

Several reports conclude that a growing shortage of registered nurses (RNs) is having a negative impact on patient safety and health care quality as well as on the overall health care delivery system.<sup>1,2</sup> In hospitals with high patient-to-nurse ratios, a recent national study found surgical patients experience higher mortality and nurses are more likely to experience job “burnout” and dissatisfaction.<sup>3</sup>

According to the American Hospital Association, there are 126,000 nursing positions currently unfilled in hospitals across the country, and the Centers for Medicare and Medicaid Services report that 90 percent of nursing homes and other long term care organizations lack sufficient nurse staffing to provide even basic care. Shortages, while a problem for the entire health care system, are likely to be most severe for rural/frontier regions and medically needy population groups. This fact sheet includes information about the current demand for nurses in North Dakota including vacancy rates, turnover rates and salary based on data collected in 2005.

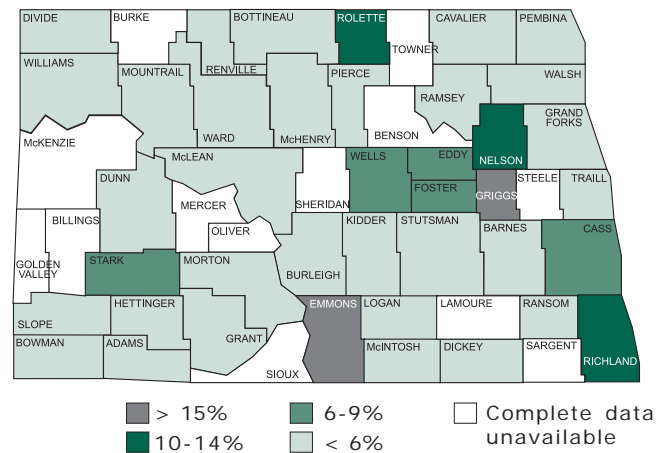
The Nursing Needs Study was recommended by North Dakota Century Code Nurse Practices Act in which the North Dakota Board of Nursing was directed to explore issues of supply and demand including recruitment, retention, and utilization of nurses. The Center for Rural Health at the University of North Dakota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

### Vacancy Rates

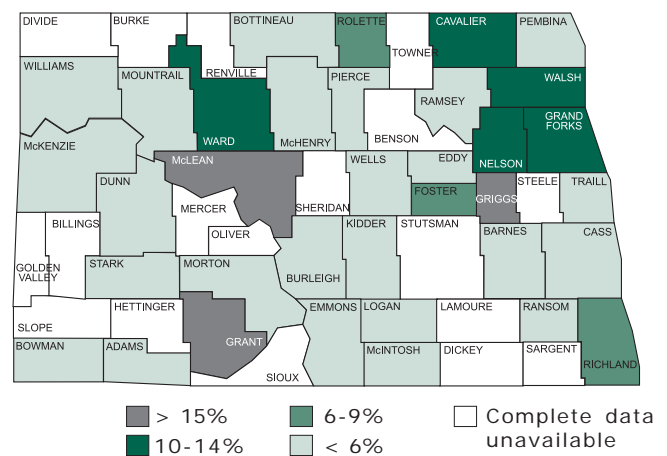
- ❖ In 2005, the statewide vacancy rate for RNs (Registered Nurses) was 11 percent, which is an increase from nine percent in 2004 and five percent in 2003. Ten counties have a RN vacancy rate above six percent, a level indicative of a shortage. Two counties have vacancy rates above fifteen percent.<sup>4</sup> Vacancy rates refer to the number of vacant positions relative to the number of budgeted positions (see Figure 1).
- ❖ The statewide vacancy rate for LPNs (Licensed Practical Nurses) was five percent, which is consistent with the past two

years. Eleven counties had vacancy rates above six percent<sup>4</sup> (see Figure 2).

**Figure 1. North Dakota RN Vacancy Rates by County**



**Figure 2. North Dakota LPN Vacancy Rates by County**



Note. Vacancy rates include all responding health care facilities within each county (hospital, long-term care, clinic, home health and public health).

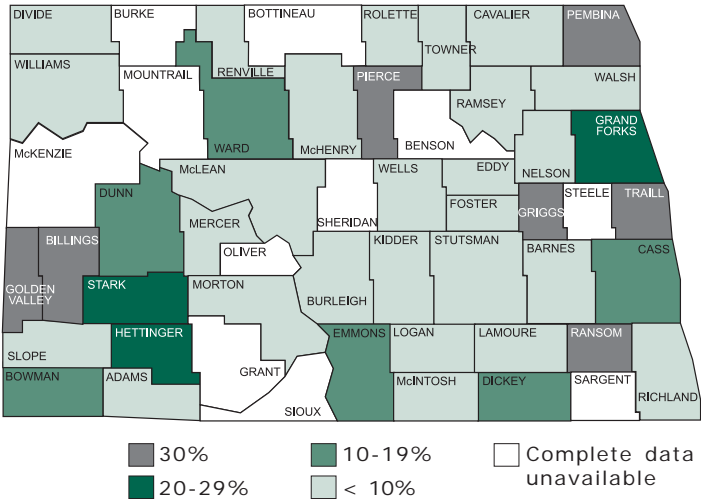
- ❖ Hospitals in semi-rural areas<sup>9</sup> spent an average of 26 weeks recruiting for a vacant nurse position in 2005. Rural hospitals spent 20 weeks and rural long-term care facilities spent 18 weeks to recruit a nurse.<sup>4</sup>

### Turnover Rates

- ❖ Another measure of demand is turnover which reflects fluctuation in staffing at each facility. Turnover rates refer to the number of resignations and terminations relative to the number of budgeted posi-

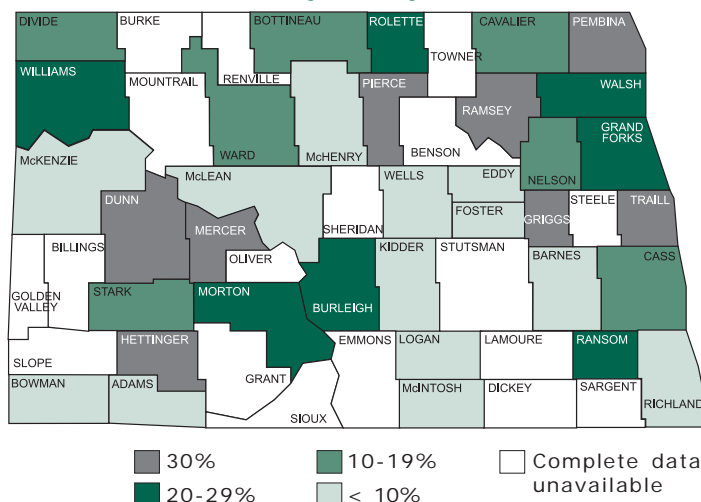
tions. Statewide RN turnover rate was 20 percent which is an increase from 18 percent in 2004 and 15 percent in 2003. When divided by county, seven counties have turnover rates 30 percent or greater.<sup>4</sup> The average nationwide turnover rate is 21 percent for RNs in hospitals with a range of 10 percent to 30 percent<sup>5</sup> (see Figure 3).

**Figure 3. North Dakota RN Turnover Rates by County**



❖ The statewide turnover rate for LPNs was 21 percent, which is an increase from 20 percent in 2004 and 17 percent in 2003. When divided by county, eight counties had LPN turnover rates 30 percent or greater in 2005<sup>4</sup> (see Figure 4).

**Figure 4. North Dakota LPN Turnover Rates by County**



Note. Turnover rates include all responding health care facilities within each county (hospital, long-term care, clinic, home health and public health).

❖ The percentage of RNs reporting an increase in patient care load has decreased to 42 percent from 52 percent in 2003. In comparison, LPNs reporting an increase in patient care load has increased from 15 percent in 2003 to 50 percent.<sup>6</sup>

- ❖ Representation of nurses in facility decision-making is an important factor in job satisfaction and nurse retention. Thirty-six percent of hospitals and 49 percent of long-term care facilities had nurse representation in 2005. This reflects an increase for long-term care facilities and a decrease for hospitals as compared to 2003.<sup>4</sup> The national average for hospitals is 76 percent.<sup>7</sup>
- ❖ As reported by health care facilities, the average wage for RNs in 2005 was about \$19/hour which is a decrease from 2004 (\$20.34/hour). Average wage for LPNs in 2005 was nearly \$14/hour which is also a decrease from 2004 (\$14.34/hour).<sup>4</sup> The national average in 2004 for RNs was \$26.87/hour and for LPNs was \$16.87/hour.<sup>8</sup>

**Footnotes:**

- 1 Institute of Medicine. (2004). *Keeping Patients Safe: Transforming the Work Environment of Nurses*. National Academies Press: Washington, DC.
- 2 Kovner, et al. (2002). Nurse staffing and post surgical adverse events: An analysis of administrative data from a sample of U.S. hospitals, 1990-1996. *Health Services Research* 37(3):611-629.
- 3 Aiken, L., Clarke, S., Sloane, D., Sochalski, J. & Silber, J. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job satisfaction. *Journal of the American Medical Association*, 288, 1987-1993.
- 4 Moulton, P. & Speaker, K. (2005). *Three Year Comparison of Nurses in North Dakota Health Care Facilities: Results and Implications*. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.
- 5 HSM Group. (2002). *Acute Care Hospital Survey of RN Vacancy and Turnover Rates*. American Association of Nurse Executives.
- 6 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.
- 7 Kimball, B. & O'Neil, E. (2002). *Health Care's Human Crisis: The American Nursing Shortage*. Robert Wood Johnson Foundation Health Workforce Solutions.
- 8 U.S. Department of Labor, Bureau of Labor Statistics (2005). *National Compensation Survey: Occupational Wages in the United States, July 2004*.
- 9 When appropriate, data were divided into three rurality categories based on Urban Influence Codes (Ghelfi & Parker, 1997). For more information, see Moulton, P. & Speaker, K. (2005). *Three Year Comparison of Nurses in North Dakota Health Care Facilities: Results and Implications*. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.

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