

## Primary Care Providers

Summer 2005

The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences (UNDSMHS) conducted the North Dakota Physician Survey in 2004 to monitor the physician workforce trends for North Dakota. The surveys, designed to examine demographics, educational background, practice profiles, and practice arrangements, were sent to 1,461 licensed physicians in the state<sup>1</sup>. Survey data was collected and analyzed through the Center for Rural Health's Health Profession Tracking Program. This is a statewide healthcare provider tracking system with the ability to create and maintain a comprehensive inventory of North Dakota's critical healthcare resources. Comprehensive results of the survey are available at <http://medicine.nodak.edu/crh>

### Physician Supply

In 2004, North Dakota had 1,461 licensed physicians<sup>1</sup>:

- ❖ Family physicians provide the majority of patient care in rural areas. A decline in U.S. graduates choosing family medicine may dramatically impact health care in areas of greatest need<sup>2</sup>.
- ❖ In the U.S. and in North Dakota, four percent of the counties do not have a physician<sup>3</sup>.
- ❖ The average age of U.S. physicians is 51 years<sup>4</sup> compared to 49 years in North Dakota.
- ❖ The majority of physicians in North Dakota are non-Hispanic white.
- ❖ From 2000-2004, the Center for Rural Health documents an average of 18 physician vacancies/year for primary care physicians (see Table 1)<sup>5</sup>.

**Table 1. Primary Care Vacancies in Rural North Dakota: 2000-2004**

Year	Vacancies
2000	17
2001	21
2002	20
2003	19
2004	14

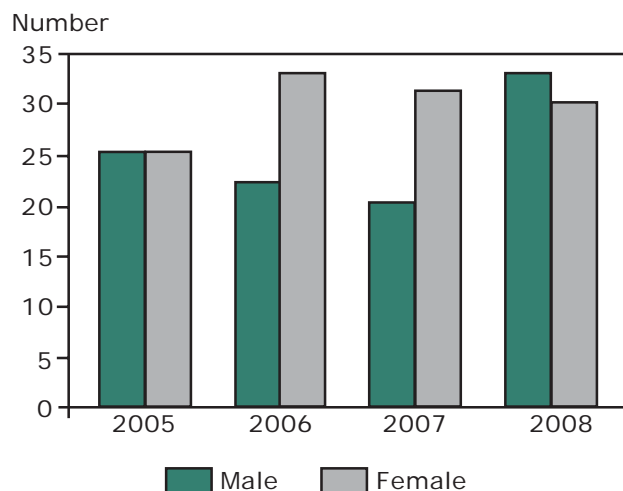
- ❖ In the U.S., 26 percent of the physicians are female<sup>4</sup> compared to 21 percent in North Dakota.

### Education and Training:

In April 2005, U.S. News and World Report ranked UNDSMHS (the state's only medical school), as third in the nation for its commitment to excellence in rural medicine based on results of a survey of medical school deans and senior faculty members at 125 U.S. medical schools.

- ❖ The average age of medical students at the UNDSMHS covering the academic classes of 2005-2008 is 24 years<sup>6</sup>.
- ❖ In the U.S.<sup>7</sup> and North Dakota medical schools, approximately one-third of the physicians attended medical schools in their home states.
- ❖ While an equal number of male and female students were admitted to the UNDSMHS in 2005, female students will exceed the number of male students in 2006 and 2007 (see Figure 1)<sup>6</sup>.

**Figure 1. Gender Composition of UNDSMHS Medical Classes: 2005-2008**



- ❖ Factors important in choosing a career for University of North Dakota School of Medicine and Health Science students and residents included: a personal attraction to medicine, an opportunity to make a difference in people's lives, and intellectual challenge<sup>8</sup>.

- ❖ North Dakota has two federal grant programs that provide rural, reservation, and community-based interdisciplinary experiences for students in medicine, nursing, psychology, dentistry, clinical laboratory science, nutrition, dietetics, radiologic technology, occupational therapy, physical therapy, and social work<sup>9</sup>.

### Practice Setting:

Factors that influence where a physician will practice include<sup>10</sup>:

- ❖ Rural practice environment,
- ❖ Personality and family characteristics of the physician, and
- ❖ Rural-focused training.

A strong relationship exists between the size of the community where a physician grew up and the size of the practice location. A national study (380 resident programs and over 1,000 residents) found that 40 percent of the residents who grew up in large cities selected a large city as their practice location and 52 percent of residents who grew up in a small town preferred a small town location for their practice<sup>11</sup>.

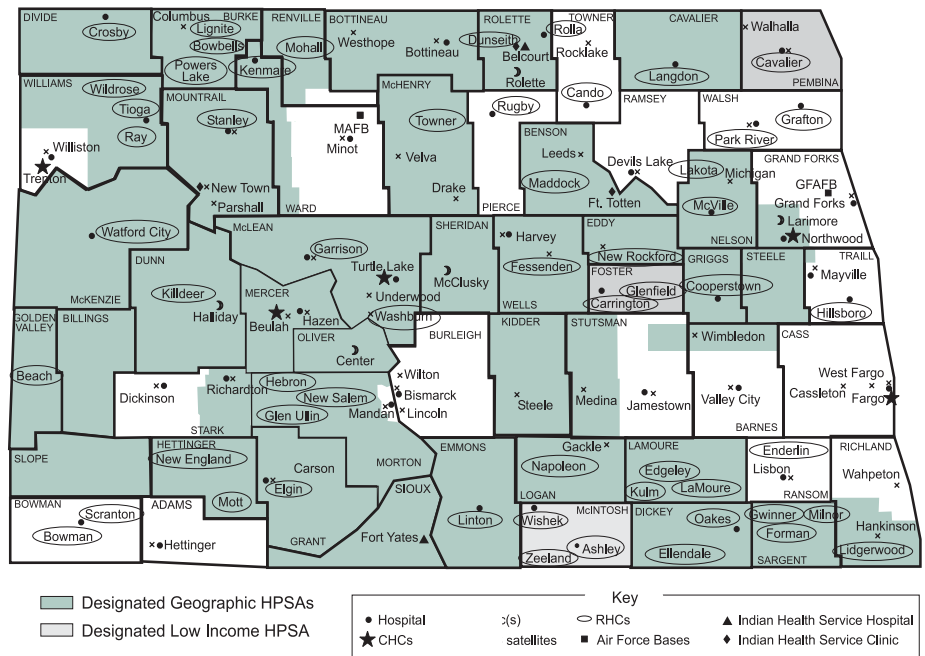
The top four reasons UNDSMHS' residents chose for working in a rural area included: getting to know patients, low cost of living, more autonomy, and safe environment<sup>7</sup>.

- ❖ Of the 210 third-year North Dakota Family Medicine residents from 1991 to 2004, 46 percent chose to practice in North Dakota. Twenty-four percent chose a rural in-state practice while 22 percent chose urban in-state practice<sup>12</sup>.
- ❖ Nationally, 11 percent of U.S. physicians practice in rural areas<sup>13</sup> and in North Dakota, 32 percent of physicians practice in rural areas.
- ❖ North Dakota has 60 certified Rural Health Clinics (RHCs) and five federally-funded Community Health Centers (CHCs). The CHCs provide primary care, mental health, and oral health services at eleven different locations including one Indian Reservation site (see Figure 3).

### Federal Programs:

The National Health Service Corps (NHSC), Health Resources Services Administration, has made significant contributions to rural North Dakota and has placed 126 providers in 54 health professional shortage areas. Currently, 17 providers are serving their NHSC obligation at nine locations. Nationally, the program has placed approximately 24,000 (1972-2004) providers with a current field strength of 4,000<sup>14</sup>.

**Figure 3. North Dakota Health Professional Shortage Areas: Rural Hospitals, Clinics and RHCs.**



### Footnotes:

- 1 North Dakota Medical Services Directory: 2004-2005.
- 2 2003 MATCH Information Sheet, American Academy of Family Physicians Web site: <http://www.aafp.org/match/nrmpinfo.html>
- 3 North Carolina Rural Health Research & Policy Analysis Center.
- 4 American Medical Association. *Physician Characteristics and Distribution in the US*, 2004 Edition.
- 5 Amundson, M., M.A. (2000-2004). *Primary Care Vacancies in Rural North Dakota*. University of North Dakota School of Medicine and Health Sciences (UNDSMHS) Center for Rural Health.
- 6 UNDSMHS Office of Student Affairs and Admissions; 2005.
- 7 State Health Workforce Profiles, U.S. Department of Health and Human Services, Health Resources Services Administration, Bureau of Health Professions, 2004.
- 8 Moulton, P., Ph.D., Amundson, M., M.A. (January 2005). *Medical Student and Resident Preliminary Survey Results*. UNDSMHS Center for Rural Health.
- 9 Award through the National Health Service Corps (NHSC) Students/residents Experiences And Rotations in Community Health Program and the Quentin N. Burdick Rural Interdisciplinary Training Grant Program.
- 10 Ricketts, T.C. (2000). *The Changing Nature of Rural Health Care*. Annual Review of Public Health, 21(1):639-657.
- 11 *The Journal of Rural Health*, 16(1), Winter, 2000.
- 12 Amundson, M., M.A. (1999-2004). *North Dakota Residency Surveys*. UNDSMHS Center for Rural Health.
- 13 *Understanding Rural America*. <http://www.nal.usda.gov/ric/resources/backgrn/02ram/2r-amer.htm>
- 14 Field Strength Survey, NHSC (2005).

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