



RURAL HEALTH POLICY BRIEF

Number 6

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North Dakota Nursing Workforce Study

Background

The North Dakota Nursing Needs study, funded by the ND Board of Nursing, initiated in May 2002, was designed 1) to provide a more accurate picture of the RN and LPN workforce in both rural and urban areas of North Dakota, 2) to compare these data with existing national data and 3) to inform policy.

The project began with 1) an examination of existing data sets, surveys and reports regarding national and North Dakota nursing workforce to provide a snapshot of national and state activities and trends in nursing workforce, 2) existing data was then assessed for gaps or potential inconsistencies in order to determine what additional information was needed and 3) formulate questions regarding nursing workforce to direct data collection efforts.

These five questions were:

1. Is there a shortage of registered nurses and licensed practical nurses in North Dakota?
2. If so, what are the characteristics of the shortage, in terms of severity, types of affected facilities and geographic distribution?
3. What are the causes of the shortage and institutional strategies to address these shortages?
4. What are the projections for adequacy of the RN/LPN workforce through the year 2010?
5. What are the implications of a nursing shortage for public policy in North Dakota?

To answer these five questions, four projects are underway during the first year of the Nursing Needs Study.

1. Facility Survey

The first project is a survey that was mailed to all hospital, long-term care (including nursing homes and basic care), clinics, public health and home health care facilities in North Dakota. This survey was developed using national surveys and a North Dakota survey.

2. RN and LPN Survey

The second project is a survey of RNs and LPNs. This survey designed to examine recruitment and retention issues was sent to a 20% stratified sample of RNs and LPNs throughout the state

3. Nurse and Nursing Student Focus Groups

The third project involves conducting several focus groups separately with students and nurses throughout the state. The nursing focus groups will center on determining job satisfaction and identifying changes that could encourage RNs and LPNs to work in North Dakota facilities, particularly those nurses from rural areas. The focus groups with nursing students addressed issues such as the reasons for choosing the nursing profession and whether they plan to work in North Dakota.

4. Faculty Survey

The fourth project will include a survey of nursing education program faculty and questions will include their views on their program's capacity to educate a sufficient number of nurses, faculty demographics, job satisfaction, reasons that students choose to



work in North Dakota and what changes may fortify the nursing workforce as a whole.

Preliminary Findings Project 1: Hospital and Long Term Care Demand for RNs and LPNs

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 hospitals and long-term care facilities; rural and urban areas and North Dakota and national data. All Directors of Nursing of the 47 hospitals in the state were surveyed; 40 facilities completed and returned questionnaires, yielding a response rate of roughly 85%. All Directors of Nursing of the 125 Long Term Care Facilities (nursing homes and basic care) in the state were surveyed, 89 facilities responded yielding a response rate of roughly 71%. This report only includes results from the hospital and long term care facility surveys with the exception of the vacancy rate table which has been computed for all five types of facilities.

- **Scheduling Issues**

Most of the responding hospitals (72%) and long-term care facilities (68.5%) offer shifts of varying length with the majority offering eight or twelve hour shifts. Very few facilities utilized mandatory overtime (5.0% hospitals, 7.9% long term care facilities) which is viewed as an important issue for nursing retention.

- **Nurse Participation in Decision Making**

Less than half (45% hospitals, 39.3% long term care) of the facilities have a formal representation structure in place for nurses to participate in decision making which is viewed as an important workforce issue. This percentage is lower than what was found in the Robert Wood Johnson Study (Kimball & O'Neil, 2002) which found 76% of the hospitals surveyed.

- **Tuition Reimbursement Issues**

Many of the responding facilities offer some form of tuition assistance or reimbursement (70% hospitals, 61.8% long term care). Over half of the hospitals allowed tuition reimbursement for LPN (55%), RN (62.5%) and MSN/PhD (55%) programs. Over half

of the long term care facilities also reimbursed for education programs for LPN (50.6%) and RN (51.7%) but only a few facilities reimbursed for MSN/PhD (19.1%) education programs. Fewer than half of the facilities reimbursed nurses for continuing education (32.5% hospitals, 34.8% long term care) and single courses (45% hospitals, 24.7% long term care). Urban facilities (hospitals and long term care facilities) reimbursed for continuing education credits and for single courses most frequently. Many of the facilities required a minimum service commitment after graduation as a condition for tuition reimbursement.

- **Recruitment Issues**

Most of the hospitals (85%) and over half of the long term care facilities (60.6%) reported having difficulty recruiting RNs. Over half of the hospitals (60%) and long term care facilities (62.9%) reported difficulty in recruiting LPNs. Many of the facilities reported using some recruitment/retention strategy for RNs and LPNs. 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. For LPNs the hospitals most frequently used pay increases, shift rotations and scholarships and the long term care facilities used pay increases, flexible scheduling, health insurance and scholarships.

- **Exit Interview Issues**

The most frequent reasons for nurses leaving hospitals and long term care facilities were reported as more money, relocation and another nursing position.

- **Clinical Practice Issues**

Most of the hospitals offered clinical practice for RN students (85%). Less than half of the hospitals offered clinical practice for LPN students (47.5%) and less than half of the long term care facilities offered clinical practice to RNs (31.5%) and LPNs (14.6%). Some of the hospitals reported that they would be able to increase the



number of RN practice positions (45%) whereas fewer hospitals reported being able to increase the number of LPN practice positions (28%). Very few long term care facilities reported that they would be able to increase the number of RN (14%) or LPN (14%) practice positions.

- **Staffing Issues**

There was a small increase in the number of terminations and resignations across facilities from 2000 to 2001. A small percentage of facilities have utilized temporary staff. Many facilities had vacancy rates that indicated a shortage (i.e., vacancy rates that are greater than 6%).

The table below lists the vacancy rates (clinics, home health, public health, long term care and hospitals) for each county.

The number of facilities that responded to the survey is listed along with the vacancy rate for RNs and LPNs in each county.

According to economists, a shortage occurs when vacancy rates exceed 5 or 6% for an extended period of time. Those counties with vacancy rates above 6% are bold-faced. The effects of RN vacancies in hospitals included higher costs to deliver care, more cross-training and among long term care facilities an increase in the number of LPN and a reduction in the number of RNs to provide direct patient care. The effects of LPN vacancies on hospitals included higher costs to deliver care, cross training and an increase in the number of patients assigned to LPN. For long term care facilities LPN vacancies has resulted in the substitution of part-time, per diem or temporary LPNs for full-time LPNs and higher costs to deliver care.

For further information on the nursing workforce study, please contact the author, Patricia Moulton, Ph.D. at 701-777-6781 or pmoulton@medicine.nodak.edu.



Urban Counties	Clinics			Home Health			Public Health			Long-term Care			Hospitals		
	RN	LPN		RN	LPN		RN	LPN		RN	LPN		RN	LPN	
Burleigh	18	1.04%	0.51%	3	0.00%	0.00%	1	0.00%	0.00%	8	0.00%	1.13%	1	0.00%	0.00%
Cass	13	0.00%	0.00%	3	0.00%	0.00%	0	---	---	4	13.01%	4.74%	3	3.87%	3.56%
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%	11.32%
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%	0.00%
Bottineau	1	0.00%	0.00%	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	1	0.00%	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%	0.00%
Grant	3	0.00%	0.00%	0	---	---	0	---	---	0	---	---	1	0.00%	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%	0.00%
Mercer	1	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	1	0.00%	0.00%
Nelson	1	0.00%	0.00%	0	---	---	1	0.00%	0.00%	3	0.00%	1.33%	1	0.00%	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%	0.00%
Ramsey	2	0.00%	4.17%	1	0.00%	0.00%	1	0.00%	0.00%	4	0.00%	0.00%	1	10.00%	7.69%
Ransom	4	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	0.00%	1	0.00%	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%	50.00%
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%	4.17%
Trail	1	0.00%	0.00%	0	---	---	1	0.00%	0.00%	3	16.67%	0.00%	2	8.33%	0.00%
Walsh	1	0.00%	0.00%	0	---	---	1	50.00%	0.00%	2	0.00%	0.00%	1	0.00%	0.00%
Ward	7	14.29%	2.86%	0	---	---	1	0.00%	0.00%	5	0.77%	0.71%	1	5.03%	0.00%
Williams	7	14.29%	0.89%	1	0.00%	0.00%	1	0.00%	0.00%	4	6.67%	4.08%	2	41.84%	0.00%

Rural Counties

Adams	0	---	---	0	---	---	0	---	---	1	0.00%	0.00%	1	0.00%	0.00%
Benson	2	0.00%	0.00%	0	---	---	0	---	---	1	0.00%	0.00%	1	7.86%	0.00%
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%	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%	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%	25.00%
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%	12.50%
McKenzie	1	0.00%	50.00%	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	2	0.00%	0.00%
Mountrail	2	16.67%	50.00%	0	---	---	0	---	---	2	20.00%	0.00%	1	0.00%	0.00%
Pembina	2	0.00%	0.00%	0	---	---	1	0.00%	0.00%	0	---	---	1	0.00%	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%	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%	0.00%

Figure 1: Vacancy Rates by County Across Facility Type.