



Iowa Department of Public Health

Advancing Health Through the Generations

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Issue Synopsis: Highlights of the National Sample Survey of Registered Nurses (March 2004 – November 2005)

The National Sample Survey of Registered Nurses (NSSRN) is the nation's most extensive and comprehensive source of statistics on registered nurses with current licenses to practice in the United States whether or not they are employed in nursing.

The U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions has published reports of eight sample surveys since 1977 for use by those involved in health care planning and evaluation as well as the public. This issue brief highlights findings of the preliminary report of national and state data collected between March 2004 and November 2005.

The source document may be found at the following URL:

<http://bhpr.hrsa.gov/healthworkforce/reports/rnpopulation/preliminaryfindings.htm>

For the NSSRN, a probability sample is selected from a sampling frame compiled from files provided by the state boards of nursing in the 50 states and the District of Columbia. The database for the report is comprised of 35,724 individual licensed RNs, including 691 RNs licensed in Iowa.

RN Population

The total number of licensed RNs living and working in the U.S. was estimated to be 2,909,467 in March 2004, an increase of 7.9 percent since 2000.

RN Workforce

Of the total estimated RN population in the U.S., 58.3 percent were employed in nursing full-time, almost 25 percent were employed in nursing part-time, and 16.8 percent were not employed in nursing. The increase in the number and percent of nurses working full-time or part-time from 2000 to 2004 was slight. The change in the number of nurses not employed in nursing was negligible.

Educational Preparation

The most common initial preparation for nursing was an associate degree. Within the initial preparation category, an estimated 42.2 percent of RNs earned an associate degree, 30.5 percent earned a baccalaureate degree, and 0.5 percent earned a master's or doctoral degree.

In terms of the highest level of preparation for nursing, an increasing number of RNs earned baccalaureate and master's degrees, even if their initial preparation was an associate degree or diploma. Within the highest degree category, an estimated 33.7 percent hold associate degree, 32.2 percent hold a baccalaureate degree, and 13.0 percent hold a master's or doctoral degree. The greatest increase from 2000 to 2004 was in of RNs receiving their master's or doctorate degrees – an estimated increase of 101,978 RNs or 37 percent.

Age

The average age of RNs has increased in every NSSRN since 1980. In 2004, the average age of the RN population was estimated to be 46.8 years, more than one year older compared to 2000, and more than four years older compared to 1996. This trend is further demonstrated by observing changes in the percent of RNs in the lower and higher age groups. In 2000, an estimated 31.7 percent of all RNs were under the age of 40; in 2004, only 26.6 percent of all RNs were estimated to be under the age of 40. The percent of nurses over 54 years of age increased to 25.5 percent in 2004 compared to 24.3 percent in 2000.

Gender

Relatively few men are licensed as RNs. There was an insignificant increase in 2004 when an estimated 5.7 percent of RNs were male. The percentages of male and female RNs completing a baccalaureate or higher degree initial nursing program were similar, 32.7 percent and 31.5 percent respectively. When the highest nursing-related educational preparation was considered, 47.7 percent of female RNs completed at least a baccalaureate program compared to 46.2 percent of males.

Family Status

The 2004 survey estimated that 70.5 percent of RNs are married. The majority (52.1 percent) of RNs have children and/or other adults at home. Of these RNs and allowing for multiple responses, 28.3 percent have children under age 6 at home, and 65.2 percent have children 6 to 18 years of age at home. An additional 14.8 percent of nurses have other dependents who do not live at home.

Racial/Ethnic Background

In 2004, about 7.5 percent of RNs did not specify their racial/ethnic background and 81.8 percent of the RN population were estimated to be White, non-Hispanic, leaving 10.6 percent in one or more of the identified racial and ethnic minority groups. Of the nurses who indicated their racial/ethnic background, 4.6 percent were Black/African American, non-Hispanic; 3.3 percent were Asian or Pacific Islander, non-Hispanic; 1.8 percent were Hispanic; 0.4 percent were American Indian/Alaskan Native; and 1.5 percent were from two or more racial backgrounds.

Employment Settings

Five major employment settings were identified for RNs: hospitals; nursing homes and extended care facilities; community and public health settings; nursing education; and ambulatory care settings.

Results from the 2004 survey indicate a slight trend away from the hospital as the setting for the principal nursing position, although changes in the structure of hospitals may explain some of the change. In 2004, an estimated 56.2 percent of employed nurses worked in hospital settings compared to 59 percent in 2000.

The percent of RNs employed in public health settings also decreased from an estimated 18.3 percent of RNs in 2000 to 14.9 percent in 2004. The percent of RNs reporting nursing homes and extended care facilities as their principal setting remained relatively constant between 2000 (6.9 percent) and 2004 (6.3 percent).

In contrast, the percent of RNs reporting their principal nursing position in other types of settings, particularly ambulatory care, increased. In 2004, an estimated 11.5 percent of RNs were employed in physician-based practices, nurse-based practices, and health maintenance organizations, compared to 9.5 percent in 2000. The remaining RNs employed in nursing reported working in nursing education, federal administrative agencies, state boards of nursing or health associations, health planning agencies, prisons, insurance companies, and other settings such as pharmaceutical and durable medical equipment companies.

Average Earnings

Changes in average earnings of RNs were examined based on the actual average earnings of RNs employed full-time in the labor market and the “real” average earnings inflated by the consumer price index (CPI). The actual average earnings of RNs employed full-time in 2004 was \$57,784 which appears to be an increase from average earnings in 2000 (\$46,7822). When changes in the purchasing power of the dollar are taken into account using the CPI, there appears to be a 12.8 percent increase since 2000 - the first significant up-turn in “real” earnings since 1988.

Racial/Ethnic Background and Highest Educational Preparation

When initial and post-RN education are considered, Asian/Native Hawaiian/Other Pacific Islanders (non-Hispanic) and Black, non-Hispanic RNs were more likely than either Hispanics or White, non-Hispanic RNs to attain at least baccalaureate preparation. Among Black, non-Hispanic RNs, 14.3 percent were estimated to have their highest preparation at the master’s or doctorate level compared to 13.3 percent among White, non-Hispanics, 10.4 percent among Hispanics, and 9.9 percent among Asian, Native Hawaiian/Pacific Islander, non-Hispanic nurses.

Age at Graduation from Initial Nursing Education Programs

The average age at graduation for recent RN graduates appears to be lower than in 2000. In 2004, 39.2 percent of those who graduated between 2000 and 2004 were under 25, and 20.9 percent of RNs were in the 35 to 49 year age interval.

The average age at graduation from initial nursing programs varies by the type of program. Graduates of associate degree programs tend to be older (31.9 year) than graduates of baccalaureate programs (26.2 years).

Additional Nursing Education Preparation

About 23.1 percent of the RN population in 2004 completed additional academic nursing or nursing-related preparation at some point after graduating from their initial nursing education. Among RNs initially prepared in associate degree programs, 20.7 percent (an estimated 253,453 RNs) obtained additional nursing-related degrees. Among RNs initially prepared in baccalaureate programs, 22.2 percent (an estimated 196,639 RNs) subsequently received masters or doctorate nursing-related degrees.

Advanced Practice Nurses

In 2004, the number of RNs prepared to practice in at least one advanced practice role (clinical nurse specialist, nurse anesthetist, nurse midwife, nurse practitioner) was estimated to be 240,461 or 8.3 percent of the total RN population. The largest group among advanced practice nurses was nurse practitioners, followed by clinical nurse specialists. These two groups together, including those with dual or multiple preparation as advanced practice nurses, comprised over 199,000 nurses, or 82.8 percent of all advanced practice nurses.

Foreign-Educated Nurses

The 2004 survey estimated that 3.5 percent of the RNs practicing in the U.S. (100,791) received their basic nursing education outside the United State. This percent does not including the 0.3 percent who received their initial nursing education in Guam, Puerto Rico, the U.S. Virgin Islands, or in unspecified U.S. states and territories.

The primary countries in which the highest number of foreign-educated nurses received their education were: Philippines (50.2 percent of foreign-educated nurses) and Canada (20.2 percent). Although their initial nursing education was outside the U.S., over half of the foreign-educated RNs (59.9 percent) were estimated to have baccalaureate or higher degrees, and two percent of the latter group have earned doctorate degrees.

The five states estimated to have the largest number of foreign-educated nurses were: California (25.5 percent), Florida (9.6 percent), New York (9.3 percent), Texas (6.7 percent), and New Jersey (6.1 percent).

Over half of the foreign-educated nurses (54.7 percent) speak one language other than English, 12.1 percent speak two languages, and 1.6 percent speak three or more languages.

RNs Residing and Licensed in COMPACT States

By 2004, a total of 17 states participated in the nurse licensure compact and an estimated 22.9 percent of RNs resided and held licensure in these states. The states with the most nurses covered by the Compact and reporting the state as their principal nursing position are: Texas (21.4 percent of the 665,593 nurses participating in the Compact), North Carolina (11.1 percent), Tennessee (7.9 percent), Wisconsin (7.6 percent), Maryland (6.5 percent), Arizona (5.6 percent), and Iowa (4.8 percent).

Registered Nurses in Nursing Faculty Positions

In 2004, it was estimated that nursing faculty was the principal nursing position of 48,666 RNs. Among these nurses, 48.8 percent were faculty in baccalaureate or higher degree programs, and 40.1 percent were faculty in associate degree programs.

The average age of all faculty nurses was 46.8 years, but the estimated age of faculty nurses with doctorates in nursing or a related field was 55.7 years. The age group with the highest percent of faculty was the 50 to 54 year age group (21.4 percent). An estimated 19.6 percent of faculty nurses were in the under-40 age group, and 30.1 percent were over age 55.

Satisfaction with Nursing Positions

The 2004 survey examined job satisfaction and reasons for not working in nursing or for changing positions. Of the nurses currently employed in nursing, it was estimated that about 78 percent were extremely or moderately satisfied. The majority of RNs (72.4 percent)

currently employed in nursing are in the same position they were in the previous year and another 6.4 percent were in a different position but with the same employer.

Of the estimated 14 percent of RNs (488,006) who are not working in nursing (and allowing for multiple responses), 49.5 percent were estimated to have left nursing for personal career reasons, 49.3 percent for personal or family reasons, 42.7 percent for reasons connected with the workplace, and 33.8 percent for retirement.

Geographic Distribution of the RN Population

Among nine geographical regions surveyed in 2004, the New England area of the country had the highest concentration of employed RNs in relation to the area's population (1,107 employed RNs per 100,000 population) and the Pacific area had the lowest concentration (645 employed RNs per 100,000). Population data were based on July 1, 2004 estimates of resident population of states from the U.S. Census Bureau.

The West North Central area (including Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) had the second highest concentration of RNs in the U.S. (1,026 employed RNs per 100,000 population). Within this group, Iowa had an estimated 1,106 employed RNs per 100,000 population.

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

Reference

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions. The Registered Nurse Population: National Sample Survey of Registered Nurses March 2004. Available at URL: <http://bhpr.hrsa.gov/healthworkforce/reports/rnpopulation/preliminaryfindings.htm>