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# Division of Health Promotion and Chronic Disease Prevention Bureau of Health Care Access Center for Health Workforce Planning

Issue Brief: Status of the Nurse Workforce in Iowa February 2006

This issue brief describes the nurse workforce in 2006. Data sources include the U.S. Department of Health and Human Services, the U.S. Department of Labor, the Iowa Board of Nursing, the Iowa Hospital Association and Iowa Workforce Development.

## **Nursing Trends in the United States**

The U.S. nursing population is on the rise, increasing 7.9 percent since 2000, according to the U.S. Department of Health and Human Services, Health Resources and Services Administration. More than 35,700 RNs from all 50 States and the District of Columbia responded to the *Eighth National Sample Survey of Registered Nurses* between March 2004 and November 2005. The survey explores educational background and specialty areas; employment status, position and salaries; geographic distribution; and personal characteristics, including gender, racial and ethnic background, age, and family status.

The complete report is expected to be released in March 2006. An interim document, Preliminary Findings: National Sample Survey of Registered Nurses, reveals the following data and trends:

- The total number of licensed registered nurses (RNs) living and working in the United States was estimated to be 2.9 million.
- Of the total licensed RN population, 83.2 percent were employed in nursing in 2004. Of this number, 58.3 percent were working full-time, almost 25 percent were working parttime, and 16.8 percent were not employed.
- The "real" earnings of RNs employed full-time have increased 12.8 percent since 2000, the first significant up-turn in real earnings since 1988.
- The nursing population continues to age: the average age of the RN population was estimated to be 46.8 years.
- Of nurses who indicated their racial and ethnic background, 88.4 percent (almost 2.4 million) were White; 4.6 percent (122,495) were Black/African American; 3.3 percent (89,976) were Asian or Pacific Islander; and 1.8 percent (48,009) were Hispanic.

## **Nursing Trends in Iowa**

On July 1, 2005 there were 39,423 actively licensed RNs in Iowa, an increase of 959 RNs since last year. Approximately 92 percent reside in Iowa and 80 percent are employed in nursing.

There were 10,588 actively licensed LPNs in Iowa, an increase of 495 since last year. Approximately 94 percent reside in Iowa and 70 percent are employed in nursing.

The largest cohort of RNs licensed in Iowa range in age from 45 to 54. Fifty-six percent are 45 years of age or older. Twenty percent are younger than 35 years of age.

The largest cohort of LPNs licensed in Iowa also range in age from 45 to 54. The majority (51%) of LPNs are younger than 45 years of age. Thirty percent are younger than 35 years of age. In 2005, 75 percent of new practical nurse graduates enrolled directly in RN programs and plan to seek RN licensure upon graduation.

## The Evolution of Nursing Education in Iowa

In 1908, Iowa nurses were required to graduate from training schools that were in good standing with the Board of Health and included two years of instruction in general hospital practice. In 1915, a requirement for one year of high school was instituted. This was increased to a two-year requirement in 1926 and to a four-year requirement in 1930. In 1915, there were only 10 nurse training schools in the United States that reported full-time paid instructors. On March 12, 1907 the Iowa Legislature took the first step toward ensuring that individuals providing nursing care to the citizens of Iowa were qualified by passing a law requiring education and licensure by examination. In 1908, the licensing exam was comprised of 50 essay questions. Seven testers sat for the examination that year.

In 2006, there are 86 nursing education programs in Iowa, including practical nursing, associate degree, baccalaureate, academic and professional master's, postmaster's, and doctoral. The last hospital-based diploma program in Iowa closed in 1999. Over 1,400 licensees living in Iowa report their highest degree as a master's or doctorate in nursing.

During the last academic year 3,265 students were admitted to Iowa's pre-licensure RN programs, an increase of 22 percent compared to the previous year. During the same time 1,795 students graduated from Iowa's pre-licensure RN programs and 105 graduated from doctoral or academic master's programs, an increase of 13 and 15 percent respectively compared to the previous year. On November 1, 2005, Iowa's RN programs reported 445 students on waiting lists and the LPN programs reported over 1,000 students on waiting lists.

lowa has identified the need for additional faculty to accommodate increasing enrollments that now exceed 5,000 students in the basic and RN-completion programs alone. On November 1, 2005, the nursing programs in lowa's baccalaureate and higher degree colleges and universities, and community colleges, reported 106 faculty vacancies, including 25 full-time and 81 part-time. In addition to 1,219 nursing faculty members, over 1,500 nurses employed in broad array of practice settings serve as clinical preceptors for RN and LPN students.

Most lowa programs report that nursing student enrollments increased in the current year. The program directors continue to identify increased faculty workload, more students in the classroom, growing need for support services, new or longer waiting lists and more clinical groups as direct results of increasing enrollments.

#### **Workforce Trends**

RNs have topped the list of health professions experiencing the greatest number of vacancies in lowa's hospitals for the past five years. However, the actual number of RN vacancies in lowa's hospital-based workforce has declined since 2000. In fall 2004, there were 309 vacant full-time RN positions and 223 vacant part-time RN positions. The total number of vacant RN positions projected between 2005 and 2007 is 1,827 full-time and 1,237 part-time. The majority of lowa's hospitals (57%) rated RN turnover as low. Fifty-four percent of lowa's hospitals were able to fill vacant RN positions in 30-60 days. The percentage of hospitals able to fill vacant RN positions in fewer than 30 days has steadily increased over the last four years.

Nurse vacancy data was last collected from all lowa's nursing homes in 2003. At that time RN vacancies in the long-term care setting were estimated at 10 percent. LPNs demonstrated the highest vacancies in this setting at 14 percent. Approximately one half of long-term care employers reported their RN and LPN vacancy situation was unchanged from the previous year, and one-third reported it had improved. RN positions were the most difficult to fill with 37 percent of long-term care employers reporting 60 days or longer to fill a vacancy. In August 2005, the University of lowa's Model RN Tracking System identified nursing homes as the worksite with the most RN full-time equivalent vacancies in north central and northeast lowa.

In February 2006, the Iowa Health Care Association developed a new Health Profession Workforce Survey to identify long term care workforce shortages in Iowa by geographic area. The survey is designed to quantify workforce demand in long-term care facilities, including assisted living, residential care facilities, nursing facilities, and skilled nursing facilities. Seven data elements will be collected for 28 categories of health professional in each long term care facility.

## **Nursing Wages**

According to data compiled by the U.S. Department of Labor's Bureau of Labor Statistics (November 2004), RNs in Iowa rank 49th (in last place) on a table showing average annual salary for nurses in the United States. The unadjusted salary for Iowa nurses was \$44,000. Once adjusted for cost of living the rank order of Iowa RNs moved to 42<sup>nd</sup> among states and the average adjusted annual salary was listed as \$46,908.

State wage data updated for 2004 using the Employment Cost Index shows an RN hourly wage range from below \$15 to more than \$25 per hour. Broken down by pay level, the highest-paid 10 percent of nurses across lowa as a whole earn a wage of approximately \$27.14 per hour and the lowest-paid earn approximately \$15.09 per hour.

Overall wages for nurses have increased in recent years. According to the U. S. Department of Labor Bureau of Labor Statistics, the most current occupational wage estimates for

registered nurses in Iowa report a median hourly wage of \$20.77 (\$44,000 annually). For licensed practical nurses, the mean hourly wage estimate is \$15.10 (\$31,480 annually).

## **National Projections**

Baseline supply and demand projections suggest that if current trends continue, only 64 percent of the demand for full-time equivalent (FTE) RNs in the U.S. will be met in 2020, as compared to 2005 when 90 percent of demand is met. By 2015, every state is projected to experience some level of shortfall. In Iowa, the shortfall of nurses is projected to increase from eight percent (2,300 RNs) in 2005 to 27 percent (9,100 RNs) in 2020. This number is almost one fourth of Iowa's current number of actively licensed RNs.

The U.S. Bureau of Labor Statistics projected the health occupations with the largest job growth between 2002 and 2012. For the first time in recent history, registered nurses top the list of the 10 occupations with the largest projected growth. The need for RNs is expected to increase significantly to replace the retiring workforce. Nationally, more new positions are expected to be created for RNs than for any other occupation.

#### **Iowa Considerations**

In Iowa, the driving forces behind RN supply and demand reflect every national trend. Factors unique to Iowa include the following:

- Economic challenges of a rural state with small, independent farming communities
- Static population between the ages of 18 and 24
- Relatively high proportion of elderly lowans with multi-system health needs and health care access challenges
- Growing population of new lowans employed in low-income jobs who are not academically prepared to enroll in nursing programs
- Significant tuition and loan burden for students in pre- and post-licensure nursing education programs
- Relatively low pay in the health fields related to Medicare reimbursement rates in lowa
- Out-migration of newly licensed registered nurses from lowa in pursuit of higher wages
- Aggressive recruitment of students and nurses by states experiencing acute shortages

# **Averting a Nursing Shortage in Iowa**

In lowa, public and private entities are working in partnership to assess and forecast health workforce supply and demand, address barriers to entry into health careers, support strategies developed at the local level that prevent shortages, and engage in activities that promote and assure a competent, diverse health workforce in lowa. As a result of these partnerships, the Center for Health Workforce Planning was created in the lowa Department of Public Health in 2002. The center's work is guided by an advisory committee representing lowa's health workforce, including nurses and nursing assistive personnel; education and training programs; practice settings that encompass acute, ambulatory, long-term and home health care; public and private partners; and community leaders. The committee provides consultation from the field, guides the center's long-term plan and evaluation, and serves as a conduit to policy makers, legislators and stakeholders.

#### Conclusion

lowa is not currently experiencing a severe nursing shortage. Important actions are being taken by public and private entities to avert a shortfall related to retirement of experienced nurses and out-migration of young nurses to other states. Priorities include preparation and support of nursing faculty, loan repayment to nurses who practice and teach in lowa, attention to workplace environment, succession planning to replace the large cohort of experienced nurses who will soon retire, and preparation of students from diverse backgrounds for success in a nursing career. Two primary activities include the following:

The Nursing Education Loan Repayment Program was announced by Governor Tom Vilsack in February 2004 and has been administered by the lowa College Student Aid Commission since July 2004. Under the program, RNs who agree to work in lowa after graduation and licensure have all or part of their student loans repaid by the lowa Student Loan Liquidity Corporation. The amount of this repayment ranges between \$750 and \$15,000, depending on the RNs' work location and length of lowa employment. RNs working in long-term care facilities throughout the state and in designated rural counties see the most benefit, especially if they remain there for the entire four years specified by the program. Health professionals who agree to work as nurse educators at lowa colleges have as much as \$20,000 of their loans repaid.

For the 2004-2005 academic year the Iowa College Student Aid Commission approved nursing forgivable Ioan benefits for 233 nursing students – 19 of whom are educators. On November 3, 2005 the Commission had approved 170 additional students – 7 of whom are educators - for the current academic year.

In 2005 the Iowa General Assembly approved funds in the amount of \$50,000 to initiate a Registered Nurse Recruitment Program. This registered nurse forgivable Ioan program, administered through the Iowa College Student Aid Commission, is a state-supported program for Iowans enrolled on a full-time basis in programs that will qualify them to teach nursing in Iowa colleges and universities. The maximum annual award to an eligible student is \$4,000.

The **Model RN Tracking System** administered by the University of Iowa, Carver College of Medicine, Office of Statewide Clinical Education Programs since July 2003 is gathering information on currently licensed RNs, including demographics, education and the work settings in which the nurses provide patient care or other services. Findings are being used to determine the supply and demand for RNs in all work settings, and inform nurses, employers and the public of recruitment opportunities. The initial target area included 13 counties in North Central lowa, including Cerro Gordo, Chickasaw, Floyd, Franklin, Hancock, Hardin, Howard, Kossuth, Mitchell, Palo Alto Winnebago, Worth, and Wright. As part of a five-year plan to include all RNs employed in Iowa, tracking is continuing in these initial counties and was expanded to an additional 15 counties in Northeast Iowa in August 31, 2005. These counties included Allamakee, Benton, Black Hawk, Bremer, Buchanan, Butler, Clayton, Delaware, Dubuque, Fayette, Grundy, Jackson, Jones, Tama, and Winneshiek. By August 31, 2006, an additional 19 counties in Southeast Iowa will be included: Cedar, Clinton, Davis, Des Moines, Henry, Iowa, Jefferson, Johnson, Keokuk, Lee, Linn, Louisa, Mahaska, Muscatine, Poweshiek, Scott, Van Buren, Wapello, and Washington.

Additional information about these projects and implementation, lowa's strategic planning to increase E-learning access to health occupations education and increase diversity in lowa's health workforce, and currently funded projects to recruit and retain health professionals is available at the web site listed below or by contacting Eileen Gloor at 515/281-8309 or egloor@idph.state.ia.us.

The Center for Health Workforce Planning was created in the Iowa Department of Public Health, Bureau of Health Care Access, to assess and forecast health workforce supply and demand, address barriers to recruitment and retention, support strategies developed at the local level that prevent shortages, and engage in activities that assure a competent, diverse health workforce in Iowa. Funding for the center, fueled through the efforts of U.S. Senator Tom Harkin, is administered through the Bureau of Health Professions, Health Resources and Services Administration, U.S. Department of Health and Human Services.

## http://www.idph.state.ia.us/hpcdp/workforce\_planning.asp

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