



Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

North Dakota Nursing Workforce Needs

Testimony presented to the

North Dakota Higher Education Committee

Minot, North Dakota

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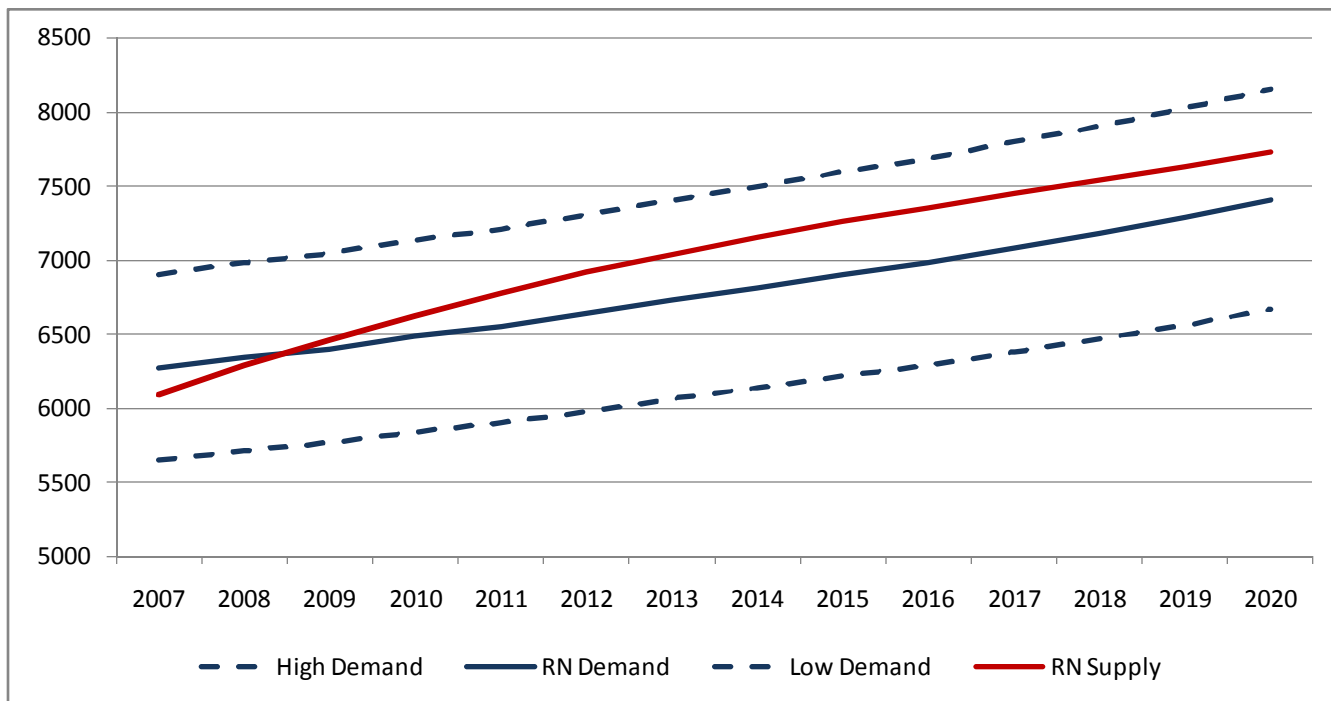
September 9, 2008

*Connecting resources and knowledge to strengthen
the health of people in rural communities.*

Thank you for the opportunity to present information about the workforce needs of nursing in North Dakota. My name is Dr. Patricia Moulton and I am from the UND School of the Medicine and Health Sciences Center for Rural Health. Today we are pleased to present the newest results of our supply and demand projections from the North Dakota Nursing Needs Study. The Nursing Needs Study was recommended, in 2001, by the North Dakota State Legislature (NDCC Nurse Practices Act 43-12.1-08.2) to address potential shortages in nursing supply. Specifically, the North Dakota Board of Nursing was directed to address issues of supply and demand for nurses, including issues of recruitment, retention, and utilization of nurses. To respond to this request, the North Dakota Board of Nursing contracted with the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences.

Currently we have a small shortage of RNs. A recent search of job postings conducted by the ND Job Service indicated that there are 220 RN, 82 LPN and 62 either LPN or RN open position listings (these numbers include flex and travel positions). Looking ahead in the near future it is projected that the state will have an adequate supply of RNs as compared to demand (see Figure 1). These projections may be influenced by a number of factors such as maintaining similar RN graduation rates, financial status of health care facilities, variation in the strength of the economy and recruitment from border states. The projection model that we are using is utilized at the federal level. It is important for you to note that the use of this model likely underestimates demand in states with large rural populations and those states with large elderly populations such as North Dakota. Because of the variation associated with the model, we are presenting the demand estimate as a range from low to high demand¹. In addition, as with all projection models, estimates become less precise in the later years of the projection.

Figure 1: North Dakota Registered Nurse FTE Supply and Demand Projections

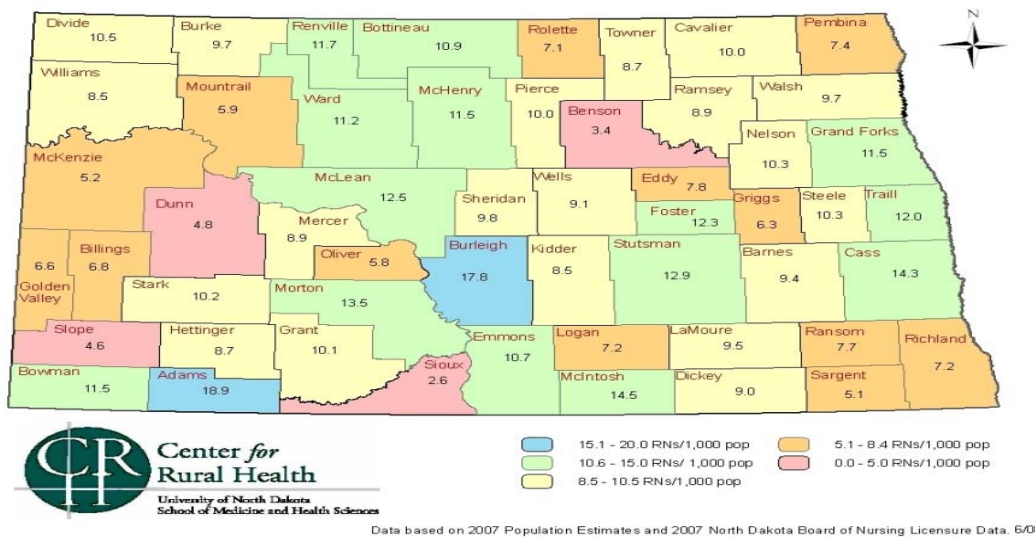


The estimate of supply and demand utilized the USDHHS Health Resources and Services Administration National Center for Health Workforce Analysis Nursing Supply and Demand software. For the full report including assumptions and limitations see: http://ruralhealth.und.edu/projects/nursing/pdf/projections_final_report0708.pdf

RN Supply

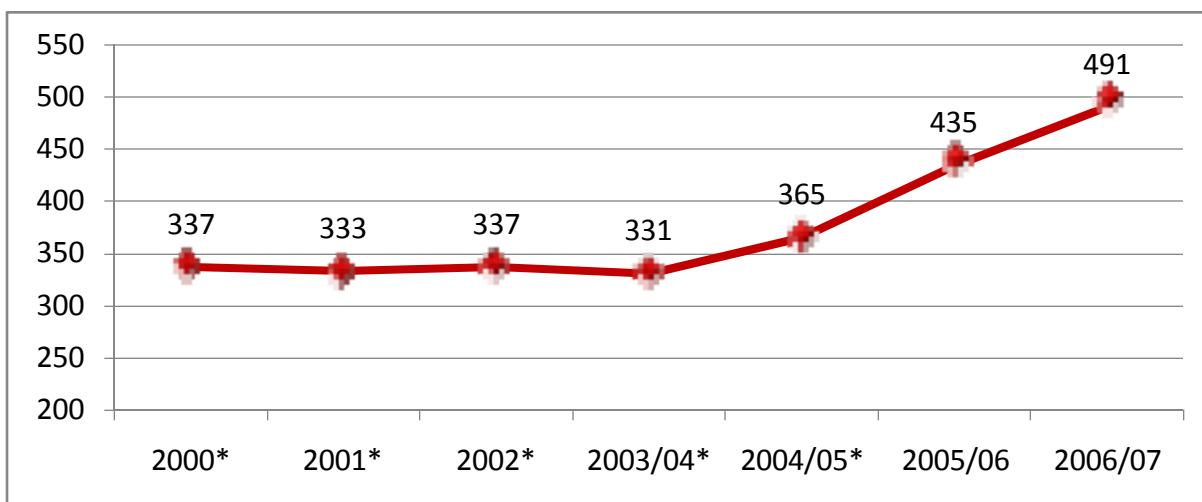
The number of licensed RNs per population has increased during the last several years and in 2006 was 14.35 RNs per 1,000 people which is greater than the national average of 8.48 per 1,000². However, maldistribution of RN supply remains a concern with 17 rural counties having less than the national average of RNs per 1,000 people (see Figure 2).

Figure 2: North Dakota RNs per 1,000 Population



All RN nursing education programs increased their enrollment from a total of 722 students in 2000 to 1,312 students in 2007. This has resulted in an increase in the number of RN graduates statewide (see Figure 3).

Figure 3: North Dakota Nursing Education Graduates: RNs



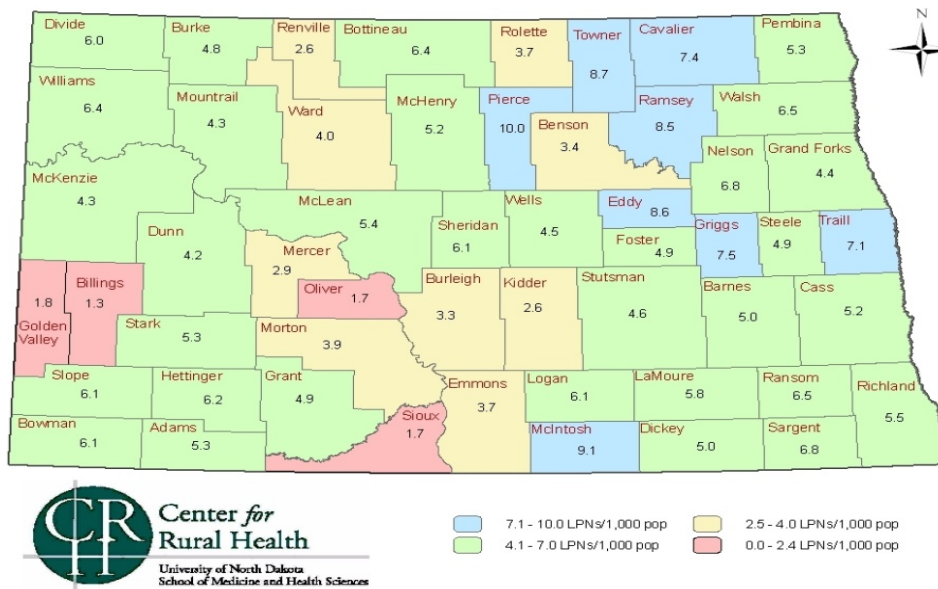
Source: North Dakota Board of Nursing Annual Education Reports 2000 through 2006/2007. Note. The 2000-2005 graduate numbers also include graduates from Concordia College as a part of the Tri-College Program.

The North Dakota average age of RNs has decreased to 44 years. This is below the national average of 47 years². Twenty-five percent of North Dakota RNs plan to retire by 2016.

LPN Supply

The number of LPNs per 1,000 people has increased slightly over the last six years to 5.65 LPNs per 1,000 people and is consistently above the national average of 2.4 LPNs per 1,000.³ However, distribution of LPNs varies widely across the state with four rural counties having less LPNs than the national average (see Figure 4).

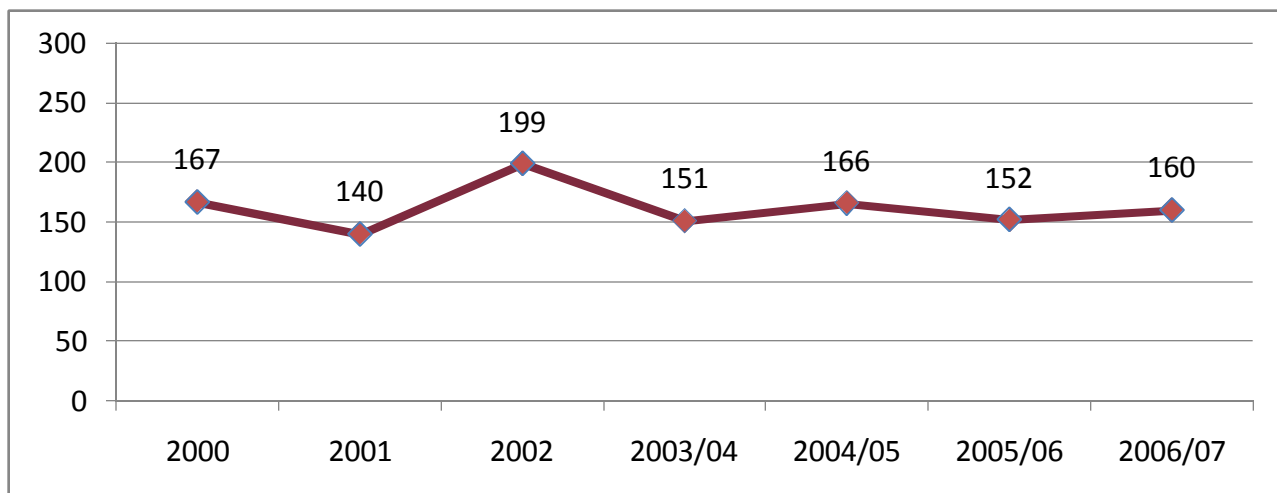
Figure 4: North Dakota LPNs per 1,000 Population



Data based on 2007 Population Estimates and 2007 North Dakota Board of Nursing Licensure Data. 6/08

Enrollment in LPN programs has declined from a total of 382 students in 2000 to 325 students in 2007. Consequently, the number of LPN graduates has decreased slightly from 2000 to 2007 (see Figure 5).

Figure 5: North Dakota Nursing Education Graduates: LPNs

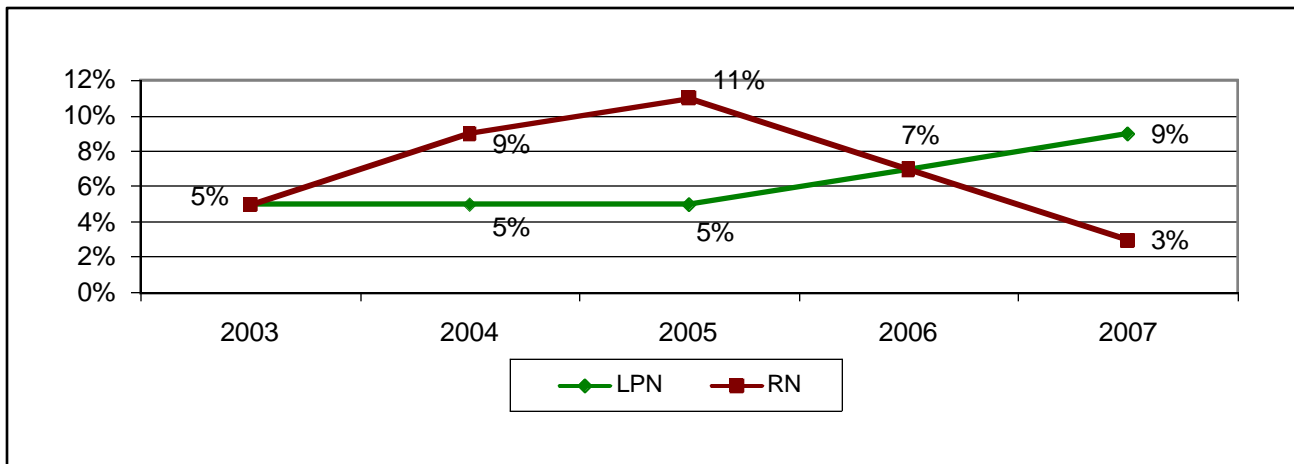


The average age of LPNs in North Dakota is 42 years. This is lower than the national average of 43 years⁴. Twenty-five percent of LPNs plan to retire by 2017.

LPN and RN Demand

According to economists, a full workforce in most industries exists when vacancy rates are below five to six percent⁵. A shortage is considered to be present at a sustained vacancy rate above this level. North Dakota RN vacancy rates have decreased over the last three years to 3% in 2007 (see Figure 6). The North Dakota hospital RN vacancy rate is 3% which is less than the national average of 8%.⁶ It is important to note that while RN vacancy rates have been decreasing, LPN vacancy rates have increased over the last three years.

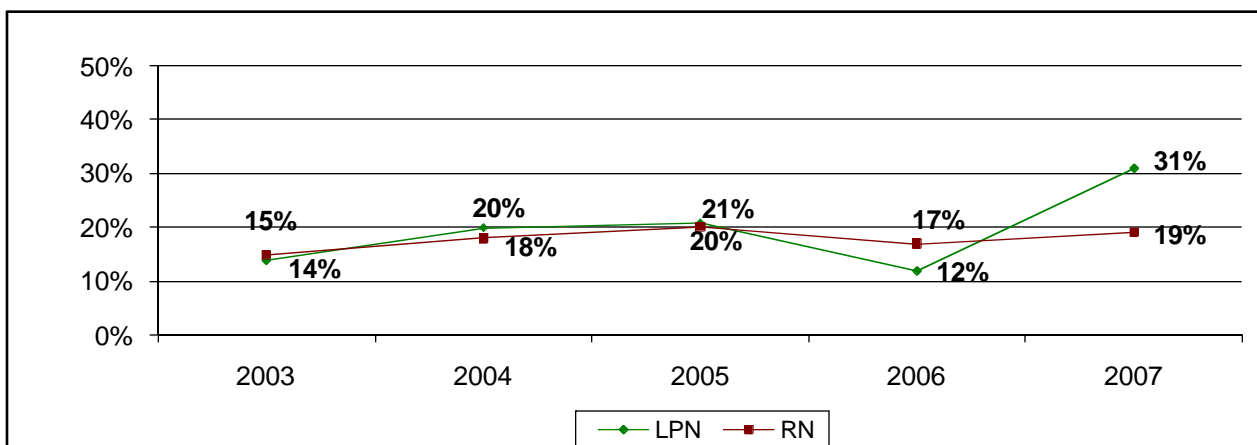
Figure 6: North Dakota Statewide Vacancy Rates



The percentage of RNs working full-time (36-40 hours/week) has increased from 11% in 2004 to 43% in 2007. LPNs have had a similar increase from 11% in 2004 to 49% in 2007. The percentage of RNs with a second job has also declined from 33% in 2003 to 16% in 2007 with LPNs having the same pattern from 23% in 2003 to 14% in 2007. This indicates that more nurses are increasing their hours at one job and working at less facilities than in 2003.

Turnover rates reflect fluctuation in staffing in healthcare facilities. The statewide turnover rate for RNs was 19 percent. It is important to note that the statewide turnover rate for LPNs was 31% in 2007. This is higher than the statewide turnover rate in previous years (see Figure 7). The turnover rate for RNs and LPNs working in North Dakota hospitals was 20% and 25% which is greater than the national average nurse turnover rate in hospitals which is 8.4%⁷

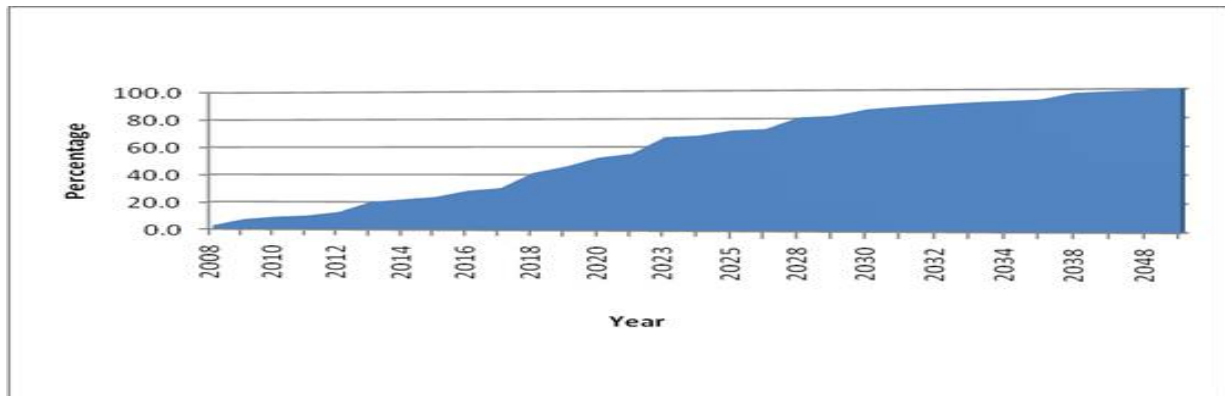
Figure 7: North Dakota Statewide Turnover Rates



Nursing Education Program Faculty

The average age of nursing faculty has decreased over the past five years from 51 years to 49 years. 41% of faculty plan to retire by 2018 (see Figure 8).

Figure 8: Faculty Retirement Plans



Although nurse faculty salaries are generally equivalent or higher than regional and national averages (see Table 1) salaries are still below Advanced Practice Nurses with average annual salaries between \$68,000 and \$97,842. When asked to estimate their workload, full-time faculty indicated an average of 53 hours each week with part-time faculty averaging 36 hours per week.

Table 1: Academic Year Average Salaries

		North Dakota	Midwestern Region	National
Instructor	Doctoral		\$54,128	\$52,000
	Nondoctoral	\$43,397	\$46,369	\$48,681
Assistant Professor	Doctoral	\$56,501	\$60,000	\$61,321
	Nondoctoral	\$48,410	\$49,161	\$51,255
Associate Professor	Doctoral	\$65,389	\$66,927	\$70,000
	Nondoctoral	\$53,415	\$54,799	\$56,567
Professor	Doctoral	\$61,034	\$79,895	\$84,875
	Nondoctoral		\$67,395	\$66,969

In the past year, 52% of faculty indicated they have been contacted by a recruiter with information about a faculty position at another program out of state. Faculty indicated that offers (\$75,000 - \$100,000) generally were significantly higher than the current salaries they were receiving. One faculty indicated that they were offered “\$100,000 for 9-month full-time position with guarantee of no summer work required. It also came with the guarantee of no work on weekends and holidays. The hours were guaranteed at an average of 8 a day and no evenings or nights required. I also would not have to obtain a terminal degree to maintain employment.”

In summary, these findings indicate:

- ❖ Continued support of North Dakota's nursing education programs in particularly support for the recent expansion of class size will play an important role in ensuring an adequate supply of nurses in the future.
- ❖ The distribution of an inadequate number of nurses across rural areas of the state remains a concern and programs designed to provide educational opportunities to rural communities should be supported. Programs such as the newly funded \$1.6 million Area Health Education Center program, a partnership between the School of Medicine and Health Sciences (UNDSMHS) and the College of Nursing at the University of North Dakota will provide an important avenue for addressing this concern. Continued funding for this program through the provision of a required state match is part of the UNDSMHS additional budget request for the Health Care Workforce Initiative.
- ❖ There is some indication of a worsening LPN shortage. This should be closely monitored.
- ❖ Increased turnover rates of nurses in health care facilities indicate a need to improve the work environment and maximize retention of nurses.
- ❖ Nursing education programs are heavily recruiting North Dakota faculty. Consequently, additional incentives are needed to ensure enough faculty will remain in North Dakota to support our nursing education programs.
- ❖ Given the number of factors that can impact supply and demand, it is important to collect data and track changes over time.

References

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