

## North Dakota Health Professions: Nursing Supply

Spring 2006

Much has been written about whether the current and future supply of nurses in the United States is sufficient. Although there has been a five-year increase in registered nursing school enrollment nationwide, there are more students interested in nursing than can be accommodated by the number of nursing faculty available. According to the American Association of Colleges of Nursing (AACN) registered nursing programs turned away 32,617 qualified applicants in 2005.<sup>1</sup> This fact sheet includes information, collected in 2005, about the current supply of nurses in North Dakota, future plans of students and the outreach of nursing education programs in order to increase capacity.

The Nursing Needs Study was recommended by North Dakota Century Code Nurse Practices Act in which the North Dakota Board of Nursing was directed to explore issues of supply and demand including recruitment, retention, and utilization of nurses. The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences conducts the Nursing Needs Study. All results from the study are available at <http://medicine.nodak.edu/crh>.

### Demographics

- ❖ North Dakota has approximately 632 Advanced Practice Nurses (APNs), 8,468 Registered Nurses (RNs), and 3,365 Licensed Practical Nurses (LPNs).<sup>2</sup>
- ❖ Ninety-four percent of nurses are female and are primarily Caucasian.
- ❖ The average age of RNs is 45 years, the same as the national average<sup>3</sup> and LPNs, 41 years, which is slightly younger than the national average of 43 years.<sup>4</sup>
- ❖ National data indicate an average of nearly eight RNs per 1,000 people.<sup>5</sup> Twenty-eight counties in North Dakota have less than the national average. Three counties have less than 3.4 RNs per 1,000 people (see Figure 1). These three counties have had a persistent shortage of RNs for the last three years. Nine counties have more than 10 RNs per 1,000 compared to 11 counties in 2003.

- ❖ Four counties have less than three LPNs per 1,000 people. In 2003, five counties had less than three LPNs/1,000 people. Ten counties have more than six LPNs per 1,000 people compared to eight counties in 2003 (see Figure 2).

Figure 1. North Dakota RNs per 1,000 People

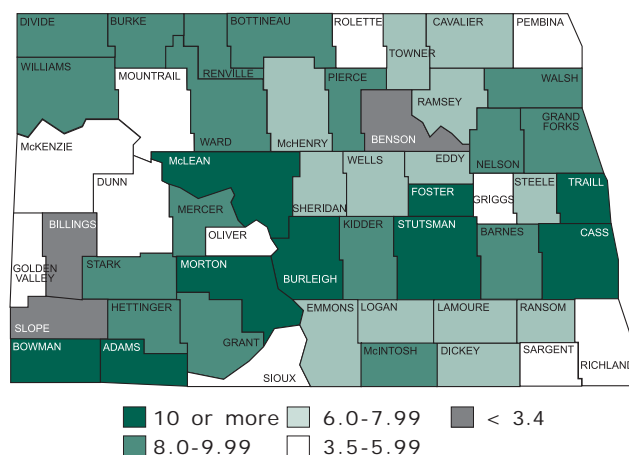
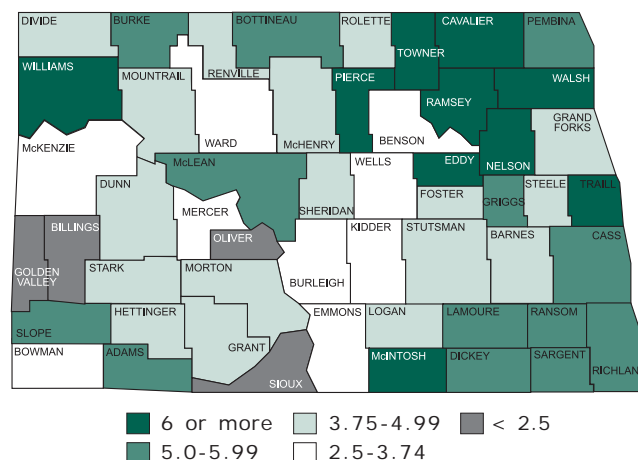


Figure 2. North Dakota LPNs per 1,000 People



### Nursing Education

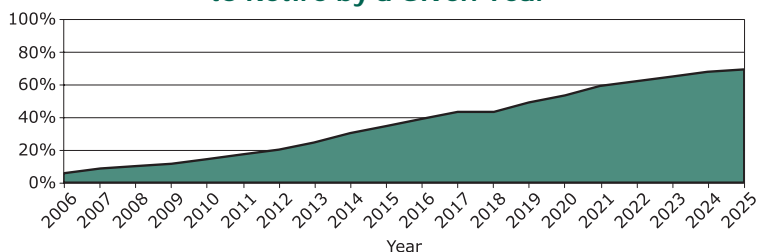
- ❖ There are currently 372 students enrolled in LPN programs, 1,098 students in RN programs, and 183 students in APN programs.<sup>6</sup>

- ❖ Sixty-three percent of surveyed nursing education programs offer distance education through internet courses along with 75 percent that offer distance education through video conferencing.<sup>7</sup>
- ❖ Fifty-five percent of LPN, 48 percent of RN and 65 percent of APN students plan to work in North Dakota after graduating from their nursing education program. Most students staying indicated that their families live in North Dakota.<sup>8</sup>
- ❖ Fifty-one percent of LPN, 32 percent of RN and 52 percent of APN students plan to seek employment in a rural area in the future. Students indicated that reasons for working in a rural area include: rural areas are safe environments, spouse/significant other has a job in a rural area, and they get to know patients.<sup>8</sup>
- ❖ Sixteen percent of LPNs and 27 percent of RNs indicated that they would be interested in pursuing a nursing faculty role sometime in the future because of perceived satisfaction in teaching.<sup>9</sup> When students are surveyed, 45 percent of LPN students and 35 percent of RN students thought that they might pursue a faculty role sometime in the future.<sup>8</sup>

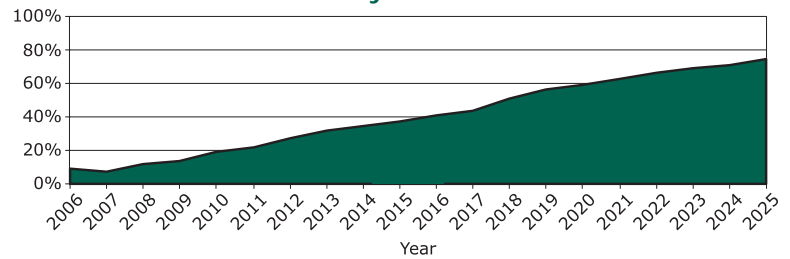
### Employment Characteristics

- ❖ Average annual salary reported by North Dakota RNs is \$38,105 as compared to the national average of \$48,240. The average salary for North Dakota LPNs is \$22,912 as compared to the national average of \$31,490.<sup>10</sup> In 2005, RNs in rural settings reported an average income 17 percent lower than RNs in urban areas. When compared with last year's reported income, rural RNs average income has increased slightly whereas RNs in urban areas reported a decline in average income. A similar increase was also found for LPNs in rural areas.<sup>9</sup>
- ❖ One-quarter of nurses indicated that they work part-time which is a decrease from one-third in 2003. Nurses indicated that they work part-time due to home and family responsibilities or enrollment in college.<sup>9</sup>
- ❖ Twenty percent of RNs and 35 percent of LPNs are employed in two nursing jobs which is much higher than national rate of six percent for RNs.<sup>9,11</sup>
- ❖ The average anticipated age of retirement is 62.<sup>9</sup> Thirty-one percent of LPNs plan to retire by 2014 (see Figure 3).

**Figure 3. Cumulative Percentage of LPNs Planning to Retire by a Given Year**



**Figure 4. Cumulative Percentage of RNs Planning to Retire by a Given Year**



- ❖ Slightly more than one-third of all RNs plan to retire within the next nine years and two-thirds within the next 16 (see Figure 4).<sup>9</sup>
- ❖ Nurses indicated that increase pay, flexible scheduling, retaining benefits, adequate staffing and the ability to work part-time might encourage them to work longer than their anticipated retirement age.<sup>9</sup>

### Footnotes:

- 1 American Association of Colleges of Nursing (2005). With enrollments rising for the 5<sup>th</sup> consecutive year, U.S. nursing schools turn away more than 30,000 qualified applications in 2005. Press Release December 12, 2005.
- 2 North Dakota Board of Nursing Nurse Licensure Database, Accessed March, 2006.
- 3 Spratley, E., Johnson, A., Sochalski, J., Fritz, M. & Spencer, W. (2000). The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing: Washington D.C.
- 4 Seago, J., Spetz, J., Chapman, S., Dyer, W., Grumbach, K. (2004). Supply, Demand and Use of Licensed Practical Nurses. Center for California Health Workforce Studies, University of California: San Francisco.
- 5 Health Resources and Services Administration, 2000.
- 6 North Dakota State Board of Nursing Report on Education 2004-2005.
- 7 King, B. & Moulton, P. (2005). North Dakota Nursing Programs Use of Technology: A Statewide Assessment. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.
- 8 Moulton, P. & Speaker, K. (2004) North Dakota Nursing Needs Study: Student Survey Results. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.
- 9 King, B. & Moulton, P. (2005). Three-year comparison of North Dakota nurses: Results and Implications. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.
- 10 U.S. Department of Labor, Bureau of Labor Statistics (2001). National and State Occupational Employment and Wage Estimates.
- 11 ANA, American Nurses Association (2001) Analysis of American Nurses Association Staffing Survey. Cornerstone Communications Group: Warwick, RI.

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