.

Requirements associated with tuition reimbursement by hospitals included:

- 58% require minimum service commitment after coursework.
- 15% require that employment for a minimum period prior to coursework.
- 12% require a minimum number of work-hours per week while in school.
- 8% have other restrictions.

Requirements associated with tuition reimbursement by long-term care facilities included:

- 63% require minimum service commitment after coursework.
- 13% require a minimum number of work-hours per week while in school.
- 8% require that the coursework be applicable to the current job.
- 8% decide on a case by case basis
- 8% have other restrictions.

Requirements associated with tuition reimbursement by regional public health facilities included:

- 100% require minimum service commitment after coursework.
- 50% have other restrictions.

Requirements associated with tuition reimbursement by home health facilities included:

- 44% require minimum service commitment after coursework.
- 22% require that employment for a minimum period prior to coursework.
- 22% require that the coursework be applicable to the current job.
- 11% have other restrictions.

Requirements associated with tuition reimbursement by clinics included:

- 38% require minimum service commitment after coursework.
- 15% GPA restrictions
- 12% require a minimum number of work-hours per week while in school.
- 10% require that the coursework be applicable to the current job.
- 5% require that employment for a minimum period prior to coursework.
- 15% have other restrictions.

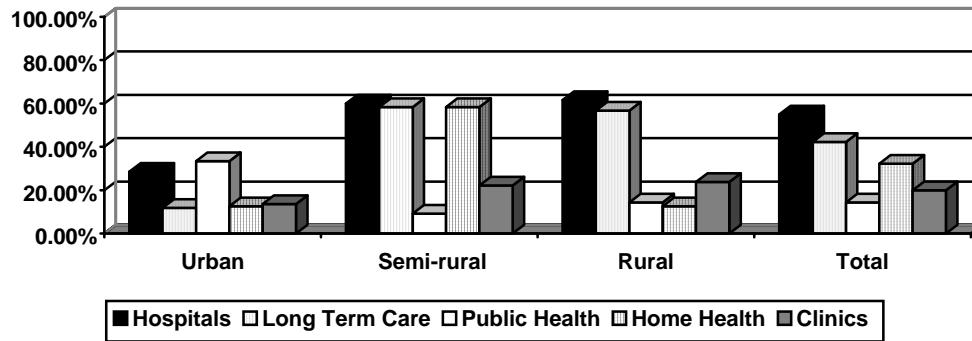
Recruitment Issues

The Robert Wood Johnson Foundation Hospital Chief Nursing Officer Survey (Kimball & O'Neil, 2002) included a "yes" or "no" question asking if the organization was experiencing a nursing shortage. Eighty-four percent of the Hospital nursing officers reported "yes" they were experiencing a nurse-shortage. Interestingly, all of the hospitals included in the survey from Montana, a region similar to ND, indicated they were not experiencing a shortage. This question was modified in the NDNN study asking respondents to rate on a scale of 1-5 whether they were having difficulty recruiting RNs or LPNs.

Respondents were asked to indicate the extent their institution had difficulty recruiting RNs and LPNs on a 5-point scale, with 1 indicating no difficulty and 5 indicating very difficult. Responses were collapsed over the five-point scale in the following manner: Facilities indicating a rating of 1 or 2 were considered to have had no difficulty recruiting. Those indicating a response of 3 were considered to have been experiencing a moderate degree of difficulty recruiting. Those indicating 4 or 5 were considered to have been experiencing significant difficulty recruiting RNs or LPNS. Urban facilities are experiencing some difficulty recruiting but across facility type semi-rural and rural facilities have had the most difficulty recruiting RNs and LPNs during the last year.

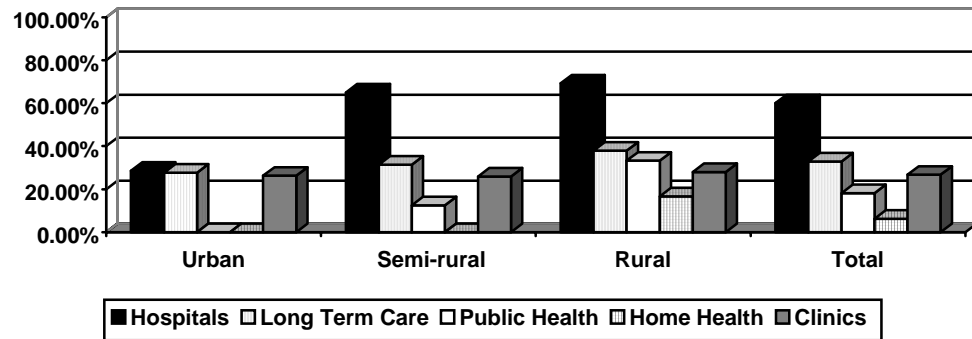
Fifty-five percent of hospitals, 42% of long-term care facilities, 14% of regional public health facilities, 32% of home health facilities, and 20% of clinics have significant difficulty (indicated ≥ 4 on a 5 point scale) recruiting RNs (see Figure 11).

Figure 11: Facilities Having Significant Difficulty Recruiting RNs



Facilities that hire LPNs had similar difficulties recruiting: 60% of hospitals, 33% of long-term care facilities, 18% of regional public health facilities, 6% of home health facilities, and 27% of clinics reported having significant difficulty (indicated ≥ 4 on a 5 point scale) recruiting LPNs (see Figure 12).

Figure 12: Facilities Having Significant Difficulty Recruiting LPNs

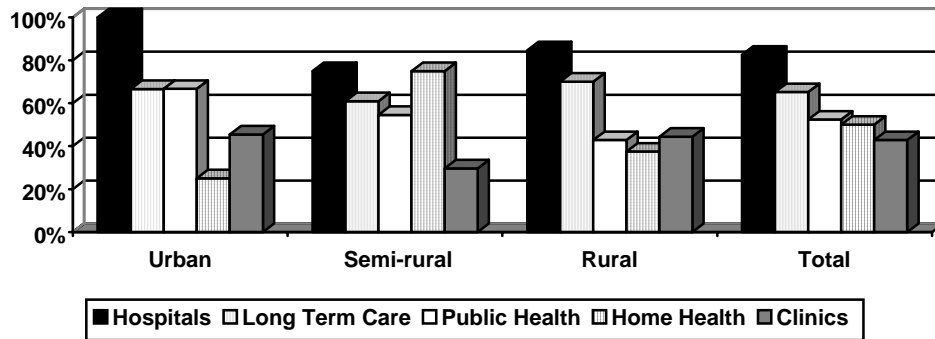


The Robert Wood Johnson Foundation Hospital Chief Nursing Officer Survey (Kimball & O’Neil, 2002) included a question regarding strategies to address nursing shortage but gave a limited number of choices (increases in pay, increases in benefits, use of incentives, use of consultants, work environment improvements and new care delivery models).

In the NDNN study, respondents were asked to indicate whether they used any recruitment or retention strategies in the last year and if so what they have used to fill RN and LPN positions. Many of the facilities indicated they had used specific recruitment and retention strategies to attract RNs and LPNs during the last year.

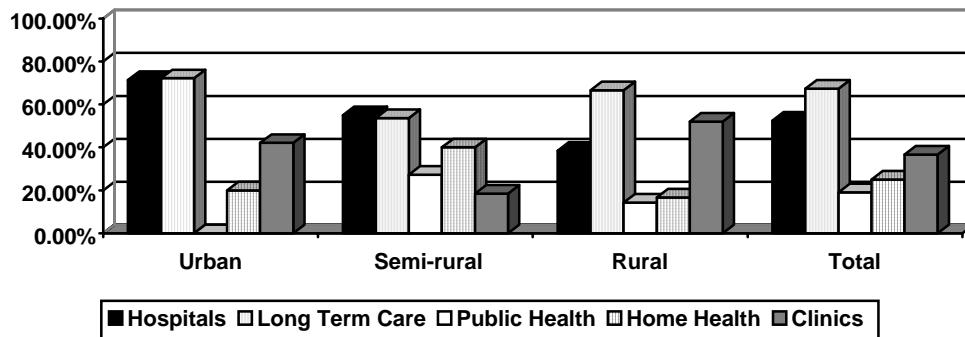
Eighty-three percent of hospitals, 65% of long-term care facilities, 52% of regional public health facilities, 53% of home health facilities, and 43% of clinics used recruitment and retention strategies for RNs in the past year (see Figure 13).

Figure 13: Facilities Using Strategies to Recruit and Retain RNs



Fifty-three percent of hospitals, 67% of long-term care facilities, 19% of regional public health facilities, 26% of home health facilities, and 37% of clinics used recruitment and retention strategies for LPNs (see Figure 14).

Figure 14: Facilities Using Strategies to Recruit and Retain LPNs



In the Robert Wood Johnson Foundation Hospital Chief Nursing Officer Survey (Kimball & O’Neil, 2002) increases in pay were used by 96% of CNOs, benefit increases by 56%, incentives by 62%, work environment improvements by 71%, consultants by 20%, and changes in care delivery models by 56% of the Hospital CNOs.

The NDNN recruitment strategies data indicate that increases in pay and benefits were used by many facilities to recruit and retain LPNs and RNs (see Table 3). Of facilities that use recruitment and retention strategies for RNs (see Table 4) and LPNs (see Table 5) many they had using similar strategies (see Table 3).

Table 3: Recruitment Strategies by Facility Type

Hospitals have used:

Most frequently

1. pay increases
2. student loan repayment
3. flexible scheduling

Least frequently

1. cost of living loan repayment.
2. certification based wages
3. education based pay differential

Long-term care facilities have used:

Most frequently

1. pay increases
2. flexible scheduling
3. health insurance

Least frequently

1. cost of living loan repayment.
2. certification based wages
3. child care

Regional public health facilities have used:

Most frequently

1. pay increases
2. improved work environment
3. health insurance

Least frequently

1. relocation costs.
2. scholarships
3. cost of living loan repayment

Home health facilities have used:

Most frequently

1. pay increases
2. health insurance
3. improved work environment

Least frequently

1. relocation costs.
2. scholarships
3. cost of living loan repayment

Clinics have used:

Most frequently

1. pay increases
2. sign-on bonuses
3. improved work environment

Least frequently

1. cost of living loan repayment
2. child care
3. maternity leave

Table 4: Facilities Using Recruitment and Retention Strategies Last Year for RNs

	Hospitals	Long-term Care	Public Health	Home Health	Clinics
Pay Increase	68%	43%	91%	75%	73%
Cost of living Loan Repayment	0%	2%	0%	0%	0%
Sign-on Bonus	30%	22%	0%	19%	27%
Relocation Costs	15%	7%	0%	6%	13%
Scholarships	28%	26%	0%	6%	13%
Improved Work Environment	28%	13%	27%	31%	23%
Dental Insurance	10%	16%	0%	19%	10%
Student Loan Repayment	38%	25%	0%	13%	7%
Child Care Services	3%	3%	0%	6%	3%
Continuing Education	20%	19%	9%	6%	10%
Maternity Leave	8%	19%	9%	13%	7%
Health Insurance	25%	34%	18%	31%	13%
Retirement Plans	15%	27%	9%	25%	10%
New Care Delivery Model	10%	6%	---	---	---
Paid Licensure	3%	6%	---	---	---
Certification-based Wages	0%	2%	---	---	---
Flexible Scheduling	33%	36%	---	---	---
Education-based Pay Differential	0%	4%	---	---	---
Shift Rotation	20%	12%	---	---	---
Other Incentives	18%	10%	9%	31%	7%

Table 5: Facilities Using Recruitment and Retention Strategies in the Last Year for LPNs

	Hospitals	Long-term Care	Public Health	Home Health	Clinics
Pay Increase	45%	46%	36%	100%	81%
Cost of living					
Loan Repayment	0%	0%	0%	0%	8%
Sign-on Bonus	10%	19%	0%	0%	15%
Relocation Costs	8%	3%	0%	0%	12%
Scholarships	25%	33%	0%	25%	19%
Improved Work Environment	18%	13%	0%	25%	31%
Dental Insurance	8%	15%	0%	0%	15%
Student Loan Repayment	18%	26%	0%	25%	8%
Child Care Services	3%	0%	0%	25%	8%
Continuing Education	20%	16%	0%	25%	23%
Maternity Leave	10%	13%	9%	25%	15%
Health Insurance	18%	33%	18%	25%	23%
Retirement Plans	13%	24%	18%	25%	27%
New Care Delivery Model	10%	7%	---	---	---
Paid Licensure	3%	3%	---	---	---
Certification-based Wages	0%	0%	---	---	---
Flexible Scheduling	18%	35%	---	---	---
Education-based Pay Differential	0%	2%	---	---	---
Shift Rotation	25%	18%	---	---	---
Other Incentives	8%	9%	0%	25%	8%

Exit Interviews

A question on the NDNN survey asked whether facilities utilized exit interviews and if so, for what reasons did RNs and LPNs leave their positions. Most facilities perform exit interviews with RNs. One hundred percent of hospitals, 82% of long-term care facilities, 52% of regional public health facilities, 82% of home health facilities, and 71% of clinics perform exit interviews with departing RNs.

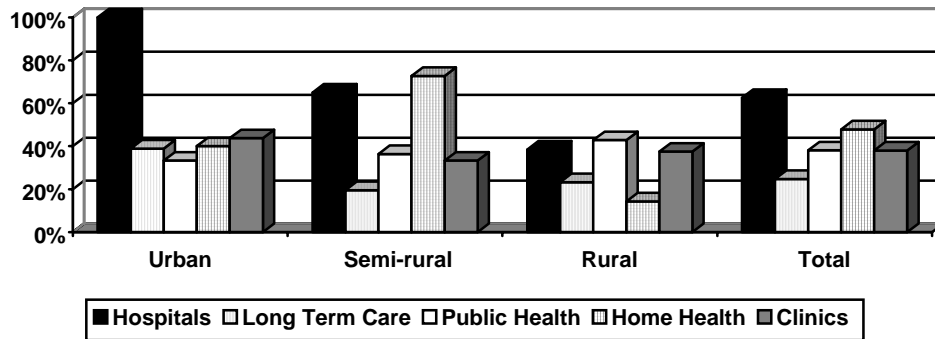
The top three reasons given during exit interviews for both RNs and LPNs deciding to leave were relocation, more money, and another nursing position (see figures 15 – 20).

The American Organization of Nurse Executive (AONE) “Acute Care Hospital Survey of RN Vacancy and Turnover Rates” (HSM Group, 2002) study also reported that the top three reasons nation wide for RN resignations were relocation (65%), more money (57%) and desired another nursing position (54%).

When divided along the urban – rural continuum, RN relocation seems to be more common in urban and semi-rural areas than in the rural areas. More money is most important to RNs in rural hospitals. Urban home health and long-term care facilities semi-rural hospitals, and rural hospital long-term care and clinics all had high percentages of RNs leaving for another nursing position. When looking at the geographic influence of relocation, more money, and another nursing position on LPNs one finds: Urban hospitals and clinics clearly lead all other facilities in percentage of LPNs leaving for relocation. Home health facilities in semi-rural and rural areas have higher percentages of LPNs leaving for more money. The distribution of LPNs leaving for another nursing position is fairly even across region and facility type.

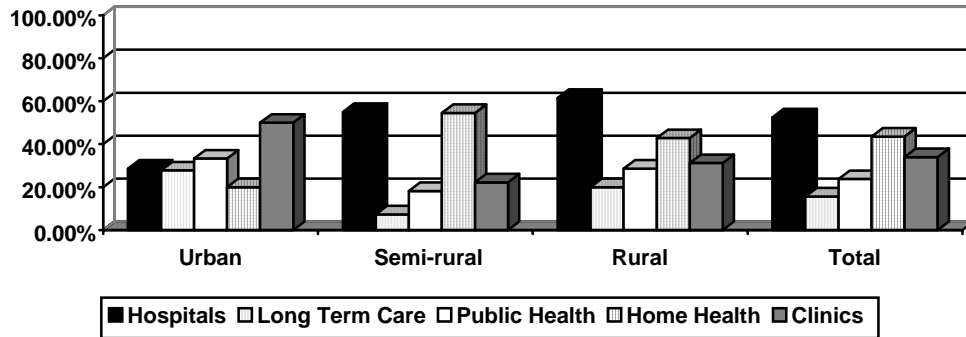
Sixty-three percent of hospitals, 25% of long-term care facilities, 38% of regional public health facilities, 48% of home health facilities, and 38% of clinics cited relocation as a reason for RNs leaving (see Figure 15).

Figure 15: Facilities Citing Relocation as the Reason for RNs Leaving



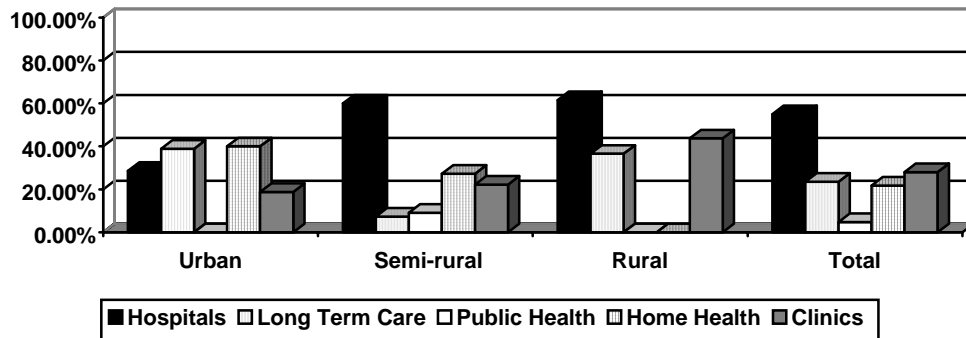
Fifty-three percent of hospitals, 16% of long-term care facilities, 24% of regional public health facilities, 43 % of home health facilities, and 34% of clinics cited money as a reason for RNs leaving (see Figure 16).

Figure 16: Facilities Citing More Money as the Reason for RNs Leaving



Fifty-five percent of hospitals, 24% of long-term care facilities, 5% of regional public health facilities, 22% of home health facilities, and 28% of clinics cited another nursing position as a reason for RNs leaving (see Figure 17).

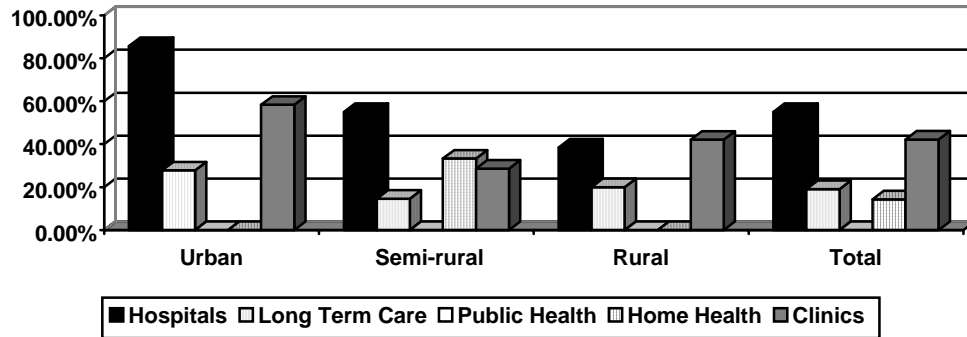
Figure 17: Facilities citing another Nursing Position as the Reason for RNs Leaving



Many facilities perform exit interviews with LPNs: Ninety-eight percent of hospitals, 90% of long-term care facilities, 55 % of regional public health facilities, 44% of home health facilities, and 63% of clinics.

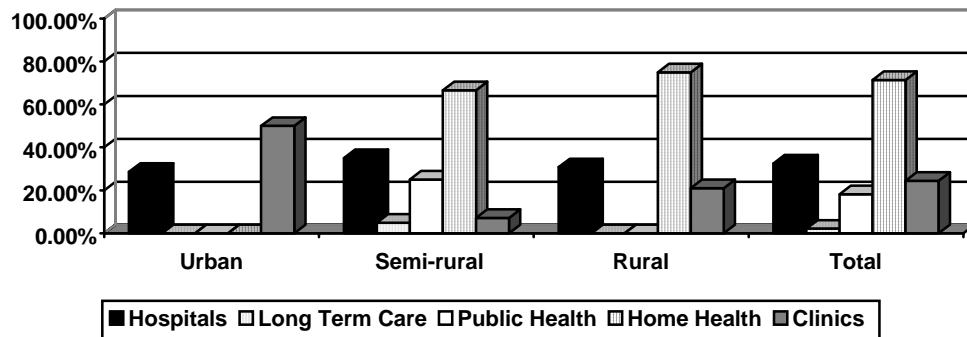
Fifty-five percent of hospitals, 19% of long-term care facilities, 0% of regional public health facilities, 14% of home health facilities, and 42% of clinics cited relocation as a reason for LPNs leaving (see Figure 18)

Figure 18: Facilities Citing Relocation as the Reason for LPNs Leaving



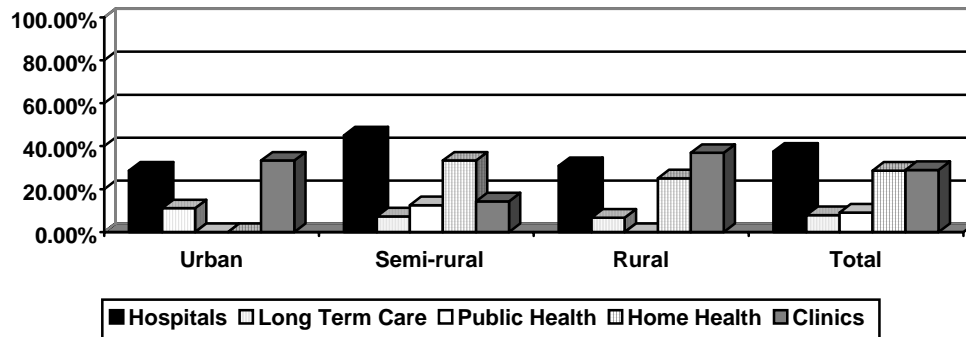
Thirty-three percent hospitals, 2% of long-term care facilities, 18% of regional public health facilities, 71% of home health facilities, and 24% of clinics cited money as a reason for LPNs leaving (see Figure 19).

Figure 19: Facilities Citing More Money as the Reason for LPNs Leaving



Of the facilities that perform exit interviews with LPNs, 38% of hospitals, 8% of long-term care facilities, 9% of regional public health facilities, 29% of home health facilities, and 29% of clinics cited another nursing position as a reason for LPNs leaving (see Figure 20).

Figure 20: Percent of Facilities Citing Another Nursing Position as Reason for LPNs Leaving



Clinical Education

The Robert Wood Johnson Foundation Hospital Chief Nursing Officer Survey (Kimball & O’Neil, 2002) included a question asking how many schools the hospital had contracts for clinical rotations and how many students rotate on-site each year. Ninety-one percent of the CNOs had contracts with schools of nursing for clinical rotations with a median of 6 schools per hospital. The number of students rotating on site ranged from 4 – 1,246.

The AONE study (HSM Group, 2002) reported that nation-wide 54% of the hospitals had agreements with schools of nursing to provide clinical education to more than 25 RN students per year.

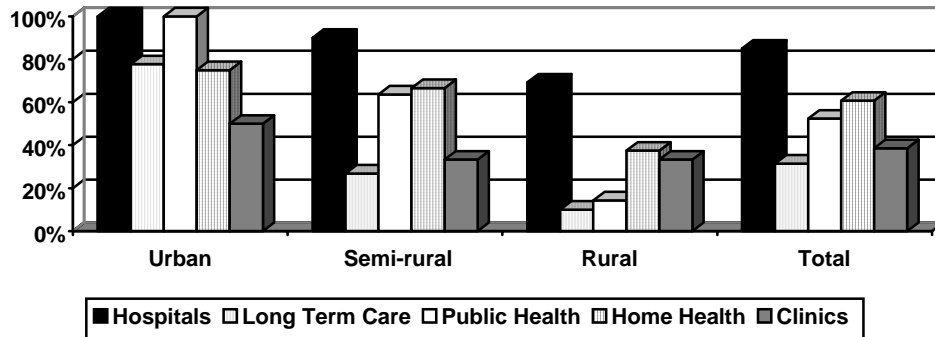
A question on the NDNN survey asked whether facilities have agreements with nursing schools to provide clinical education for students in RN and LPN programs. Those that answered in the affirmative were asked the following series of questions:

1. With how many schools does your facility contract?
2. How many nursing students rotate on-site each year?
3. Do you plan to change your level of support for clinical education?
4. Will you be able to increase the number of nursing students in rotation at your facility?

Clinical education for RN students is much more common in urban facilities than semi-rural or rural facilities. Overall, hospitals provide the highest percentage of sites across all levels of the urban—rural continuum. Clinical education for LPN students is much more common at urban facilities and semi-rural facilities than rural facilities. Overall, home health facilities and hospitals provide the highest percentage of sites across all levels of the urban—rural continuum.

Many of the institutions offered clinical education to RN students: 85% of hospitals, 32% of long-term care facilities, 52% of regional public health facilities, 61% of home health facilities, and 39% of clinics provide clinical education for RN students (see Figure 21).

Figure 21: Facilities that Provide Clinical Education to RN Students



Of facilities that offer clinical training to RN students, hospitals had agreements with 3 schools on average; long-term care facilities had agreements with 1 school on average; and Clinics had agreements with 2 schools on average. No data were available for regional public health or home health facilities.

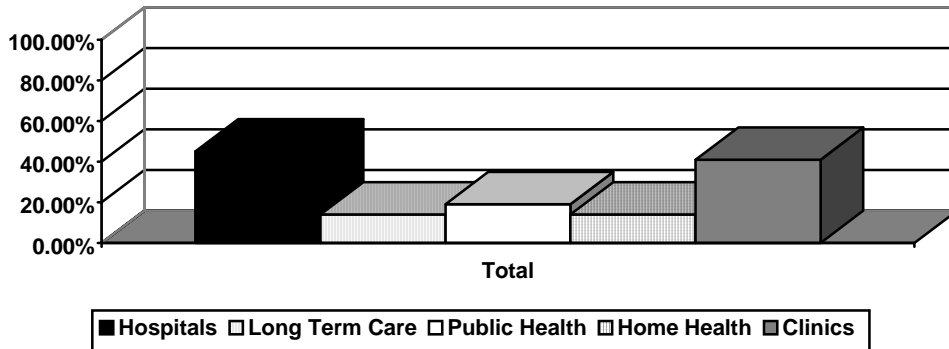
On average per year:

- Hospitals educate 23 RN students per year
- Long-term care facilities educate 12 RN students
- Regional public health facilities educate 18 RN students
- Home health facilities educate on average 10 RN students
- Clinics educate on average 21 RN students

Facilities could increase the number of RN student clinical education positions at the following rates (see figure 22):

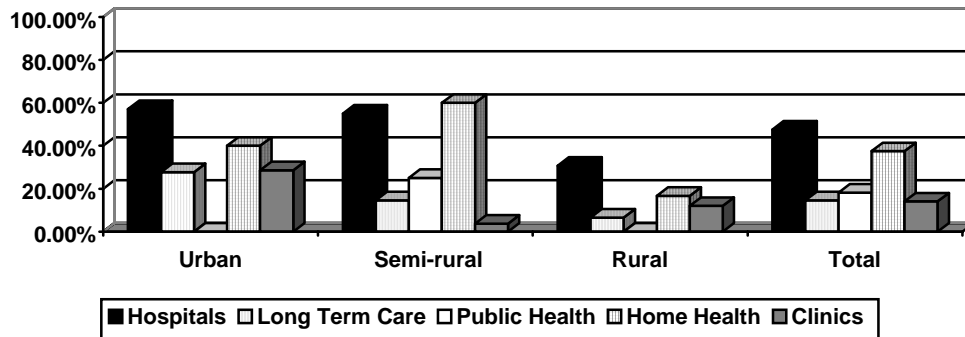
- Hospitals 45%, with an average of 4 positions added at each site.
- Long-term care facilities 14%, with an average of 11 positions added at each site.
- Regional public health facilities 19%, the average of positions added was not available.
- Home health facilities 14%, the average of positions added was not available.
- Clinics 41%, with an average of 5 positions added at each site.

Figure 22: Facilities that Could Increase Clinical Education to RN Students



Many institutions offer clinical education to LPN students: 48% of hospitals, 15% of long-term care facilities, 18% of regional public health facilities, 38% of home health facilities, and 14% of clinics indicated that they provide clinical education to LPN students. Urban hospitals, long-term care facilities, and clinics are more likely than their semi-rural or rural counterparts to offer clinical LPN education. Semi-rural regional public health and home health facilities are more likely than their urban or rural counterparts to offer clinical LPN education (see Figure 23).

Figure 23: Facilities that Provide Clinical Education to LPN Students



Of facilities that offer clinical training to LPN students, hospitals had agreements with 1.4 schools on average; long-term care facilities had agreements with 1 school on average; and Clinics had agreements with 1.3 schools on average. No data were available for regional public health or home health facilities.

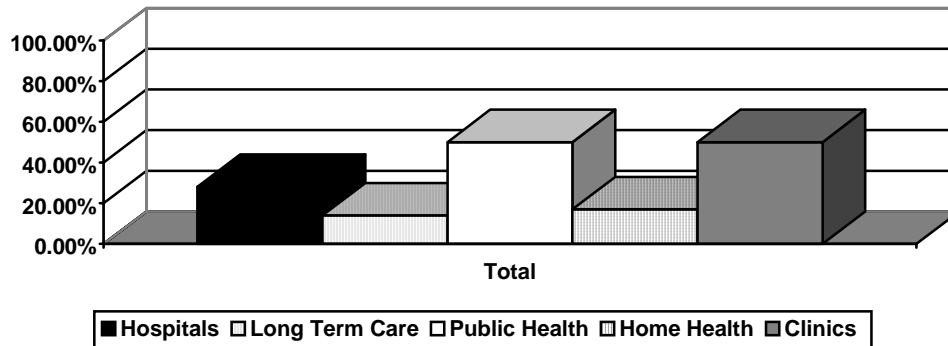
On average per year:

- Hospitals educate 18 LPN students
- Long-term care facilities educate LPN 17 students
- Regional public health facilities data were not available
- Home health facilities educate on average LPN 12 students
- Clinics educate on average LPN 30 students

Facilities could increase the number LPN student clinical education positions at the following rates (see figure 24):

- Hospitals 28%, with an average of 6 positions added at each site.
- Long-term care facilities 14%, with an average of 11 positions added at each site.
- Regional public health facilities 50%, the average of positions added was not available.
- Home health facilities 17%, the average of positions added was not available.
- Clinics 50%, with an average of 9 positions added at each site.

Figure 24: Facilities that Could Increase Clinical Education to LPN Students



Staffing Issues

Respondents were asked for the total number of FTE RN and LPN resignations and terminations in 2000 and 2001. Respondents were also asked the number of budgeted FTE RN and LPN, positions that were filled with full-time nurses, part-time nurses, vacant positions and the use of temporary staff for several specific departments and overall in their facility. These questions were modified from the AONE “Acute Care Hospital Survey of RN Vacancy and Turnover Rates” (HSM Group, 2002). Respondents appeared to have problems allocating staff according to the listed departmental categories. Thus the NDNN study is reporting only data that were reported for total number of direct and indirect care positions.

The number of RN terminations, across facility type, was relatively low. The number of 2001 RN terminations was 14 at hospitals, 11 at long-term care facilities, 1 at regional public health facilities, 1 at Home Health facilities, and 13 at clinics (see Table 6).

Table 6: Number of RN Terminations by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals				
2000	4	6	4	14
2001	7	5	2	14
Long -term care				
2000	1	4	3	8
2001	4	1	6	11
Public Health				
2000	0	0	0	0
2001	0	1	0	1
Home Health				
2000	0	1	0	1
2001	0	1	0	1
Clinics				
2000	9	1	0	10
2001	10	3	0	13

The number of LPN terminations indicated by facilities, across facility type, was relatively low. The number of 2001 LPN terminations was 2 at hospitals, 13 at long-term care facilities, 0 at regional public health facilities, 0 at Home Health facilities, and 23 at clinics (see Table 7)

Table 7: Number of LPN Terminations by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals				
2000	1	3	1	5
2001	1	1	0	2
Long -term care				
2000	3	6	2	11
2001	6	7	0	13
Public Health				
2000	0	0	0	0
2001	0	0	0	0
Home Health				
2000	0	1	0	1
2001	0	0	0	0
Clinics				
2000	21	1	0	22
2001	23	0	0	23

All categories of facilities showed a slight increase in the number of resignations from 2000 to 2001. Hospitals had the greatest number of RN resignations (see Table 8) and long-term care facilities had the greatest number of LPN resignations (see Table 9).

Table 8: Number of RN Resignations by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals				
2000	63	61	21	145
2001	66	72	14	152
Long -term care				
2000	21	24	24	69
2001	18	32	21	71
Public Health				
2000	2	6	3	11
2001	8	6	0	14
Home Health				
2000	47	13.	3	63
2001	46	13	1	60
Clinics				
2000	58	7	9	74
2001	74	8	4	86

Table 9: Number of LPN Resignations by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals				
2000	14.5	26.8	0	41.3
2001	23.3	22.5	5	50.8
Long -term care				
2000	27.8	28	11	66.8
2001	21.6	40.7	16	78.3
Public Health				
2000	0	0	0	0
2001	0	0	1	1
Home Health				
2000	0	1.10	2	3.10
2001	3.30	4.50	1	8.80
Clinics				
2000	40.70	8	6.50	55.20
2001	30.20	7	10.40	47.60

The AONE study (HSM Group, 2002) reported that 54% of hospitals nationwide used temporary staff to fill RN positions. Most North Dakota facilities reported very little use of temporary staff. **There were, however two notable exceptions: 25% of semi-rural home health facilities reported hiring temporary RN staff (see Table 10) and 100% of rural regional public health facilities reported hiring temporary LPN staff (see Table 11).**

Table 10: Percent of Facilities with Temporary RN Staff

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>
Hospitals	14%	8%	8%
Long -term care	6%	1%	5%
Public Health	33%	9%	14%
Home Health	0%	25%	0%
Clinics	18%	15%	5%

Table 11: Percent of Facilities with Temporary LPN Staff

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>
Hospitals	7%	5%	4%
Long -term care	5%	1%	8%
Public Health	0%	0%	100%
Home Health	0%	0%	0%
Clinics	16%	7%	12%

The AONE study (HSM Group, 2002) defined turnover rate as the number of resignations and terminations divided by the average number of direct and indirect care RN FTE positions for the

same year. AONE found a nationwide turnover rate of 21.3% for RNs in hospitals with a range of 10% to 30%. **The NDNN study used turnover rate as defined in the AONE study.**

The highest turnover rates for RNs were in urban home health care facilities, while the lowest turnover rates were in rural clinics (see Table 12).

Table 12: RN Turnover Rate by Facility Type

	Urban	Semi-rural	Rural	Total
Hospitals	4%	13%	9%	9%
Long -term care	7%	14%	14%	13%
Public Health	18%	24%	0%	16%
Home Health	43%	18%	7 %	21%
Clinics	17%	22%	2%	15%

The highest turnover rates for LPNs were found urban home health care facilities while the lowest turnover rates were in urban, semi-rural, and rural regional public health facilities (see Table 13).

Table 13: LPN Turnover by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals	6%	17%	13%	14%
Long -term care	15%	20%	8%	15%
Public Health	0%	0%	0%	0%
Home Health	50%	3%	4 %	18%
Clinics	19%	9%	34%	21%

Vacancy Rates

Vacancy rate is defined as the average number of vacant FTE positions divided by the average number of budgeted FTE positions for the same year. According to economists, a full workforce in most industries exists when vacancy rates do not exceed five to six percent (Prescott, 2000). A shortage is considered to be present at a sustained vacancy rate above this level. Nationally, current nurse vacancy rates in hospitals average about 15 percent (AHA, 2002). The AONE study (HSM Group, 2002) reported the nation-wide vacancy rate for RNs in hospitals as 10.2%.

Across the urban—rural continuum in ND: Urban hospitals, long-term care facilities, and regional public health facilities had RN vacancy rates at or above 6%. Semi-rural hospitals and long-term care facilities had RN vacancy rates at or above 6%. Rural long-term care facilities and clinics had RN vacancy rates at or above 6% (see table 14). Across the urban—rural continuum in ND: urban hospitals and clinics had LPN vacancy rates at or above 6%. Semi-rural hospitals and long-term care facilities had LPN vacancy rates at or above 6%. Rural hospitals, long-term care facilities, home health facilities, and clinics had LPN vacancy rates at or above 6% (see table 15).

Table 14: RN Vacancy Rates by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals	9%	8%	3%	8%
Long -term care	9%	8%	11%	9%
Public Health	8%	2%	0%	4%
Home Health	1%	0%	4%	1%
Clinics	4%	5%	8%	4%

Table 15: LPN Vacancy Rates by Facility Type

	<u>Urban</u>	<u>Semi-rural</u>	<u>Rural</u>	<u>Total</u>
Hospitals	9%	6%	6%	8%
Long -term care	3%	8%	14%	9%
Public Health	0%	0%	0%	0%
Home Health	0%	0%	9%	2%
Clinics	7%	3%	9%	7%

Across facility type many of the counties containing responding facilities are experiencing a shortage of RNs or LPNs. In urban counties, facility vacancy rates above 6% included regional public health(RN positions), long-term care (RN and LPN positions), and hospitals (RN and LPN positions). In semi-rural counties, facility vacancy rates above 6% included clinics (RN positions), regional public health (RN positions), long-term care (RN positions) and hospitals (RN and LPN positions). In rural counties, facility vacancy rates above 6% included clinics (RN and LPN positions), home health (RN positions), long-term care (RN and LPN positions) and hospital (RN and LPN positions).

The counties with facility vacancy rates above 40% indicating a severe shortage. These counties included the rural counties of **McIntosh** (long-term care LPN, hospital RN), **McKenzie** (clinic LPN), and **Mountrail** (clinic LPN), as well as the semi-rural counties of **Emmons** (long-term care RN), **Stark** (hospital LPN), **Walsh** (regional public health RN), and **Williams** (hospital RN) (see Table 16).

Table 16: Facility Vacancy Rates by County

County	Clinics			Home Health			Public Health			Long-term Care			Hospitals	
	Count	RN	LPN	Count	RN	LPN	Count	RN	LPN	Count	RN	LPN	Count	RN
Urban Counties														
Burleigh	18	1.04%	0.51%	3	0.00%	0.00%	1	0.00%	0.00%	8	0.00%	1.13%	1	0.00%
Cass	13	0.00%	0.00%	3	0.00%	0.00%	0	---	---	4	13.01%	4.74%	3	3.87%
Grand Forks	5	0.84%	2.74%	2	2.30%	0.00%	1	17.89%	0.00%	4	1.25%	1.79%	3	8.33%
Morton	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	2	0.00%	22.22%	0	---
Semi-rural Counties														
Barnes	1	0.00%	0.00%	2	0.00%	0.00%	0	---	---	3	0.00%	0.00%	1	4.24%
Bottineau	1	0.00%	0.00%	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	1	0.00%
Emmons	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	58.82%	5.45%	1	0.00%
Grant	3	0.00%	0.00%	0	---	---	0	---	---	0	---	---	1	0.00%
Kidder	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	0	---	---	0	---
McLean	5	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	2	0.00%
Mercer	1	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	1	0.00%
Nelson	1	0.00%	0.00%	0	---	---	1	0.00%	0.00%	3	0.00%	1.33%	1	0.00%
Oliver	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Pierce	1	0.00%	0.00%	1	0.00%	0.00%	0	---	---	2	0.00%	0.00%	1	17.39%
Ramsey	2	0.00%	4.17%	1	0.00%	0.00%	1	0.00%	0.00%	4	0.00%	0.00%	1	10.00%
Ransom	4	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%
Richland	2	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	2	0.00%	0.00%	0	---
Stark	3	0.00%	0.00%	1	0.00%	0.00%	0	---	---	3	8.93%	5.25%	2	33.33%
Steele	0	---	---	0	---	---	1	0.00%	0.00%	0	---	---	0	---
Stutsman	2	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	5	2.48%	3.33%	1	8.82%
Trail	1	0.00%	0.00%	0	---	---	1	0.00%	0.00%	3	16.67%	0.00%	2	8.33%
Walsh	1	0.00%	0.00%	0	---	---	1	50.00%	0.00%	2	0.00%	0.00%	1	0.00%
Ward	7	14.29%	2.86%	0	---	---	1	0.00%	0.00%	5	0.77%	0.71%	1	5.03%
Williams	7	14.29%	0.89%	1	0.00%	0.00%	1	0.00%	0.00%	4	6.67%	4.08%	2	41.84%
Rural Counties														
Adams	0	---	---	0	---	---	0	---	---	1	0.00%	0.00%	1	0.00%
Benson	2	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	1	7.86%
Billings	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Bowman	1	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	0	---
Burke	2	0.00%	0.00%	0	---	---	0	---	---	0	---	---	0	---
Cavalier	0	---	---	0	---	---	1	0.00%	0.00%	3	35.10%	3.03%	1	0.00%
Dickey	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	3	0.00%	0.00%	0	---
Divide	1	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	1	0.00%
Dunn	2	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	0	---
Eddy	3	2.45%	8.33%	0	---	---	0	---	---	1	21.43%	8.00%	0	---
Foster	1	7.35%	25.00%	1	7.14%	0.00%	0	---	---	2	0.00%	0.00%	1	0.00%
Golden Valley	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Griggs	2	7.55%	11.63%	0	---	---	0	---	---	0	---	---	0	---
Hettinger	0	---	---	0	---	---	0	---	---	1	0.00%	0.00%	0	---
Lamoure	3	0.00%	0.00%	0	---	---	0	---	---	3	0.00%	0.00%	0	---
Logan	0	---	---	0	---	---	1	0.00%	0.00%	2	0.00%	0.00%	0	---
McHenry	0	---	---	0	---	---	0	---	---	1	0.00%	0.00%	0	---
McIntosh	4	0.00%	0.00%	2	0.00%	0.00%	1	0.00%	0.00%	2	25.00%	50.00%	2	45.00%
McKenzie	1	0.00%	50.00%	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	2	0.00%
Mountrail	2	16.67%	50.00%	0	---	---	0	---	---	2	20.00%	0.00%	1	0.00%
Pembina	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	0	---	---	1	0.00%
Renville	0	---	---	0	---	---	0	---	---	1	0.00%	0.00%	0	---
Rolette	1	0.00%	0.00%	1	0.00%	0.00%	0	---	---	2	16.67%	16.67%	1	0.00%
Sargent	0	---	---	0	---	---	1	0.00%	0.00%	0	---	---	0	---
Sheridan	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Sioux	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Slope	0	---	---	0	---	---	0	---	---	0	---	---	0	---
Towner	1	0.00%	0.00%	0	---	---	1	0.00%	0.00%	0	---	---	0	---
Wells	0	---	---	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%

Figure 1: Vacancy Rates by County Across Facility Type.

Effect of Vacancies

Respondents were asked how RN and LPN vacancies affected their operations in the past year. Respondents could check as many options as applied, so percentages do not add up to 100%.

RN Vacancies:

The most frequent effects of RN vacancies in hospitals included higher costs to deliver care in (55%) and an increase in cross-training (50%). The most frequent effects of RN vacancies in long-term care facilities were an increase in the number of LPNs (31%) and a reduction in RNs providing direct patient care (24%). The most frequent effect of RN vacancies in regional public health facilities was increased cross-training of staff (14%). The most frequent effects of RN vacancies in home health facilities were substituting part-time, per diem or temporary RNs for full-time (39%) and increased cross-training (25%). The most frequent effect of RN vacancies in clinics were substituting part-time, per diem or temporary RNs for full-time (14%), and had higher costs to deliver care (14%) (see Table 17).

LPN Vacancies:

The most frequent effects of LPN vacancies in hospitals included higher costs to deliver care (35%), increase in cross-training (30%), and an increase in the number of patients assigned to LPNs (30%) and ER overcrowding (30%). The most frequent effects of LPN vacancies in long-term care facilities were substitution of part-time, per diem or temporary LPNs for full-time staff (22%) and higher costs to deliver care (19%). The most frequent effect of LPN vacancies in regional public health facilities was reduced or eliminated services (18%). The most frequent effect of LPN vacancies in home health facilities was increased cross training (31%). The most frequent effects of LPN vacancies in clinics were increased cross-training (14%) and reassignment of LPNs (13%) (see Table 18).

Table 17: How Facilities Have Been Affected by RN Vacancies

	<u>Hospitals</u>	<u>Long-term Care</u>	<u>Clinics</u>	<u>Public Health</u>	<u>Home Health</u>
Increase in cross-training of staff	50%	12%	13%	14%	25%
Substitute part-time, per diem or temporary RNs for full-time	38%	21%	14%	10%	39%
Increase in # of Licensed practical nurses	35%	31%	11%	10%	11%
Reassignment or floating of RNs	20%	12%	10%	0%	11%
Reduction in # of Budgeted RN positions	13%	7%	10%	5%	18%
Reduced/ Eliminated Services	10%	4%	6%	10%	11%
Higher Costs to Deliver Care	55%	15%	14%	----	----
Reduction in # of RNs to provide direct patient care	43%	24%	11%	----	----
Hiring of unlicensed assistive personnel to provide care	10%	12%	6%	----	----
Increase in amount of time RNs supervise UAPs	18%	7%	4%	----	----
Loss of management level nurse (without replacement)	30%	11%	6%	----	----
Exceeded 90% census at peak	5%	1%	----	----	----
Restricted Admissions	5%	4%	----	----	----
Increase in # of patients assigned to RNs	40%	7%	----	----	----
Increased Waiting Time for Surgery	0%	----	----	----	----
Experienced ER overcrowding	13%	----	----	----	----
ER Diversion	5%	----	----	----	----

Table 18: How Facilities Have Been Affected by LPN Vacancies

	<u>Hospitals</u>	<u>Long-term Care</u>	<u>Clinics</u>	<u>Public Health</u>	<u>Home Health</u>
Increase in cross-training	30%	16%	14%	0%	31%
Reassignment or floating of LPNS	23%	16%	13%	0%	0%
Reduction in # of budgeted LPN positions	8%	4%	1%	0%	6%
Reduced/ Eliminated Services	0%	4%	1%	18%	6%
Higher costs to deliver care	35%	19%	8%	----	----
Increase in # of patients assigned to LPNS	30%	15%	7%	----	----
Substitution of part-time, per diem or temporary LPNS for full-time	15%	22%	6%	----	----
Hiring of unlicensed assistive personnel	18%	17%	11%	----	----
Increase in amount of time LPNS spend supervising UAPs	13%	13%	3%	----	----
Exceeded 90% Census at peak	8%	0%	----	----	----
Restricted Admissions	0%	2%	----	----	----
Reduction in # of LPNS providing direct care.	15%	15%	----	----	----
Increased waiting time for surgery	3%	----	----	----	----
Experienced ER overcrowding	0%	----	----	----	----
Gone on ER diversion	3%	----	----	----	----
Experienced ER overcrowding	30%	----	----	----	----
ER Diversion	15%	----	----	----	----

The American Journal of Nursing “Patient Care Survey” (Shindul-Rothschild, Berry & Long-Middleton, 1996) asked about changes that have occurred in nursing departments. Respondents most frequently cited an increase in the number of patients assigned to RNs (65.5%), a reduction in the number of RNs providing direct patient care (60.2%) and an increase in cross-training of nursing staff (59.4%).

The AONE (HSM Group, 2002) study found that those hospitals that had vacancy rates above the national average most frequently cited higher costs to deliver care (69%) and emergency department overcrowding (51%).

Suggestions of Facility Administrators for Alleviating Shortages

NDNN study respondents were asked, “what is the one solution you think would work the best to address the nursing shortages?” Comments were wide ranging; however, there were five strong themes that emerged.

Theme 1. The work place needs to be more responsive to the needs of nurses. The lack of workplace responsiveness along with a lack of respect from physicians and administrators is a serious issue for nurses. Maintaining appropriate levels of staffing and workload were common recommendations. Exercising flexibility in scheduling to accommodate nurses when possible was also identified as a possible strategy. Flexible scheduling for older nurses was also suggested in order to retain more older and experienced nurses who may not be able to or desire to work long shifts, holidays and weekends.

Theme 2. Salary and benefits should be increased to become competitive with other states. Many facilities in rural areas have a very difficult time recruiting and retaining nurses due to the combination of lower wages and fewer amenities. Also, pay differentials for weekends and other less desirable shifts were suggested. Many respondents thought that increased benefits, beyond salary increases, was a key strategy to bolster job satisfaction. Benefits suggested included sign-on bonuses, tuition assistance and loan repayment programs.

Theme 3. The entry into practice requirement was too restrictive and should be adjusted to accommodate differing levels of practice and pay. Of the one hundred thirty-seven respondents who responded to the “best solution” question, some respondents (n=36) noted that the strict entry into practice requirement has limited the ability to provide appropriate care to the largest number of patients and has contributed to the shortage. The common solutions suggested by respondents were along two lines. One group thought steps in the education training (e.g. 1-year LPN, 2-year RN, 3-year RN, and 4-year RN) would allow nurses to work while pursuing their objective of a BSN. The second group suggested that reinstatement of hospital-based diploma programs would alleviate the shortage of nurses that is currently plaguing their institutions. A few respondents (n=9) felt that the entry-into practice requirements should not be changed, because the education requirements are important for maintaining technically competent nurses.

Theme 4. Nursing has a negative image, that is somewhat deserved. The pay is minimal, the responsibility and stress are immense, and the status of the job is relatively low. This makes nursing difficult to sell to young college students and high-school students as a viable career option. Although the career of nursing is demanding, many respondents see nursing as a rewarding profession offering the possibility of many benefits. However, if nursing is to amend its negative image, hiring institutions must respond appropriately to the needs of nurses. In addition to eliminating the negative image, many respondents felt that recruitment efforts of high school students need to increase in order to interest people in nursing.

Theme 5. Opportunities for nursing education need to be increased. Many respondents in rural areas stated that some CNAs and LPNs they knew would become RNs if nursing education were available. The option of web-based programs, with limited time in residence, was offered as a viable means of training for remote locations. Other options included offering flexible scheduling so that students from remote locations could attend short blocks of intensive training and “grow your own” career ladder programs.

Other issues raised by some of the respondents included: utilization of Medical Assistants to distribute medication to allow LPNs and RNs to do more nursing, decreasing the amount of paperwork, to utilize support staff to answer phones and other services, create certification programs for other types of health personnel to learn infection control, QA coordination and risk management to free up nurses to provide more acute patient care.

In summary, respondents seemed to agree that nurses are underpaid for the education and have profound responsibility associated with nursing practice. There are many suggestions for limiting the potential disparity between supply and demand for nurses. Mainly, respondents suggest that benefits, salaries, work environment, entry into practice requirements, and staffing levels are not currently suited to the demands of the profession. The broader group of respondents suggested that increased wages, benefits, and staffing would increase job satisfaction. The implementation of a tiered system of entry into practice would increase the available number of appropriately skilled nurses for acute and long-term care facilities throughout North Dakota. Other respondents suggested a partial solution is available through increased training opportunities coupled with enhanced efforts to improve the image of nursing. Many suggested that making the field more attractive to young people would likely increase the number of available nurses.

Facility Survey Methodology

Nursing Needs Study Facilities Survey Method

This project was designed to assess nursing workforce demand and the characteristics of potential shortages in North Dakota health care facilities. To better understand current nursing workforce a survey was sent to the Nursing Directors at all hospitals and long-term care facilities (nursing homes and basic care facilities) in North Dakota. A survey was also sent to the administrators of all regional public health facilities, home health facilities, and clinics in North Dakota.

This survey was developed to provide a comprehensive picture of the nature of nursing employment and potential shortages throughout the state and to enable comparisons to be drawn between health care facilities; rural and urban areas and North Dakota and national data. Survey questions were derived from national surveys including the Robert Wood Johnson Foundation Nursing Shortage Study: Chief Nursing Officer Interview Tool (Kimball & O'Neil, 2002), the American Organization of Nurse Executives Acute Care Hospital Survey of RN Vacancy and Turnover Rates (HSM Group, 2002) and the American Journal of Nursing Survey (Shindul-Rothschild, Berry & Long-Middleton, 1996). None of the national Director of Nursing surveys addressed LPNs, so several of the NDNN questions were modified to be appropriate for LPNs. Questions on the NDNN survey were also modified to be appropriate for the various types of facilities that were queried.

Mailing lists for the hospital and long-term care facilities were derived from an extant list available at the Center for Rural Health that was augmented with information from the 2001 North Dakota Medical Services Directory. The clinics, public health and home health mailing list was derived from the 2001 North Dakota Medical Services Directory. Participants received the survey by mail and were asked to mail the survey back to the Center for Rural Health in a postage-paid envelope. The survey was accompanied by a cover letter outlining the purpose of the study. The surveys were sent between August and October 2002 and respondents were asked to return the survey within two weeks. Those participants that had not returned their survey within one month were sent another copy and given two weeks to respond. Hospital and long-term care facilities that had not responded within two months were contacted by the North Dakota Healthcare Association (hospitals) and the North Dakota long-term care association (long-term care facilities) in order to increase the final response rate.

The NDNN survey was mailed to the director of nursing (DON) of all hospitals (N=47) and all long-term care facilities (N=125) in North Dakota. The NDNN survey was mailed to the facility administrator of all regional public health facilities (28), all home health care facilities (41), and all clinics (286) in North Dakota (527 facilities).

Facility Survey References

- AHA Commission on Workforce for Hospital and Health Systems (2002). In Our Hands: How Hospital Leaders Can Build a Thriving Workforce. Chicago: American Hospital Association.
- Ghelfi, L. & Parker, T. (1997). A County-level measure of urban influence. Rural Development Perspectives, 12. (2) 32-41.
- HSM Group. (2002). Acute Care Hospital Survey of RN Vacancy and Turnover Rates. American Association of Nurse Executives.
- Kimball, B. & O'Neil, E. (2002). Health Care's Human Crisis: The American Nursing Shortage. Robert Wood Johnson Foundation Health Workforce Solutions.
- Prescott, P. (2000). The Enigmatic Nursing Workforce. Journal of Nursing Administration. Volume 30, No. 2.
- Shindul-Rothschild, J., Berry, D. & Long-Middleton, E. (1996). Where have all the nurses gone? Final results of our patient care survey. American Journal of Nursing, 96. 25-39.

14. Have you employed any of the following recruitment/retention strategies **in the last year** to specifically address RN staff shortages? _____ Yes _____ No

If yes, please check which ones.

- | | |
|---|--|
| _____ Pay increases | _____ Flexible Scheduling |
| _____ Shift rotation | _____ Student Loan Repayment |
| _____ Cost of Living Loan Repayment | _____ Child Care Services |
| _____ Sign-on Bonuses | _____ Paid Licensure |
| _____ Re-location Assistance | _____ Continuing Education Assistance |
| _____ Nurse Scholarships | _____ Maternity Leave |
| _____ Work environment improvements | _____ Health Insurance |
| _____ New care delivery models | _____ Retirement Plans |
| _____ Dental Insurance | _____ Education-based wage differentials |
| _____ Certification-based wage differentials | |
| _____ Other Incentives (please specify) _____ | |

15. Do you have agreements with nursing schools to provide clinical training for students in RN programs? _____ Yes _____ No

If yes, please answer the following questions.

(a) How many schools do you have agreements with? _____

(b) How many RN nursing students rotate on-site during 1 year? _____

(c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for RN clinical training in your facility?

Please circle one choice

More Likely Less Likely No change

(d) Are you able to increase the number of RN nursing student clinical rotation positions? _____ Yes _____ No

If yes, how many positions? _____

(Please continue on page 4)

16. For the departments listed below, please indicate the current number of RNs in each category. (Note. FTE = Full-time equivalent) If you do not employ a particular category of RNs please write N/A in the first column for that category.

Areas	Current Number of Budgeted RN FTEs in this area	How many of these FTE positions are filled with full-time RNs?	How many of these FTE positions are filled with part-time RNs (<32 hours /week)?	Current number of vacant RN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(a) Medical or surgical care						
(b) Operating room						
(c) Perioperative						
(d) Critical and Intensive Care						
(e) Obstetrics						
(f) Emergency room						
(g) Pediatrics						
(h) Ambulatory (Clinic) care						
(i) Home Care						
(j) Nurse Managers						
(k) Total # of RNs in direct patient care (staff nurses)						
(l) Total # of RNs in indirect care (quality mngmt, case mngmt, infection control, etc.)						

17. Do you have any other comments/concerns regarding the RN workforce?

(Please continue on page 5)

LPN Information

18. Do you hire LPNs at your facility? _____ Yes _____ No

If yes, please answer the following questions.

If no, please go to question 28.

19. To what extent has your institution had difficulty recruiting LPNs?

Please circle one number.

No Difficulty				Very Difficult
1	2	3	4	5

20. In the past year, how have LPN vacancies affected your operations?

Check as many as apply.

- _____ Exceeded 90% census at peak.
- _____ Restricted admissions.
- _____ Reduced/eliminated services (specify _____)
- _____ Higher costs to deliver care
- _____ Increased waiting time for surgery.
- _____ Experienced emergency department overcrowding.
- _____ Gone on emergency diversion.
- _____ Reduction in the number of LPNs providing direct patient care
- _____ Increase in the number of patients assigned to LPNs
- _____ Substitution of part-time, per diem, or temporary LPNs for full-time positions
- _____ Hiring of unlicensed assistive personnel (UAP)/Techs/Aides to provide patient care previously provided by LPNs
- _____ Increase in amount of time LPNs spend supervising unlicensed assistive personnel (UAP)/techs/aides
- _____ Increase in cross-training of nursing staff
- _____ Reassignment or floating of LPNs to areas with vacancies.
- _____ Reduction in the number of budgeted LPN positions

21. What was the total number of FTE LPN resignations in 2001? _____

What was the total number of FTE LPN resignations in 2000? _____

22. What was the total number of FTE LPN terminations in 2001? _____

What was the total number of FTE LPN terminations in 2000? _____

23. Do you do exit interviews with LPNs as they leave? _____ Yes _____ No

If yes, please rank the top three reasons for prompting LPN resignations.

- | | |
|-----------------------------------|-------------------------------|
| _____ More money | _____ Relocation |
| _____ Job dissatisfaction | _____ Retirement |
| _____ Conflict with management | _____ Sought nursing position |
| _____ Sought non-nursing position | _____ Burnout |
| _____ Other _____ | |

(Please continue on page 6)

24. Have you employed any of the following recruitment/retention strategies **in the last year** to specifically address LPN staff shortages? Yes No

If yes, please check which ones.

- | | |
|--|---|
| <input type="checkbox"/> Pay increases | <input type="checkbox"/> Flexible Scheduling |
| <input type="checkbox"/> Shift rotation | <input type="checkbox"/> Student Loan Repayment |
| <input type="checkbox"/> Cost of Living Loan Repayment | <input type="checkbox"/> Child Care Services |
| <input type="checkbox"/> Sign-on Bonuses | <input type="checkbox"/> Paid Licensure |
| <input type="checkbox"/> Re-location Assistance | <input type="checkbox"/> Continuing Education Assistance |
| <input type="checkbox"/> Nurse Scholarships | <input type="checkbox"/> Maternity Leave |
| <input type="checkbox"/> Work environment improvements | <input type="checkbox"/> Health Insurance |
| <input type="checkbox"/> New care delivery models | <input type="checkbox"/> Retirement Plans |
| <input type="checkbox"/> Dental Insurance | <input type="checkbox"/> Education-based wage differentials |
| <input type="checkbox"/> Certification-based wage differentials | |
| <input type="checkbox"/> Other Incentives (please specify) _____ | |

25. Do you have agreements with schools of nursing to provide clinical training for LPNs?
 Yes No

If yes, please answer the following questions.

- (a) How many schools do you have agreements with? _____
- (b) How many LPN nursing students rotate on-site during 1 year? _____
- (c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for LPN clinical training in your facility?

Please circle one choice

More Likely Less Likely No change

(d) Are you able to increase the number of LPN nursing student clinical rotation positions? Yes No

If yes, how many positions? _____

(Please continue on page 7)

26. For the areas listed below, please indicate the current number of LPNs in each category. (Note. FTE = Full-time equivalent) If you do not employ a particular category of LPNs please write N/A in the first column for that category.

Areas	Current Number of Budgeted LPN FTEs in this area	How many of these FTE positions are filled with full-time LPNs?	How many of these FTE positions are filled with part-time LPNs (<32 hours/week)	Current number of vacant RN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(a) Medical or surgical care						
(b) Operating room or perioperative						
(c) Critical and Intensive Care						
(d) Obstetrics						
(e) Emergency room						
(f) Pediatrics						
(g) Ambulatory (Clinic) care						
(h) Home Care						
(i) Nurse Managers						
(j) Total # of LPNs in direct patient care (staff nurses)						
(k) Total # of LPNs in indirect care (quality mngmt, case mngmt, infection control, etc.)						

(Please continue on page 8)

27. Do you have any other comments/concerns regarding the LPN workforce?

28. When you think of the various possible solutions for nursing shortages, what is the one solution that you think would work the best? _____

**Thank you for completing our survey.
Please return to the Center for Rural Health in the postage paid envelope enclosed.**

**Center for Rural Health
School of Medicine & Health Sciences
University of North Dakota
P.O. Box 9037
Grand Forks, ND 58202-9037**

Long-Term Care Facility Director of Nursing Survey

Please answer all questions as completely as possible. The first section includes questions about general staffing concerns. The second section addresses RN specific staffing issues and the third section addresses LPN specific staffing issues.

1. What is your job title? _____
2. What is your phone number so that we may contact you with any questions regarding the survey? (_____) _____
3. Where is your facility located? City _____
4. Do you offer shifts of varying length? _____ Yes _____ No
If yes, which of the following do you offer? Please check all that apply.
_____ 4-hour _____ 8-hour _____ 10-hour _____ 12-hour
_____ Other _____
5. Do you use mandatory overtime? _____ Yes _____ No
If yes, how long has it been in place?
_____ Less than 1 year _____ 1-2 years _____ 3-5 years _____ over 5 years
6. Do you have a formal structure in place for nurses to participate in decision-making, including shared governance, nursing councils or nursing representatives at facility meetings?
_____ Yes _____ No

If yes, please answer the following questions.
(a) How many years has it been in place? _____
(b) How well does it work in your facility for increasing nursing participation in decision-making?

Not Well				Very Well
1	2	3	4	5
7. Do you currently offer some type of tuition reimbursement? _____ Yes _____ No
If yes, please answer the following questions.
(a) Do you use it as a recruitment incentive? _____ Yes _____ No
(b) Do you use it as a retention incentive? _____ Yes _____ No
(c) Does your tuition reimbursement plan allow:
_____ Nurse aides to upgrade to LPNs
_____ LPNS to upgrade to RNs
_____ RNs to upgrade to MSN/PhD
(d) What percentage of tuition _____% or total amount per year \$ _____ does your facility reimburse?
(e) Do you reimburse for courses taken for continuing education? _____ Yes _____ No
(f) Do you reimburse for single courses taken during a semester? _____ Yes _____ No
(g) Do you reimburse only for courses that lead to a degree? _____ Yes _____ No
(h) What are the conditions associated with tuition reimbursement?

(Please continue to page 2)

Registered Nurse Information

8. Do you hire RNs at your facility? _____ Yes _____ No

If yes, please answer the following questions.

If no, please skip to question 18.

9. To what extent has your institution had difficulty recruiting RNs?

Please circle one number.

No Difficulty

Very Difficult

1

2

3

4

5

10. In the past year, how have RN vacancies affected your operations?

Check as many as apply.

_____ Exceeded 90% census at peak

_____ Restricted admissions.

_____ Reduced/eliminated services (specify _____)

_____ Higher costs to deliver care

_____ Reduction in the number of RNs providing direct patient care

_____ Increase in number of positions filled by LPNs

_____ Increase in the number of patients assigned to RNs

_____ Substitution of part-time, per diem, or temporary RNs for full-time positions

_____ Hiring of unlicensed assistive personnel (UAP)/Techs/aides to provide patient care previously provided by RNs

_____ Increase in amount of time RNs spend supervising unlicensed assistive personnel (UAP)/techs/aides

_____ Loss of nurse at management level (without replacement)

_____ Increase in cross-training of nursing staff

_____ Reassignment or floating of RNs to areas with vacancies.

_____ Reduction in the number of budgeted RN positions

11. What was the total number of FTE RN resignations in 2001? _____

What was the total number of FTE RN resignations in 2000? _____

12. What was the total number of FTE RN terminations in 2001? _____

What was the total number of FTE RN terminations in 2000? _____

13. Do you do exit interviews with RNs as they leave? _____ Yes _____ No

If yes, please rank the top three reasons for prompting RN resignations..

_____ More money

_____ Relocation

_____ Job dissatisfaction

_____ Retirement

_____ Conflict with management

_____ Sought nursing position

_____ Sought non-nursing position

_____ Burnout

_____ Other _____

(Please continue to page 3)

14. Have you used any of the following as recruitment/retention strategies **in the last year** to specifically address RN staff shortages? _____ Yes _____ No

If yes, please check which ones.

- | | |
|---|--|
| _____ Pay increases | _____ Flexible Scheduling |
| _____ Shift rotation | _____ Student Loan Repayment |
| _____ Cost of Living Loan Repayment | _____ Child Care Services |
| _____ Sign-on Bonuses | _____ Paid Licensure |
| _____ Re-location Assistance | _____ Continuing Education Assistance |
| _____ Nurse Scholarships | _____ Maternity Leave |
| _____ Work environment improvements | _____ Health Insurance |
| _____ New care delivery models | _____ Retirement Plans |
| _____ Dental Insurance | _____ Education-based wage differentials |
| _____ Certification-based wage differentials | |
| _____ Other Incentives (please specify) _____ | |

15. Do you have agreements with nursing schools to provide clinical training for students in RN programs? _____ Yes _____ No

If yes, please answer the following questions.

(a) How many schools do you have agreements with? _____

(b) How many RN nursing students rotate on-site during 1 year? _____

(c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for RN clinical training in your facility?

Please circle one choice

More Likely Less Likely No change

(d) Are you able to increase the number of RN nursing students in clinical rotation positions? _____ Yes _____ No
If yes, how many positions? _____

(Please continue to page 4)

16. For the departments listed below, please indicate the current number of RNs in each category. (Note. FTE = Full-time equivalent) If you do not employ a particular category of RNs please write N/A in the first column for that category.

Departments	Current Number of Budgeted RN FTEs in this area	How many of these FTE positions are filled with full-time RNs?	How many of these FTE positions are filled with part-time RNs (< 32 hours/week)?	Current number of vacant RN FTEs in this area.	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(a) Basic care						
(b) Skilled care						
(c) Intermediate care						
(d) Hospice care						
(e) Alzheimer's / head injury care						
(f) Respite care						
(g) Adult day care						
(h) Ambulatory (Clinic) Care						
(i) Home Care						
(j) Nurse Managers						
(k) Total # of RNs in direct patient care (staff nurses)						
(l) Total # of RNs in indirect care (quality mngmt, case mngmt, infection control, etc.)						

17. Do you have any other comments/concerns regarding the RN workforce?

(Please continue to page 5)

LPN Information

18. Do you hire LPNs at your facility? _____ Yes _____ No

If yes, please answer the following questions.

If no, please skip to question 28.

19. To what extent has your institution had difficulty recruiting LPNs?

Please circle one number.

No Difficulty
1 2 3 4 5
Very Difficult

20. In the past year, how have LPN vacancies affected your operations?

Check as many as apply.

- _____ Exceeded 90% census at peak
- _____ Restricted admissions.
- _____ Reduced/eliminated services (specify _____)
- _____ Higher costs to deliver care
- _____ Reduction in the number of LPNs providing direct patient care
- _____ Increase in the number of patients assigned to LPNs
- _____ Substitution of part-time, per diem, or temporary LPNs for full-time positions
- _____ Hiring of unlicensed assistive personnel (UAP)/Techs/Aides to provide patient care previously provided by LPNs
- _____ Increase in amount of time LPNs spend supervising unlicensed assistive personnel (UAP)/techs/aides
- _____ Increase in cross-training of nursing staff
- _____ Reassignment or floating of LPNs to areas with vacancies.
- _____ Reduction in the number of budgeted LPN positions

21. What was the total number of FTE LPN resignations in 2001? _____

What was the total number of FTE LPN resignations in 2000? _____

22. What was the total number of FTE LPN terminations in 2001? _____

What was the total number of FTE LPN terminations in 2000? _____

23. Do you do exit interviews with LPNs as they leave? _____ Yes _____ No

If yes, please rank the top three reasons for prompting LPN resignations..

- _____ More money _____ Relocation
- _____ Job dissatisfaction _____ Retirement
- _____ Conflict with management _____ Sought other nursing job
- _____ Sought non-nursing position _____ Burnout
- _____ Other _____

(Please continue to page 6)

24. Have you used any of the following as recruitment/retention strategies **in the last year** to specifically address LPN staff shortage? _____ Yes _____ No

If yes, please check which ones.

- | | |
|---|--|
| _____ Pay increases | _____ Flexible Scheduling |
| _____ Shift rotation | _____ Student Loan Repayment |
| _____ Cost of Living Loan Repayment | _____ Child Care Services |
| _____ Sign-on Bonuses | _____ Paid Licensure |
| _____ Re-location Assistance | _____ Continuing Education Assistance |
| _____ Nurse Scholarships | _____ Maternity Leave |
| _____ Work environment improvements | _____ Health Insurance |
| _____ New care delivery models | _____ Retirement Plans |
| _____ Dental Insurance | _____ Education-based wage differentials |
| _____ Certification-based wage differentials | |
| _____ Other Incentives (please specify) _____ | |

25. Do you have agreements with nursing schools to provide clinical training for students in LPN programs? _____ Yes _____ No

If yes, please answer the following questions.

(a) How many schools do you have agreements with? _____

(b) How many LPN nursing students rotate on-site during 1 year? _____

(c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for LPN clinical training in your facility?

Please circle one choice

More Likely

Less Likely

No change

(d) Are you able to increase the number of LPN nursing student clinical rotation positions? _____ Yes _____ No
If yes, how many positions? _____

(Please continue to page 7)

26. For the departments listed below, please indicate the current number of LPNs in each category. (Note. FTE = Full-time equivalent) If you do not employ a particular category of LPNs please write N/A in the first column for that category.

Departments	Current Number of Budgeted LPN FTEs in this area	How many of these FTE positions are filled with full-time LPNs?	How many of these FTE positions are filled with part-time LPNs (<32 hours/week)?	Current number of vacant RN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(a) Basic care						
(b) Skilled care						
(c) Intermediate care						
(d) Hospice care						
(e) Alzheimer's / head injury care						
(f) Respite care						
(g) Adult day care						
(h) Ambulatory (Clinic) Care						
(i) Home Care						
(j) Nurse Managers						
(k) Total # of LPNs in direct patient care (staff nurses)						
(l) Total # of LPNs in indirect care (quality mngmt, case mngmt, infection control, etc.)						

(Please continue to page 8)

27. Do you have any other comments/concerns regarding the LPN workforce?

28. When you think of the possible solutions to nursing shortages, what is the one solution that you think would work the best? _____

**Thank you for completing our survey.
Please return to the Center for Rural Health in the postage paid envelope enclosed.
Center for Rural Health
School of Medicine & Health Sciences
University of North Dakota
P.O. Box 9037
Grand Forks, ND 58202-9037**

Clinic Administrator Survey

Please answer all questions as completely as possible. This survey should be completed with information about the clinic setting of your facility only. The first section includes questions about general staffing concerns. The second section addresses RN-specific staffing issues and the third section addresses LPN-specific staffing issues.

1. What is your job title? _____

2. What is your phone number so that we may contact you with any questions regarding the survey? (_____) _____

3. Where is your facility located? City _____
Please indicate the type of facility.
 Free-standing, independent clinic Health Care System Clinic
 Clinic associated with a hospital Other _____

4. Do you currently offer some type of tuition reimbursement for nurses? Yes No
If yes, please answer the following questions.
 - (a) Do you use it as a recruitment incentive? Yes No
 - (b) Do you use it as a retention incentive? Yes No
 - (c) Does your tuition reimbursement plan allow:
 Nurse aides to upgrade to LPNs
 LPNS to upgrade to RNs
 RNs to upgrade to MSN/PhD
 - (d) What percentage of tuition _____% or total amount per year \$ _____ does your facility reimburse?
 - (e) Do you reimburse for courses taken for continuing education? Yes No
 - (f) Do you reimburse for single courses taken during a semester? Yes No
 - (g) Do you reimburse only for courses that lead to a degree? Yes No
 - (h) What are the conditions associated with tuition reimbursement?

5. Has your facility substituted unlicensed assistive personnel (UAP) or medical assistants for nursing positions in the last year? Yes No
If yes, please indicate why.
 Shortage of available nurses
 UAPs and medical assistants have lower wages
 Overall organization restructuring
 Other _____

(Please continue to page 2)

Registered Nurse Information

6. Do you hire RNs at your facility? Yes No

If yes, please answer the following questions.

If no, please skip to question 16.

7. To what extent has your institution had difficulty recruiting RNs?

Please circle one number.

No Difficulty Very Difficult
1 2 3 4 5

8. In the past year, how have RN vacancies affected your operations?

Check as many as apply.

- Reduced/eliminated services
- Higher costs to deliver care
- Reduction in the number of RNs providing direct patient care
- Increase in number of positions of LPNs
- Substitution of part-time, per diem, or temporary RNs for full-time positions
- Hiring of unlicensed assistive personnel/techs/aides/medical assistants to provide patient care previously provided by RNs
- Increase in amount of time RNs spend supervising unlicensed assistive personnel/techs/aides/medical assistants
- Loss of nurse at management level (without replacement)
- Increase in cross-training of nursing staff
- Reassignment or floating of RNs to areas with vacancies.
- Reduction in the number of budgeted RN positions

9. What was the total number of FTE RN resignations in 2001? _____

What was the total number of FTE RN resignations in 2000? _____

10. What was the total number of FTE RN terminations in 2001? _____

What was the total number of FTE RN terminations in 2000? _____

11. Do you do exit interviews with RNs as they leave? Yes No

If yes, please rank the top three reasons for prompting RN resignations.

- | | |
|--|--|
| <input type="checkbox"/> More money | <input type="checkbox"/> Relocation |
| <input type="checkbox"/> Job dissatisfaction | <input type="checkbox"/> Retirement |
| <input type="checkbox"/> Conflict with management | <input type="checkbox"/> Sought nursing position |
| <input type="checkbox"/> Sought non-nursing position | <input type="checkbox"/> Burnout |
| <input type="checkbox"/> Other _____ | |

(Please continue to page 3)

12. Have you employed any of the following recruitment strategies in the last year to address RN staff shortages? Yes No

If yes, please check which ones.

- | | |
|--|--|
| <input type="checkbox"/> Pay increases | <input type="checkbox"/> Student Loan Repayment |
| <input type="checkbox"/> Increases in benefits | <input type="checkbox"/> Cost of Living Loan Repayment |
| <input type="checkbox"/> Moving Expenses | <input type="checkbox"/> Sign-on Bonuses |
| <input type="checkbox"/> Re-location Assistance | <input type="checkbox"/> Tuition Reimbursement |
| <input type="checkbox"/> Continuing Education Assistance | <input type="checkbox"/> Nurse Scholarships |
| <input type="checkbox"/> Day Care Services | <input type="checkbox"/> Work environment improvements |
| <input type="checkbox"/> Maternity Leave | <input type="checkbox"/> Health Insurance |
| <input type="checkbox"/> Dental Insurance | <input type="checkbox"/> Retirement Plans |
| <input type="checkbox"/> Other Incentives (please specify) _____ | |

13. Do you have agreements with schools of nursing to provide clinical training for students in RN programs? Yes No

If yes, please answer the following questions.

- (a) How many schools do you have agreements with? _____
- (b) How many RN nursing students rotate on-site during 1 year? _____
- (c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for RN clinical training in your facility?

Please circle one choice

More Likely Less Likely No change

- (d) Are you able to increase the number of RN nursing students in clinical rotation positions? Yes No If yes, how many positions? _____

14. For the areas listed below, please indicate the current number of RNs in each category.

(Note. FTE = Full-time equivalent)

	Current Number of Budgeted RN FTEs in this area	How many of these FTE positions are filled with full-time RNs?	How many of these FTE positions are filled with part-time LPNs (< 32 hours/week)?	Current number of vacant RN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(A) Total # of RNs in direct patient care (staff nurses)						
(B) Total # of RNs in indirect care (nurse manager, quality mngmt, case mngmt, infection control, etc.)						

(Please continue to page 4)

15. Do you have any other comments/concerns regarding the RN workforce?

LPN Information

16. Do you hire LPNs at your facility? _____ Yes _____ No

If yes, please answer the following questions.

If no, skip to question 26.

17. If yes, to what extent has your institution had difficulty recruiting LPNs?

Please circle one number.

No Difficulty Very Difficult
1 2 3 4 5

18. In the past year, how have LPN vacancies affected your operations?

Check as many as apply.

- _____ Reduced/eliminated services
- _____ Higher costs to deliver care
- _____ Increase in number of positions of LPNs
- _____ Substitution of part-time, per diem, or temporary LPNs for full-time positions
- _____ Hiring of unlicensed assistive personnel (UAP)/Techs/aides/medical assistant to provide patient care previously provided by LPNs
- _____ Increase in amount of time LPNs spend supervising unlicensed assistive personnel (UAP)/techs/aides/medical assistant
- _____ Increase in cross-training of nursing staff
- _____ Reassignment or floating of LPNs to areas with vacancies.
- _____ Reduction in the number of budgeted LPN positions

19. What was the total number of FTE LPN resignations in 2001? _____

What was the total number of FTE LPN resignations in 2000? _____

20. What was the total number of LPN terminations in 2001? _____

What was the total number of LPN terminations in 2000? _____

21. Do you do exit interviews with LPNs as they leave? _____ Yes _____ No

If yes, please rank the top three reasons prompting LPN resignations.

- | | |
|-----------------------------------|-------------------------------|
| _____ More money | _____ Relocation |
| _____ Job dissatisfaction | _____ Retirement |
| _____ Conflict with management | _____ Sought nursing position |
| _____ Sought non-nursing position | _____ Burnout |
| _____ Other _____ | |

(Please continue to page 5)

22. Have you employed any of the following recruitment strategies in the last year to specifically address LPN staff shortages? Yes No

If yes, please check which ones.

- | | |
|--|--|
| <input type="checkbox"/> Pay increases | <input type="checkbox"/> Student Loan Repayment |
| <input type="checkbox"/> Increases in benefits | <input type="checkbox"/> Cost of Living Loan Repayment |
| <input type="checkbox"/> Moving Expenses | <input type="checkbox"/> Sign-on Bonuses |
| <input type="checkbox"/> Re-location Assistance | <input type="checkbox"/> Tuition Reimbursement |
| <input type="checkbox"/> Continuing Education Assistance | <input type="checkbox"/> Nurse Scholarships |
| <input type="checkbox"/> Day Care Services | <input type="checkbox"/> Work environment improvements |
| <input type="checkbox"/> Maternity Leave | <input type="checkbox"/> Health Insurance |
| <input type="checkbox"/> Dental Insurance | <input type="checkbox"/> Retirement Plans |
| <input type="checkbox"/> Other Incentives (please specify) _____ | |

23. Do you have agreements with schools of nursing to provide clinical training for students in LPN programs? Yes No

If yes, please answer the following questions.

- (a) How many schools do you have agreements with? _____
- (b) How many LPN nursing students rotate on-site during 1 year? _____
- (c) Have any changes in your nurse staffing in the last year made it more or less likely that you will continue to offer the same level of support for LPN clinical training in your facility?

Please circle one choice

More Likely Less Likely No change

- (d) Are you able to increase the number of LPN nursing students in clinical rotation positions? Yes No If yes, how many positions? _____

24. For the areas listed below, please indicate the current number of LPNs in each category.

(Note. FTE = Full-time equivalent)

	Current Number of Budgeted LPN FTEs in this area	How many of these FTE positions are filled with full-time LPNs?	How many of these FTE positions are filled with part-time LPNs (< 32 hours/week)?	Current number of vacant LPN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(A) Total # of LPNs in direct patient care (staff nurses)						
(B) Total # of LPNs in indirect care (nurse managers, quality mngmt, case mngmt, infection control, etc.)						

(Please continue to page 6)

25. Do you have any other comments/concerns regarding the LPN workforce?

26. When you think of the possible solutions to nursing shortages, what is the one solution that you think would work the best? _____

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Center for Rural Health
School of Medicine and Health Sciences
University of North Dakota
P.O. Box 9037
Grand Forks, ND 58202-9037**

Public Health and Home Health Care Administrator Survey

Please answer all questions as completely as possible. The first section includes questions about general staffing concerns. The second section addresses RN-specific staffing issues and the third section addresses LPN-specific staffing issues.

1. What is your job title? _____
2. What is your phone number so that we may contact you with any questions regarding the survey? (_____) _____
3. Where is your facility located? City _____
4. Do you currently offer some type of tuition reimbursement for nurses? _____ Yes _____ No
If yes, please answer the following questions.
 - (a) Do you use it as a recruitment incentive? _____ Yes _____ No
 - (b) Do you use it as a retention incentive? _____ Yes _____ No
 - (c) Does your tuition reimbursement plan allow:
_____ Nurse aides to upgrade to LPNs
_____ LPNS to upgrade to RNs
_____ RNs to upgrade to MSN/PhD
 - (d) What percentage of tuition _____ % or total amount per year \$ _____ does your facility reimburse?
 - (e) Do you reimburse for courses taken for continuing education? _____ Yes _____ No
 - (g) Do you reimburse for courses that lead to a degree? _____ Yes _____ No
 - (h) What are the conditions associated with tuition reimbursement?

Registered Nurse Information

5. Do you hire RNs at your facility? _____ Yes _____ No
If yes, please answer the following questions.
If no, please skip to question 15.
6. To what extent has your institution had difficulty recruiting RNs?
Please circle one number.
No Difficulty Very Difficult
1 2 3 4 5
7. In the past year, how have RN vacancies affected your operations?
Check as many as apply.
_____ Reduced/eliminated services
_____ Increase in number of LPN positions
_____ Substitution of part-time, per diem, or temporary RNs for full-time positions
_____ Increase in cross-training of nursing staff
_____ Reassignment or floating of RNs to areas with vacancies.
_____ Reduction in the number of budgeted RN positions
8. What was the total number of FTE RN resignations in 2001? _____
What was the total number of FTE RN resignations in 2000? _____

9. What was the total number of FTE RN terminations in 2001? _____
 What was the total number of FTE RN terminations in 2000? _____

10. Do you do exit interviews with RNs as they leave? _____ Yes _____ No

If yes, please rank the top three reasons for prompting RN resignations.

- _____ More money
- _____ Job dissatisfaction
- _____ Retirement
- _____ Conflict with management
- _____ Sought non-nursing position
- _____ Other _____
- _____ Relocation to another area
- _____ Inside North Dakota
- _____ Outside North Dakota
- _____ Sought nursing position
- _____ Burnout

11. Have you employed any of the following recruitment and retention strategies in the last year to address RN staff shortages? _____ Yes _____ No

If yes, please check which ones.

- _____ Pay increases
- _____ Increases in benefits
- _____ Moving Expenses
- _____ Re-location Assistance
- _____ Continuing Education Assistance
- _____ Day Care Services
- _____ Maternity Leave
- _____ Dental Insurance
- _____ Other Incentives (please specify) _____
- _____ Student Loan Repayment
- _____ Cost of Living Loan Repayment
- _____ Sign-on Bonuses
- _____ Tuition Reimbursement
- _____ Nurse Scholarships
- _____ Work environment improvements
- _____ Health Insurance
- _____ Retirement Plans

12. Do you have agreements with nursing schools to provide clinical training for students in RN programs? _____ Yes _____ No

If yes, how many RN nursing students rotate on-site during 1 year? _____

Are you able to increase the number of RN nursing student clinical rotation positions? _____ Yes _____ No

13. For the areas listed below, please indicate the current number of RNs in each category.
 (Note. FTE = Full-time equivalent)

	Current Number of Budgeted RN FTEs in this area	How many of these FTE positions are filled with full-time RNs?	How many of these FTE positions are filled with part-time RNs (< 32 hours/week)?	Current number of vacant RN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(A) Total # of RNs in direct patient care (staff nurses)						
(B) Total # of RNs in indirect care (nurse managers, quality mngmt, case mngmt, infection control)						

14. Do you have any other comments/concerns regarding the RN workforce?

LPN Information

15. Do you hire LPNs at your facility? Yes No

If yes, please answer the following questions.

If no, skip to question 25.

16. If yes, to what extent has your institution had difficulty recruiting LPNs?

Please circle one number.

No Difficulty				Very Difficult
1	2	3	4	5

17. In the past year, how have LPN vacancies affected your operations?

Check as many as apply.

- Reduced/eliminated services
- Increase in cross-training of nursing staff
- Reassignment or floating of LPNs to areas with vacancies.
- Reduction in the number of budgeted LPN positions

18. What was the total number of FTE LPN resignations in 2001? _____

What was the total number of FTE LPN resignations in 2000? _____

19. What was the total number of LPN terminations in 2001? _____

What was the total number of LPN terminations in 2000? _____

20. Do you do exit interviews with LPNs as they leave? Yes No

If yes, please rank the top three reasons prompting LPN resignations.

- | | |
|--|---|
| <input type="checkbox"/> More money | <input type="checkbox"/> Relocation to another area |
| <input type="checkbox"/> Job dissatisfaction | <input type="checkbox"/> Inside North Dakota |
| <input type="checkbox"/> Retirement | <input type="checkbox"/> Outside North Dakota |
| <input type="checkbox"/> Conflict with management | <input type="checkbox"/> Sought nursing position |
| <input type="checkbox"/> Sought non-nursing position | <input type="checkbox"/> Burnout |
| <input type="checkbox"/> Other _____ | |

21. Have you employed any of the following recruitment and retention strategies in the last year to specifically address LPN staff shortages? Yes No

If yes, please check which ones.

- | | |
|--|--|
| <input type="checkbox"/> Pay increases | <input type="checkbox"/> Student Loan Repayment |
| <input type="checkbox"/> Increases in benefits | <input type="checkbox"/> Cost of Living Loan Repayment |
| <input type="checkbox"/> Moving Expenses | <input type="checkbox"/> Sign-on Bonuses |
| <input type="checkbox"/> Re-location Assistance | <input type="checkbox"/> Tuition Reimbursement |
| <input type="checkbox"/> Continuing Education Assistance | <input type="checkbox"/> Nurse Scholarships |
| <input type="checkbox"/> Day Care Services | <input type="checkbox"/> Work environment improvements |
| <input type="checkbox"/> Maternity Leave | <input type="checkbox"/> Health Insurance |
| <input type="checkbox"/> Dental Insurance | <input type="checkbox"/> Retirement Plans |
| <input type="checkbox"/> Other Incentives (please specify) _____ | |

22. Do you have agreements with nursing schools to provide clinical training for students in LPN programs? Yes No
 If yes, how many LPN nursing students rotate on-site during 1 year? _____
 Are you able to increase the number of LPN nursing student clinical rotation positions? Yes No

23. For the areas listed below, please indicate the current number of LPNs in each category.
 (Note. FTE = Full-time equivalent)

	Current Number of Budgeted LPN FTEs in this area	How many of these FTE positions are filled with full-time LPNs?	How many of these FTE positions are filled with part-time LPNs (< 32 hours/week)?	Current number of vacant LPN FTEs in this area	Do you use temporary staff to fill these positions? Yes/ No	If yes, how many FTE positions are filled by temporary staff ?
(A) Total # of LPNs in direct patient care (staff nurses)						
(B) Total # of LPNs in indirect care (nurse managers, quality mngmt, case mngmt, infection control, etc.)						

24. Do you have any other comments/concerns regarding the LPN workforce?

25. When you think of the possible solutions to nursing shortages, what is the one solution that you think would work the best? _____

Thank you for completing our survey.

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