The Registered Nurse Population

Findings from the 2008 National Sample Survey of Registered Nurses

September 2010

U.S. Department of Health and Human Services
Health Resources and Services Administration

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Preface

The U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), is the principal Federal agency responsible for the evaluation and development of the nursing workforce in the United States. HRSA's Bureau of Health Professions (BHPr) works to appraise and improve the U.S. nursing workforce with the goal of ensuring there are enough qualified nurses to meet the Nation's health needs. To do this, BHPr reviews the supply, composition, and distribution of nurses on the national and State levels. To that end, BHPr commissioned the National Sample Survey of Registered Nurses (NSSRN).

This publication is the report of the ninth NSSRN representing data collected about registered nurses (RNs) holding active nursing licenses as of March 2008. As with previous iterations of the NSSRN, this report is available to all primary stakeholders involved in health care planning and evaluation as well as the public. The 2008 NSSRN public use files and code book are available to researchers and analysts and can be accessed at http://bhpr.hrsa.gov/healthworkforce/rnsurvey/default.htm.

The 2008 NSSRN was developed for the U.S. Department of Health and Human Services, Health Resources and Services Administration under contract with Westat. The study was overseen by BHPr and funded through the Division of Nursing.

The first national survey was conducted in 1977; HRSA has conducted this national survey every 4 years since 1980. Data from these periodic surveys provide the basis for evaluating trends and projection of the future supply of nursing resources at the national and State levels. The NSSRN is the cornerstone of nursing workforce data. It is the principal data source used for disseminating information to the Federal Government, researchers, and the public on the nursing workforce. It provides essential information for performing supply-demand projections of nursing requirements and foreseen shortages. Periodic monitoring of the number and characteristics of the registered nurse population is vital to effectively maintain an up-to-date picture of the RN population and to assess the future availability of this critical resource. For example, previous surveys were integral in identifying the shortages of RNs that occurred at the end of the 1980s and then reappeared around 2000.

The NSSRN is the Nation's most extensive and comprehensive source of statistical data on all individuals in the United States that hold active RN licenses, whether they are currently practicing

nursing or not. The survey assesses the number of RNs; their educational background; employment setting, position, and specialty areas; job satisfaction; and salaries. In addition, the survey also identifies the geographic distribution of nurses throughout the United States, as well as the personal composition of the U.S. nursing workforce in terms of gender, racial/ethnic background, age, and family structure.

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For an electronic copy of the report and further information:
http://bhpr.hrsa.gov/healthworkforce/rnsurvey

Executive Summary

Purpose of the National Sample Survey of Registered Nurses

The National Sample Survey of Registered Nurses (NSSRN), which has been conducted since 1977, is the largest survey of registered nurses (RNs) in the United States. Nurses with active RN licenses are asked to report on their education, employment, intentions regarding nursing work, and demographics. These data are used by policymakers and numerous stakeholders, both domestic and international, to assess the status of and trends in the U.S. nursing workforce.

The Size of the Registered Nurse Workforce

There were an estimated 3,063,162 licensed registered nurses living in the United States, as of March 2008. This is an increase of 5.3 percent from March 2004, representing a net growth of 153,806 RNs. An estimated 444,668 RNs received their first U.S. license from 2004 through 2008, and thus approximately 291,000 RNs allowed their U.S. licenses to lapse, possibly indicating that the substantial retirements that have been anticipated may have begun.

Initial Education of Registered Nurses

The most commonly reported initial nursing education of RNs in the United States is the Associate Degree in Nursing (ADN), representing 45.4 percent of nurses. Bachelor's or graduate degrees were received by 34.2 percent of RNs, and 20.4 percent received their initial education in hospital-based diploma programs. The average age of RNs who graduated from their initial nursing education program is rising. More than 21 percent of RNs earned an academic degree prior to their initial nursing degree. Nearly two-thirds of RNs reported working in a health occupation prior to their initial nursing education.

Highest Education Preparation of Registered Nurses

After initial licensure, RNs can obtain additional academic degrees in nursing or nursing-related fields. In 2008, half of the RN population had a bachelor's or higher degree in nursing or a nursing-related field, while the other half's highest education level was a diploma or an ADN.

Employment of Registered Nurses

In 2008, an estimated 2,596,399 RNs were employed in nursing, representing 84.8 percent of licensed RNs. This was the highest rate of nursing employment since the NSSRN commenced in 1977. There also has been the first increase in full-time employment since 1996, rising from 58.4 percent of RNs in 2004 to 63.2 percent in 2008. Among nurses under 50 years old, 90 percent or more are employed in nursing positions; this percentage drops to less than half of RNs over age 65.

Hospitals remain the most common employment setting for RNs in the United States, increasing from 57.4 percent in 2004 to 62.2 percent of employed RNs in 2008. The increase in this percentage is the first increase since 1984. While nearly 90 percent of RNs under 25 years old work in hospitals, less than 53 percent of RNs age 55 and older work in hospitals.

Fewer than half of nurses with master's degrees work in hospitals; more than 18 percent are in ambulatory care settings and nearly 12 percent are in academic education.

The most common job title of RNs in the United States is "staff nurse," or its equivalent (66.3 percent). Between 2004 and 2008, the proportion of staff RNs increased by 2.2 percent. Just under 20 percent of RNs with graduate degrees are staff RNs, compared with 72.8 percent of those without a graduate degree. The next most common job title in 2008 included management and administration titles (12.5 percent).

Many registered nurses hold more than one job in nursing. Overall, about 12 percent of RNs who have a full-time primary nursing position and 14 percent of those with part-time primary positions have additional nursing positions.

More than half of RNs work at least 40 hours per week in their principal nursing position, and another 24.2 percent work 32 to 39 hours per week. A total of 19.1 percent of RNs report that they

worked on-call or could have been called to work (on "standby") during a typical work week in their principal nursing positions. Among RNs employed in nursing positions, 27.5 percent report that they worked overtime averaging 7.5 hours per week and received pay for such work.

Earnings and Satisfaction of Registered Nurses

Average annual earnings for RNs employed full-time in 2008 were $66,973, rising 15.9 percent since the 2004 average of $57,785. When annual earnings are adjusted for inflation to 1980 dollars, earnings in 2008 increased only 1.7 percent from average inflation-adjusted 2004 earnings. The highest earnings were reported by nurse anesthetists (NAs), who averaged $135,776 per year. Staff nurses earned $61,706 per year, on average. Registered nurses with graduate degrees earned an average of at least $20,000 more than did RNs with other levels of education.

In 2008, 29.3 percent of RNs reported that they were extremely satisfied and a further 51.8 percent reported being moderately satisfied with their principal nursing position. This compares with 2004 rates of satisfaction of 27.5 percent and 50.5 percent, respectively. Only 11.1 percent were dissatisfied in 2008, as compared with 13.8 percent in 2004. The highest rates of being moderately or extremely satisfied were reported by registered nurses working in academic education programs (86.6 percent), while the lowest rate of being either moderately or extremely satisfied was reported by nurses in nursing homes/extended care (74.5 percent).

Job Changes and Future Employment Plans

Nearly 80 percent of RNs were employed in nursing in both 2007 and 2008, while 12.3 percent were not employed in nursing in either year. Nearly 3 percent were employed in nursing in 2007, but not in 2008, and conversely, 2.4 percent returned to employment in 2008. Of those who were employed in 2007 but not in 2008, 27.3 percent (24,430) reported that they stopped working due to retirement. Among nurses who worked full-time in 2007, 11.6 percent changed to a different employer by 2008. Another 6.5 percent of these RNs worked with the same employer, but held a different position. More than 73 percent of RNs reported that they changed positions or employers due at least in part to workplace issues, such as lack of good management or inadequate staffing. Personal career reasons, such as interest in another position or improved pay or benefits, were a factor in job

changes for 37.5 percent of nurses. Nearly 30 percent of nurses changed jobs at least in part due to personal family reasons.

The percentage of employed RNs who intended to leave nursing within 3 years is quite small, at 3 percent or fewer, among nurses under 55 years old. Among RNs 55 and older who worked in nursing in 2008, 12.5 percent intended to leave the nursing profession within 3 years and another 8.9 percent intended to leave their current nursing jobs and were unsure if they will remain in nursing afterward.

Nurse Faculty

There were an estimated 31,056 RNs working as faculty in their principal nursing position in 2008. The majority (60 percent) of these worked in programs that provide education at the Bachelor's of Science in Nursing (BSN) level or a higher level. Another 38.3 percent worked in ADN education programs. An additional 34,666 RNs worked in academic education settings as a secondary nursing position.

In 2008, more than 40 percent of RNs who worked as faculty in their principal nursing position were between the ages of 50 and 59, and more than 19 percent of RNs whose principal position is as faculty were 60 years or older. Nursing faculty received somewhat lower annual earnings than RNs in general from their principal full-time nursing position. Earnings from principal nursing positions for RNs who work full-time averaged $66,973 in 2008, while earnings for faculty RNs were $63,985 on average. Nearly 90 percent of faculty reported that they are moderately or extremely satisfied with their position, as compared with 81.1 percent of all working RNs. The satisfaction of faculty is similar to that of nurses with graduate degrees, of whom 87.3 percent were moderately or extremely satisfied.

Nurse Practitioners

In 2008, an estimated 158,348 nurses had preparation as nurse practitioners (NPs). NPs represent the largest group of advanced practiced registered nurses (APRNs). About 35 percent of NPs were under 45 years old. Nearly 85 percent of NPs reported that they held a master's degree and 3.9 percent reported holding a doctorate degree. Of all NPs, 10.3 percent also were prepared as clinical

nurse specialists (CNSs). More than 93 percent of NPs employed in nursing reported having either national certification or State Board recognition.

Most NPs were employed in nursing (89.2 percent), and 69.6 percent of these NPs had a principal position job title of NP. Virtually all NPs who reported NP as their job title had national certification or State Board recognition. Some NPs (11.4 percent) reported that their job title was staff nurse or an equivalent; others worked in instruction or had a management or administration title. More than 38 percent of NPs were employed in hospital settings, including primary care clinics located in or owned by a hospital. Another 35.3 percent worked in ambulatory care settings outside hospitals.

Nurses prepared as NPs in 2008 earned an average of $73,776 per year in their principal nursing position. More than 87 percent of NPs were moderately or extremely satisfied with their principal position.

Nurse Midwives

Nurse midwives (NMs) were the smallest of the APRN groups, with an estimated 18,492 nurses prepared as NMs. More than 54 percent were 50 years or older, and half (50.3 percent) reported having a graduate degree. More than 91 percent of NMs employed in nursing had national certification or recognition from their State Board of Nursing.

The majority (84.3 percent) of NMs were employed in nursing positions in 2008, but only 41.7 percent of employed NMs reported a job title of nurse midwife. All of these NMs also had State Board recognition or national certification in this field. The majority (57.9 percent) of NMs worked in hospital settings, and 25.1 percent worked in ambulatory care.

Nurses prepared as NMs earned an average of $69,222 per year. They had a high level of satisfaction with their principal nursing position, with 86.2 percent being moderately or extremely satisfied.

Nurse Anesthetists

NAs were the third largest group of APRNs, with an estimated 34,821 nurses prepared as anesthetists in 2008. NAs were also the youngest group of APRNs: nearly 40 percent were under 45 years old. Nearly 40 percent of NAs were men. In 2008, 65.4 percent of NAs held a master's or doctorate degree as their highest nursing or nursing-related degree, and almost all had national certification or State Board recognition (99.3 percent).

In 2008, 31,868 NAs were employed in nursing positions (91.5 percent). Registered nurses prepared as NAs earned an average of $135,776 per year, making them the highest-paid APRN group. They were the most satisfied of the APRN groups, with 93.5 percent reporting moderate or extreme satisfaction with their principal position.

Clinical Nurse Specialists

In 2008, there were an estimated 59,242 nurses prepared as CNSs. CNSs were the second largest group of APRNs. There was a marked decline of 18.3 percent in the number of CNSs between 2004 and 2008. CNSs were older than other APRNs in 2008, with 63.6 percent over 50 years old. The vast majority of CNSs (92.8 percent) reported at least a master's degree as their highest preparation, with 7.2 percent completing a doctorate degree for their CNS preparation. More than 50 percent had national certification or recognition from their State Board of Nursing. CNSs had the lowest rate of employment in nursing of all the advanced specialties, with 84 percent working in nursing. Only 18.8 percent of CNSs reported their job title as clinical nurse specialist. Other common job titles among nurses prepared as CNSs are instruction (21.1 percent), and management or administration (17.8 percent). Nearly half of nurses prepared as CNSs worked in hospitals (49.4 percent).

Some nurses prepared as CNSs also had preparation in other advanced specialties. More than 27 percent of CNSs also had preparation as NPs. Among such dual-prepared RNs the most common job title was nurse practitioner (54.8 percent).

Nurses prepared as CNSs in 2008 earned an average of $74,918 per year in their principal nursing position. CNSs were very satisfied with their principal positions, with 91 percent being moderately or extremely satisfied.

Nurses Who Do Not Work in Nursing

An estimated 466,564 RNs were not employed in nursing in 2008. Nearly one-third of RNs who were not working in nursing were 65 years of age or older; almost half were 60 years of age or older. The decision to work in nursing is more closely tied to age of registered nurses' children than presence of them; RNs whose children were all under age 6 were less likely to work in nursing than were RNs whose children were all at least 6 years old.

Overall, about half of RNs who were not working in nursing in 2008 have been out of nursing work for 4 or fewer years. Among nurses who were under 50 years old, 57.5 percent have been out of nursing for less than 4 years. Reasons for not working in nursing are often associated with life stages, such as the need to care for children or retirement. However, 41 percent of RNs under 50 years old reported that they were not working in nursing due to workplace problems such as burnout, stressful work environment, and poor management. This is of concern. Among nurses 50 years and older, personal and family reasons (41.5 percent), workplace reasons (35.5 percent), and personal career factors (32.4 percent) also were important. Among RNs under 50 years old who were not working in nursing, only about 15 percent did not intend to return to nursing work.

Demographics and Diversity

For the first time in the past three decades, the aging of the nursing workforce slowed. In 1988, half of the working population of RNs was less than 38 years of age, but in 2004 that figure rose to 46 years and remained steady at 46 years of age in 2008. This slowdown in the aging trend resulted from an increase in employed RNs less than 30 years of age—the first increase seen in this age group since the inaugural NSSRN in 1977.

Men comprised a growing percent of the RNs in 2008, making up 6.2 percent of employed RNs who were licensed before 2000 and 9.6 percent of those licensed in 2000 or more recently. The employment profile of men who work in nursing differs from that of women. More men reported principal employment in a hospital and work as NAs.

Significant gains in racial/ethnic minority representation among RNs have been made over time. The population of RNs from minority racial/ethnic groups increased from 333,368 in 2000 to 513,860 in 2008, with the growth occurring primarily among recently graduated RNs. However, the

racial and ethnic distribution of the RN population is substantially different from that of the U.S. population. Approximately 65 percent of the U.S. population is White, non-Hispanic, while 83.2 percent of RNs are White, non-Hispanic.

Internationally Educated Nurses

Internationally educated nurses (IENs) are RNs whose initial nursing education took place outside of the United States or in the U.S. territories (formerly termed foreign-trained or foreign-educated nurses). They represent a larger percentage of the U.S. nursing workforce in recent years, comprising 5.1 percent of RNs licensed before 2004, compared with 8.1 percent since then. The Philippines continued to dominate as the source country of the IEN workforce (50 percent), followed by Canada at nearly 12 percent. India supplied 9.6 percent and the United Kingdom provided 6 percent, with the contributions from India accelerating and surpassing those from the United Kingdom among recent licensees. Approximately one-quarter of IENs lived in California in 2008, with New York, Florida, and Texas each home to 10 to 12 percent of IENs.

Most IENs (88.3 percent) were employed in nursing in 2008, a somewhat higher percentage than RNs in general (84.8 percent). IENs were more likely than their U.S.-educated counterparts to work full-time. A greater percentage (17.2 percent) of internationally educated RNs hold secondary nursing positions than do RNs in general. Approximately three-quarters of IENs licensed since 2004 are employed in hospital settings. Most IENs licensed since 2004 (94.1 percent) have staff nurse job titles.

Recent Nurse Graduates

In this report, recent graduates are defined as those RNs who completed their initial nursing education after 2000 (from 2001 to 2008). The most recent graduates are those who completed their initial nursing education after 2004 (2005 to 2008). Recent graduates comprised nearly 20 percent of all RNs in the United States in 2008 and about 23 percent of employed RNs.

About 39 percent of recent graduates entered the profession with a BSN; only 3 percent had a diploma nursing education. RNs who graduated before 2001 completed their nursing programs at an average age of 26.7 years, while the average age of the recent graduates was a little over 30 years.

RNs among the most recent graduate cohort were more likely than RNs who graduated in any previous cohort to have received a postsecondary degree prior to entering nursing; 31.7 percent of graduates from 2001 to 2004 had a prior postsecondary degree, compared with 37.1 percent of graduates from 2005 to 2008.

More than 10 percent of RNs who completed their initial nursing education between 2001 and 2004 later completed additional degrees. Bachelor's degrees were completed by nearly 10 percent of graduates from diploma or ADN programs; master's or doctorates were completed by more than 10 percent of BSN graduates and almost 2 percent of diploma or ADN graduates.

The vast majority of recent graduates were employed in nursing positions in 2008 (94.5 percent of 2001–2004 graduates and 96.6 percent of 2005–2008 graduates), and 83.8 percent of the most recent graduates worked full-time.

Hospitals employed more than 83 percent of the most recent graduates and more than 75 percent of RNs who graduated in 2001 to 2004. The most common job title held by all working RNs was staff nurse or an equivalent title, with 92.2 percent of the most recent graduates and 80.7 percent of graduates from 2001 to 2004 having this title.

Recent graduates were less satisfied with their principal nursing positions than were RNs who graduated before 2001.

In addition, recent graduates change jobs somewhat more frequently than RNs who graduated prior to 2001. Of all employed RNs, 14.9 percent of graduates from 2001 to 2004 had changed employers for their principal nursing position in the previous year and 7.5 percent had changed positions but were with the same employer. Among the 2005 to 2008 graduates, the percentages for job changing were similar. The reasons for job changes varied, but those cited most frequently were related to working conditions. Recent graduates were more likely to report that they changed jobs for career reasons than were pre-2001 graduates. Recent graduates also were more likely than pre-2001 graduates to report that personal or family reasons drove their job change.

Nearly 40 percent of recent graduates planned to leave their current jobs within 3 years, compared with 27.1 percent of pre-2001 graduates. Nonetheless, the vast majority of recent graduates intended to remain in the nursing profession, with only 3.3 percent of those who intended to leave their current job stating that they did not plan to stay in nursing.

Average earnings from all nursing positions for the most recent graduates were $52,994. The total nursing earnings of the most recent graduates were lower on average than the average total earnings of RNs who graduated from 2001 to 2004 ($57,489) and lower than the average total earnings for RNs graduating before 2001 ($62,903).

Nurses Nearing Retirement

Older RNs over age 50 comprised 44.7 percent of the total RN population in 2008, compared with 33 percent in 2000. The percentage of older RNs working in nursing in 2008 declines steadily from 87.5 percent for those 50–54 years of age to 33.3 percent for those aged 75 and older. RNs aged 50–54 in 2008 who were employed full-time worked an average of 43.7 hours per week, slightly more than the average for full-time nurses under age 50. Beginning at age 60, the hours worked by part-time nurses declines steadily with age. Older RNs are also less likely than younger RNs to have secondary positions in nursing.

While a smaller percentage of older nurses worked in hospital positions in 2008, higher percentages are employed in nursing homes/extended care, academic education programs, and home health settings. The majority of RNs in 2008 remained employed with the same employer, and older RNs were more likely to be in the same position and with the same employer year to year when compared with younger nurses. Registered nurses 50 to 59 years old were less likely to report an intention to leave their current nursing position within 3 years than were RNs under 50 years old. As RNs grow older, and especially for RNs older than age 60, retirement becomes an increasingly dominant reason for employment changes.

Introduction

Conducted since 1977, the National Sample Survey of Registered Nurses (NSSRN) is the largest survey of the Registered Nurses (RNs) workforce in the United States. A sample of nurses with active RN licenses from every State are asked to report on their education, employment, intentions regarding nursing work, and demographics. The resulting data are used by policymakers and numerous stakeholders, both domestic and international, to assess status and trends in the U.S. nursing workforce. The data are also used to evaluate the responsiveness of the workforce to Federal and State programs seeking to ensure workforce capacity for providing essential health care services and identifying areas for further research. These data illustrate education and skills of the RN workforce, portray the diversity of RNs, illustrate the U.S. employment of internationally educated nurses, depict the factors that affect RNs' decisions to work in the nursing profession, and support efforts to forecast the future supply of and demand for RNs. After the first survey was conducted in 1977, the NSSRN has been conducted every 4 years since 1980. This report provides findings from the survey conducted in 2008.

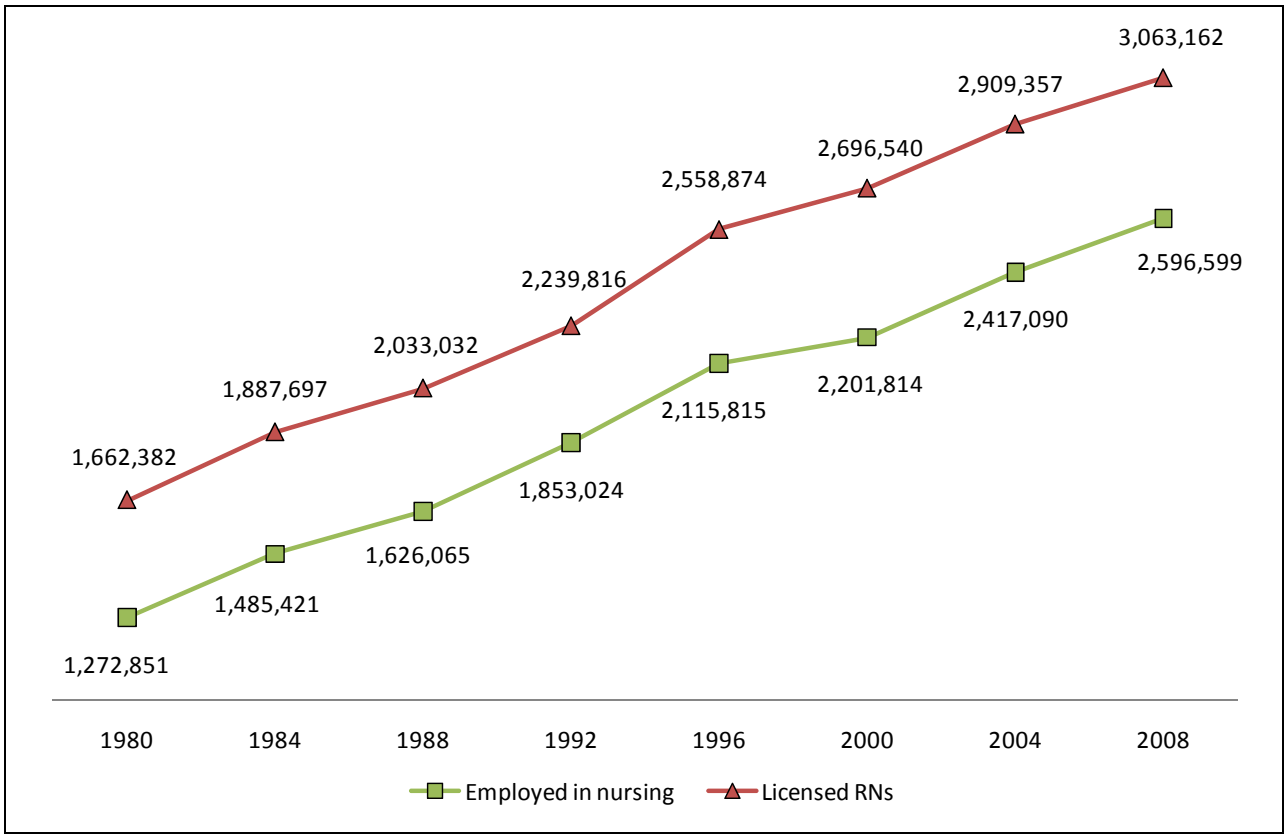
The Registered Nurse Workforce in the United States

There were an estimated 3,063,162 licensed RNs living in the United States, as of March 2008 (Figure 1-1 and Appendix A, Table 1).[1] This is an increase of 5.3 percent from March 2004, representing a net growth of 153,806 RNs.[2] Based on data from the results of the 2008 survey, an estimated 444,668 RNs received their first U.S. license from 2004 through 2008, and thus approximately 291,000 RNs had a lapsed RN license during this time period. These data indicate that the long anticipated and substantial retirements from the nursing field may have begun. Thus, even as new graduates enter the field, overall nursing workforce growth may be affected by RNs leaving the profession.

[1] The standard error for the estimate of the total number of RNs licensed and living in the United States is 4,045.8. The 95 percent confidence interval has a lower limit of 3,055,232 and an upper limit of 3,071,092. Please see Chapter 1 and Appendix B for more details on weighting and estimation.

[2] There were an additional estimated 11,903 internationally educated RNs holding active U.S. licenses who were not living in the United States as of March 2008. RNs living outside of the Unites States are not included in the analyses of the U.S. nursing workforce for the purposes of this report.

Figure 1-1. The nursing workforce of the United States, 1980-2008



Source: 1980-2008 National Sample Survey of Registered Nurses

Survey Methods 1

1.1 Summary

The 2008 National Sample Survey of Registered Nurses (NSSRN) was based on a randomly selected sample of individual RNs from each State's listing of licensed RNs. The sampling rate differed by State. Sampling for all previous administrations of NSSRN was based on a randomly selected sample of alphabetic clusters of names in each State using a "nested alpha segment design." When nested alpha-segment design was used for the first administration of the NSSRN in 1977, available data sources for identifying eligible RN listings could be on paper listings, index cards, electronic files, or other media. The alpha-segment design provided an innovative way of determining an RN's probability of selection for the survey, in spite of the data source limitations, especially for those RNs licensed in multiple States, without having to identify a given RN on all the lists on which that individual appeared.

Technological advances in computer hardware and software since earlier NSSRN surveys have made identifying multiple appearances of the same RN on different lists feasible. The sample design for the 2008 NSSRN takes advantage of such technological advances. In so doing, the precision of the national estimates has improved. The 2008 NSSRN included a sample of 55,151 RN records. From this sample, 33,549 surveys were completed, yielding an unweighted response rate[1] of 62.41 percent.

Data were collected between July 2008 and March 2009 using mailed paper surveys, electronic surveys on the World Wide Web (the Web), and direct telephone interviews. Each survey was carefully reviewed for missing or inaccurate data. When critical data were found to be missing, incomplete, or insufficient, professional telephone interviewers called the respondent to ask about the data item(s) in question. When complete data could not be obtained from the sampled RN, appropriate statistical imputation methods were used to reduce nonresponse error. The 2008 NSSRN imputation protocol used regression modeling to generate likely responses for missing values for individual questions within completed cases. Imputation of this type had not been

[1] The American Association for Public Opinion Research Response Rate #3 calculation was used; it is defined as the number of completed surveys divided by the number of returned surveys (complete plus partial) plus an estimate of the number of eligible cases among those who did not respond and whose eligibility could not be ascertained.

undertaken for any previous administration of the NSSRN but is a powerful statistical method using defined protocols.

The establishment of sample weights for the participating RNs was the final step in preparing the data for analysis and reporting. The weighting process for the 2008 NSSRN had several steps, which included identifying the initial probability of selection for each sampled record; adjusting for survey nonresponse; and accounting for multiple chances of selection for RNs who appeared on the listings of more than one State. In addition, a weight calibration procedure known as "raking" was employed to achieve consistency between the counts appearing on each State listing and the estimates of the number of RNs currently licensed in each State, based on the survey weight assignments. Weighted responses were then used to calculate national estimates.

Also different from prior NSSRN survey analyses, the nonresponse adjustment procedure used for the 2008 NSSRN used weighting to adjust for differences in rates of response to the survey by different age groups. Response rates by age group varied; generally older RNs participated at a higher rate than younger RNs. Without a weighted adjustment for age group response rates, older RNs would be overrepresented in population estimates, leading to a disproportionately large effect on survey estimates associated with age. Thus, adjusting sample weights to reflect age group participation rate served to reduce the potential for bias in some NSSRN estimates.

This chapter provides an overview of the survey methods used in the 2008 NSSRN process. Appendix B provides a more detailed description of the sample allocation, sample performance, imputation, weighing methods, and comparisons with previous survey sampling and weighting techniques. NSSRN data users who are interested in comparing the 2008 NSSRN findings with findings from previous NSSRN administrations should pay particular attention to the discussions of imputation and weighting here and in Appendix B.

The data reported in tables in the body of the report may differ slightly from data in the correspondingly cited appendix. This may be due to several factors such as the rounding of aggregate data or the context of the discussion where there is some difference in the population of interest.

1.2 2008 Questionnaire

The content and structure of the 2008 questionnaire were very similar to the questionnaire used for the 2004 NSSRN administration. A copy of the 2008 questionnaire is included in Appendix C. The following were key questionnaire topics:

- *Eligibility* for the survey;
- *Education*, including initial nursing education, upgrade education post licensure, and education preparation for advanced practice nursing;
- *Principal nursing employment*, including geographic location, employment setting, job title, hours worked, level of care, patient population, clinical specialty, earnings, and job/employment intentions;
- *Secondary employment,* including employment settings, hours worked, and earnings;
- *Nurses not working in nursing,* including their intention to return to nursing and reasons for not working in nursing;
- *Employment outside nursing,* including area/field of work, hours worked, and earnings;
- *Prior nursing employment,* including reasons for job change, geographic location of prior employment, and prior employment setting;
- *General information* about the responding RN, including job satisfaction, geographic location of current residence and residence 1 year ago, race and ethnicity, language fluency, number of dependents in the household, and household earnings; and
- *Licensing and certification* information.

Some revisions to the 2008 questionnaire addressed new or emerging topics of interest and improved data quality. Additionally, some questions were converted from "check one" to "check all that apply" to better capture the richness and breadth of information about RNs. Of particular note are the survey additions or revisions in the following areas:

- Employment setting (questions 23 and 57);
- Job title (question 24);
- Level of care (question 29a);
- Patient population served by the RN (question 29b);
- Clinical specialty (question 29c);

- Hours worked per week in their principal nursing position (question 27) and in any secondary nursing positions (question 36); and
- Distribution of time across job functions (question 28).

1.3 Sample Design

From the inception of the NSSRN in 1977 through the 2004 administration, the sample of RNs was identified using a nested cluster design in which RNs were clustered alphabetically by last name: This last name cluster design is referred to as the "alpha-segment design." Although the alpha-segment design produced good estimates of the nursing workforce over the years, it has some shortcomings. First, because RNs of the same racial/ethnic background may have similar alphabetically clustered names, the alpha-segment design may have resulted in larger than desired variation for some estimates, such as racial and ethnic composition of the RN workforce. Second, constructing an alpha-segment frame and implementing the sample design were tedious and time-consuming tasks. Third, sorting to achieve implicit stratification was not feasible. Lastly, the alpha-segment design made adjustments for differential nonresponse a bit more cumbersome.

The 2008 NSSRN sample design is based on independent systematic random samples selected from State-based strata, with equal probability of selection within each stratum. An equal probability systematic random sample can be thought of as randomly selecting a record from the beginning of a list with probability 1/n and then every nth record after that until all records on the list have had a chance of being selected. This kind of design was not feasible in 1976, but technological advances and the advent of electronic recordkeeping have largely eliminated the barriers. The 2008 NSSRN sample design was straightforward to implement and eliminated the clustering that could contribute undesirable variability to survey estimates, particularly for survey results associated with race/ethnicity.

The sample design was developed to address a number of issues:

- A given RN may be licensed in more than one State.
- Unduplication was carried out to eliminate additional records for a single nurse, such as a record associated with advanced practice nursing when an RN already had a basic RN license record. Therefore, for the purposes of sampling, an individual RN in a given State is associated with exactly one RN license.

- Some States (22 at the time of the 2008 administration) participate in what is known as the Nurse Licensure Compact, which affects who may appear on a given State's listing of licensed RNs. An RN licensed in one Compact State would not have a license in other Compact States, but could work as an RN in any of the Compact States.

- Some areas of the country experience significant interstate commuting of RNs, with RNs who live in one State working in another, nearby State or participate as a travel nurse for a short period of time.

Each State (and the District of Columbia) maintains a list of RNs actively licensed in that State. These State lists were used to draw a probability sample of RNs for the NSSRN from among those RNs who were licensed as of the end of 2007/early 2008. RNs appearing in the listings of licensed RNs for more than one State had multiple chances of selection for the 2008 NSSRN. To avoid duplication, multi-State strata were formed for several groups of States where interstate commuting was expected to be fairly sizeable. Probability matching was used to form such strata so that only a single record for those RNs appears in the listing for the multi-State stratum.

After these adjustments, a sample of 55,151 licensed RNs was drawn for the 2008 NSSRN. This sample size was expected to yield sufficient completed surveys to support stable State, regional, and national estimates. Data were collected on the RN population who were actively licensed as of March 10, 2008. Appendix B provides a detailed description of the sample strata, determination of the probabilities of selection, and allocation of the 55,151 RNs across the 50 States and the District of Columbia.

1.4 Data Collection Methods

The 2008 NSSRN employed a multimode approach to data collection. Data were collected from July 2008 through March 2009. Using contact information contained in State licensing records, sampled RNs were first notified of the study via a letter mailed through the U.S. Postal Service (USPS). The letter invited RNs to complete a survey via the Web. Shortly after the Web invitation was sent, paper surveys were also sent via USPS. Finally, RNs who did not respond were contacted by telephone and expedited mail. The different steps of data collection were as follows:

- **First Contact.** A survey notification letter was sent via USPS to all RNs in the sample. The first contact mailing included a description of the study and instructions for logging on and completing the survey via the Web. No paper questionnaire was included in this first contact mailing.

- **Second Contact.** Two weeks after the first contact mailing, a paper questionnaire was sent via USPS to all RNs who had not completed their survey via the Web. The second contact mailing included a description of the study, a second invitation to complete the survey via the Web, and Web log-on instructions. A paper questionnaire and a postage-paid return envelope for the questionnaire were included to increase response from those RNs without Web access or who preferred paper questionnaires.

- **Third Contact.** Approximately 3 weeks after the second contact mailing, post cards were sent to all sampled RNs reminding them to complete their survey either on paper or on the Web. A note of thanks was also included on the post card for RNs who had already completed their surveys.

- **Fourth Contact.** A second copy of the paper questionnaire was sent to nonrespondents 3 weeks after the third contact. The fourth contact mailing was sent only to nonrespondents and included a letter requesting completion of the survey, Web log-on instructions, a paper questionnaire, and a postage-paid return envelope for the questionnaire.

- **Fifth Contact.** After 3 weeks had passed following the fourth contact, nonresponding RNs were contacted. RNs who failed to respond after the first four contact attempts were split into two groups for follow-up. RNs whose telephone numbers were available from licensing lists were contacted for follow-up by professional telephone interviewers. Services that provide matching and telephone number searches were also used to find a telephone number for a telephone follow-up with nonresponding RNs. If the telephone number search was unsuccessful, RNs who did not respond were sent a final package via FedEx that included a letter requesting completion of the survey, Web log-on instructions, a paper questionnaire, and a postage-paid return envelope for the questionnaire.

When a survey was received that contained responses to all questions deemed necessary to meet the requirement for a completed survey, the survey was noted as "complete" and the survey data were added into the database of 2008 NSSRN complete surveys. Data collection for the 2008 NSSRN ended on March 31, 2009.

1.5 Sample Performance

Response rates are often used to help assess the quality or unbiasedness of survey results. The 2008 NSSRN unweighted response rate was 62.41[2] percent with a weighted response rate of 61.48 percent.

[2] The American Association for Public Opinion Research Response Rate #3 calculation was used. It is defined as the number of completed surveys divided by the number of returned surveys (complete plus partial) plus an estimate of the number of eligible cases among those who did not respond and whose eligibility could not be ascertained.

Weighted response rates take into account sample design and probabilities of selection, adjusting for the fact that some States and strata are represented disproportionately in the sample. The weighted response rate for this survey can be interpreted as an estimate of the expected propensity to respond of an RN randomly selected from among all RNs currently licensed in the Nation.

Table 1-1 shows the overall performance of the sample. Table B2-1 in Appendix B provides a distribution of response rates by State.

Table 1-1. Summary of 2008 NSSRN sample performance

Sample disposition	Number in sample
Completed surveys	33,549
Over the Web	13,066
On paper	14,897
Over the telephone	5,586
Ineligible for the survey	870
Nonresponse	14,160
Refusals	6,572
Total sample	55,151

Source: 2008 National Sample Survey of Registered Nurses

1.6 Imputation

There are two types of nonresponse in surveys: unit nonresponse and item nonresponse. Unit nonresponse occurs when a sampled RN does not complete the survey at all. Unit nonresponse was reflected in the calculation of the response rate and in weighting through nonresponse adjustment.

Item nonresponse occurs when an RN responded to the survey but failed to provide answers to one or more individual questions appropriate for that individual. This results in a missing value for one or more survey items. When items were missing values, the items were filled in from the State sample frame files (licensure lists) when possible. The variables usually available on the sample frames included demographic characteristics (date of birth, race/ethnicity, and gender), home address, and first RN license date. Not all States provided these variables, and data for them could be very sparse even when the variable was included in the State frame.

If any important item nonresponse existed after review of the State sample files, respondents were called and queried about the missing data item(s), a process referred to as data retrieval. Some items deemed important and worthy of initiating data retrieval were year of licensure, employment setting

for principal nursing position, job title, number of hours worked, and other data elements central to the analysis of the 2008 NSSRN data. As a last resort, when item nonresponse persisted after review of the sample frame file and data retrieval, statistical imputation was used to assign values for missing data.

The 2008 NSSRN imputation protocol relied on regression modeling to generate likely responses where there were missing values for individual questions within completed cases. Imputation statistical procedures identify a value that not only would probably be appropriate for the respondent but would also be in keeping with the distribution of values for that variable. For example, the survey items "Nurse's year of graduation from initial nursing education" and "Year of first licensure" are highly correlated. If the year of licensure is missing from an RN's record but not the year of graduation, the missing year of licensure value can be imputed using regression modeling. The year of licensure is the dependent variable in this case, and the year of graduation is the independent (or predictor) variable. The regression model is established using respondent cases in which both the year of licensure and year of graduation are known.

There is a component of variation associated with the generation of imputed values that is generally not reflected in survey estimates of variance. As a result, imputation can result in an understatement of the variance in survey estimates. The degree to which estimates of variability have been understated is generally considered negligible if the imputation rate is low (less than 10 percent). However, if the imputation rate is more than 20 percent, the degree of underestimation may be nontrivial.

Eighty percent of the imputed variables for the 2008 NSSRN have imputation rates below 10 percent, 19 percent are borderline (imputation rate of 10-19 percent), and three variables (1 percent of all survey variables) have an imputation rate greater than 20 percent.[3] The three variables are question 11B—total number of hours provided for emergency preparedness training in the past year (imputation rate: 46 percent); question 13D_A—year of receiving an (upgrade) Associate Degree in Nursing (ADN) (imputation rate: 36 percent); and question 41—years until planned return to paid work in nursing (imputation rate: 21 percent). When working with these three variables, NSSRN data users should be aware of the potential underestimation of the variance and bias in the point estimates.

[3] Imputation rates were computed as the ratio of the number of imputed cases of that variable to the total number of applicable cases in the data set.

Further information on imputed variables and data file flags for imputed variables are included in the 2008 NSSRN codebook.

1.7 Sample Weighting

1.7.1 Overview of the Weighting Process

Data weighting was one of the final steps in preparing the data for analysis and reporting. The 2008 NSSRN weighting process consisted of several steps, as follows:

- Determination of the initially assigned weights at the sampled license level;
- Adjustment for survey nonresponse by age group (for strata where age was available);
- Assignment of factors to account for multiple opportunities for selection (determined as part of the matching effort to determine the number of sample frames on which an RN appeared);
- Establishing an initial weight at the RN level; and
- Calibration of the RN level weights (via raking) to achieve consistency with State and national totals.

A detailed discussion of each of these steps in the weighting processes is found in Appendix B. The remainder of this overview discussion focuses on some key issues related to sample weighting for the 2008 NSSRN.

1.7.2 Implications of Weighting for NSSRN Data Users

Sampling error can cause sample estimates to differ from true population parameter values. Sampling error is the consequence of not measuring every unit in the population. It can be reduced with larger sample sizes, with efficiently designed sampling strategies, or with a combination of both.

In the 2008 NSSRN, both strategies were employed. For example, higher sampling rates were used for smaller States to permit more accurate State-level estimation for these States. However, this served to reduce the precision associated with national estimates compared with what would have

been achieved with a simple random sample of the same size but with no variation by State in sampling rates. The factor by which the variance is reduced is known as a "design effect."

In the 2008 NSSRN, sampling rates also varied between strata within a State for RNs who were either:

- Residents of Alaska, New Mexico, or Hawaii but were on another State's listing of RNs with currently active licenses; or
- Members of the groups of States for which the design used multi-State strata.

Replicate weights were computed for use in estimating the variability of 2008 NSSRN estimates. Users of the 2008 NSSRN data as well as past NSSRN data are encouraged to use these weights to assess the precision of sample estimates as well as to compare estimates either within the 2008 NSSRN database or between estimates from various years.

Another important difference in the weighting methods for 2008 was the adjustment of differential nonresponse by age group. Earlier administrations of the NSSRN may have underestimated the representation of younger RNs due to undercoverage on State sampling frames. In the 2000 and 2004 NSSRN administrations, poststratification of the weights of the youngest RNs (those under the age of 26) was done to adjust the weights. However, this group represented only a small portion of licensed RNs, and the overall impact of this procedure did not address any issues that may have existed for other age categories.

While undercoverage of newly licensed RNs may still be an issue, another source of bias associated with younger RNs is that response propensities by age showed that younger RNs responded at lower rates than older RNs in the 2008 NSSRN.

In administrations prior to the 2008 NSSRN, the weight adjustment processes were global in nature. Generally speaking, poststratification was used to achieve consistency between responding RNs associated with a given State of licensure and the corresponding control total, licensed RNs in the State (who were currently active). The control total took into account RNs who were also licensed in what were characterized as "higher priority" States. Thus, if older RNs had higher response rates in a State, as they often did, they would be represented at a disproportionately high rate among the population of currently active RNs licensed in the State. This is a potential source of bias for survey estimates that are correlated with age. In addition to the general age distribution of the RN

population, other variables that could be affected include those related to education and employment.

In summary, the 2008 NSSRN final weighting processes included a poststratification adjustment of eligible and ineligible respondents by age group to corresponding age group totals for each State frame where age was provided by the State licensing Boards (44 of 51 State Boards).

Assessing the Impact of Accounting for Differential Nonresponse by Age

To assess the extent to which survey estimates may have changed after accounting for differential nonresponse by age group, a separate set of weights was developed using a global approach to nonresponse adjustment. That is, a poststratification of all responding eligible and ineligible RNs to a single State control total for each State was undertaken. This approach thus served to simulate the approach to nonresponse adjustment used in past NSSRN administrations. This weight is referred to here as the "surrogate" weight.

A series of statistics were run to compare the estimate based on the final weight to the estimate based on the surrogate weight. Looking at some key data elements from the 2008 NSSRN, the comparison of the final weight to the surrogate weight suggests that including a weight adjustment reflecting differential response propensities by age had an important impact on the 2008 NSSRN survey estimate. Estimates where sizeable effect is in evidence are: initial nursing education, RNs with a bachelor's degree; RNs employed in nursing; white, non-Hispanic RNs; RNs employed in a hospital setting; and most of the age group and graduation year categories.

These findings regarding the effects of nonresponse adjustment by age group should be taken into account when comparing estimates from the 2008 NSSRN to those from previous NSSRN administrations. Differences between the 2008 NSSRN estimates and those from prior years for estimates correlated with age may be due to an improvement in the weighting process rather than a significant change in the RN population over time.

Appendix B provides a more detailed discussion of the weighting process and nonresponse adjustment by age.

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Education and Licensing of Registered Nurses 2

2.1 Introduction

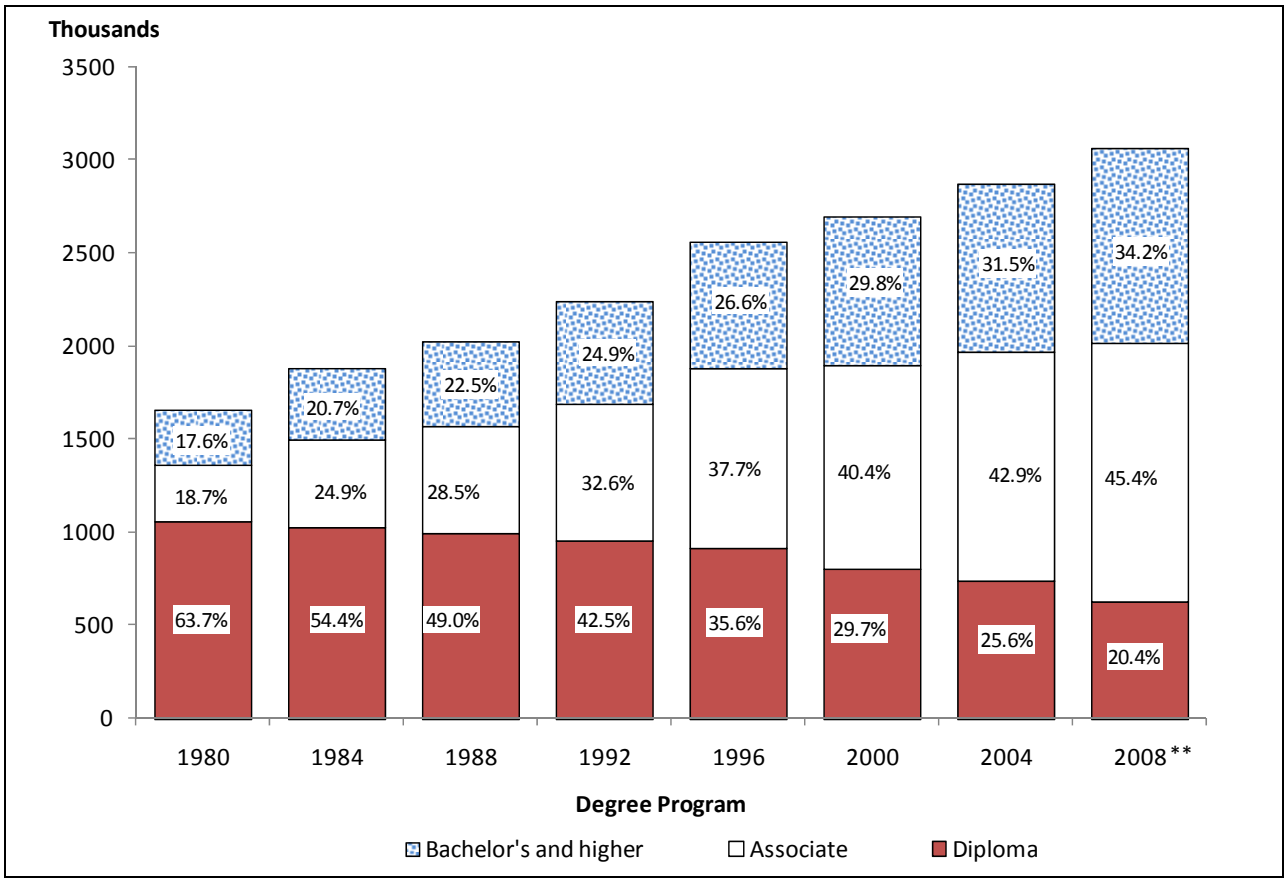
RNs are prepared in several types of education programs. The most frequent initial education program is the Associate Degree in Nursing (ADN), with 45.4 percent of U.S. RNs prepared in ADN programs (Figure 2-1). Some RNs pursue their initial registered nurse education after completing postsecondary education in other fields or working in another occupation. After completing an approved initial education program, a registered nurse candidate takes the National Council Licensure Examination (NCLEX), which is created and administered by the National Council of State Boards of Nursing (NCSBN), in order to receive a State license. RNs subsequently can pursue additional nursing education, including graduate-level degrees and education in Advanced Practice fields such as nurse practitioner or nurse anesthetist. Some RNs seek higher degrees in non-nursing fields (such as education and business) that are related to their nursing career.

2.2 Initial Nursing Education

Initial RN education occurs through a variety of routes. ADN programs generally require 2 years of nursing coursework after completion of prerequisites that include basic science. Bachelor's degree programs typically span 4 years of full-time education. Diploma programs, which are traditionally based in hospitals and last 3 years, were once the most common form of nursing education in the United States. The number of these programs has steadily declined since the 1970s and many now offer an Associate of Science Degree (AS) through local community colleges. A small number of RNs qualify for their licenses based on military training or other licensing credentials. There are a few initial RN education programs that confer a master's degree or a doctorate but most are specifically designed for students who have obtained a bachelor's or higher degree in another field prior to pursuing nursing education.

The most commonly reported route for initial nursing education of RNs in the United States is the ADN program (Figure 2-1).

Figure 2-1. Distribution of registered nurses according to initial nursing education, 1980-2008*



* The counts for all initial degrees may not add to the total registered nurse estimates for each survey due to incomplete information provided by respondents and the effect of rounding. Only those who provided education preparation information are included in the calculations used for this figure.

**For 2008 initial education, there were 13,325 registered nurses with master's degrees (0.4%) and 954 registered nurses with doctorate degrees (0.03%).

Source: 1980-2008 National Sample Survey of Registered Nurses

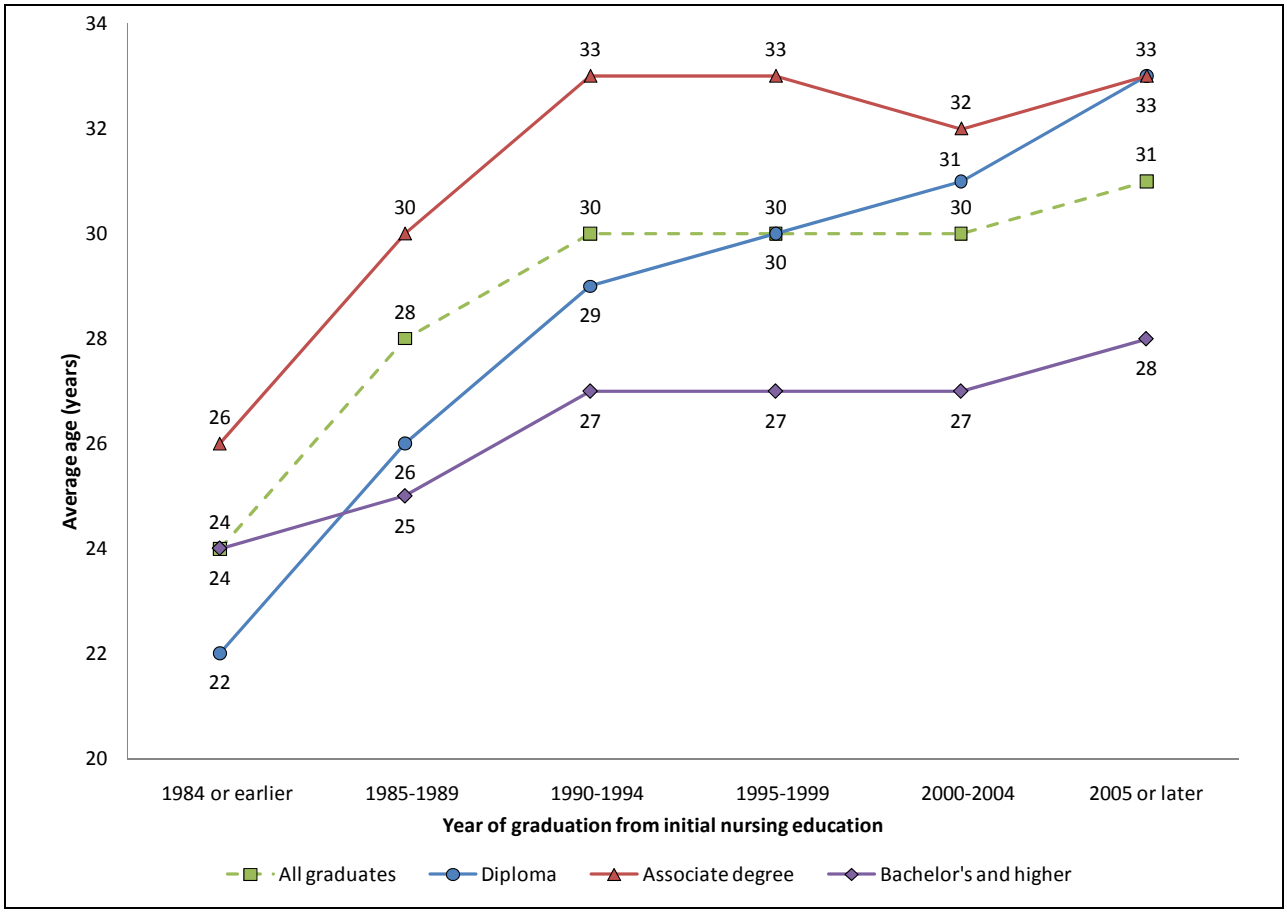
Since 1980, there has been a steady shift away from RN education in diploma programs to ADN and bachelor's programs although diploma education still accounts for the initial education of 20.4 percent of RNs in 2008. However, only 3.1 percent of RNs who graduated after 2004 reported a diploma as initial nursing education. Fully 34.2 percent of RNs in 2008 were initially prepared at a bachelor's or higher degree level, almost twice as many as in 1980.

2.3 Age at Graduation

Average age at graduation has been comparatively stable since 1994, with the exception of diploma-educated RNs, for whom the average age has continued to rise. The average age at graduation of

RNs who graduated from their initial nursing education program after 2004 is 31 years, notably higher than the average age of 24 years for RNs who graduated before 1985 (Figure 2-2). The increase in average age at graduation occurred primarily among RNs who graduated between 1985 and 1994. Registered nurses whose initial nursing education is a bachelor's degree or higher tend to be 5 years younger on average than either ADN or diploma graduates.

Figure 2-2. Average age at graduation from initial nursing education, by type of program



Source: 2008 National Sample Survey of Registered Nurses

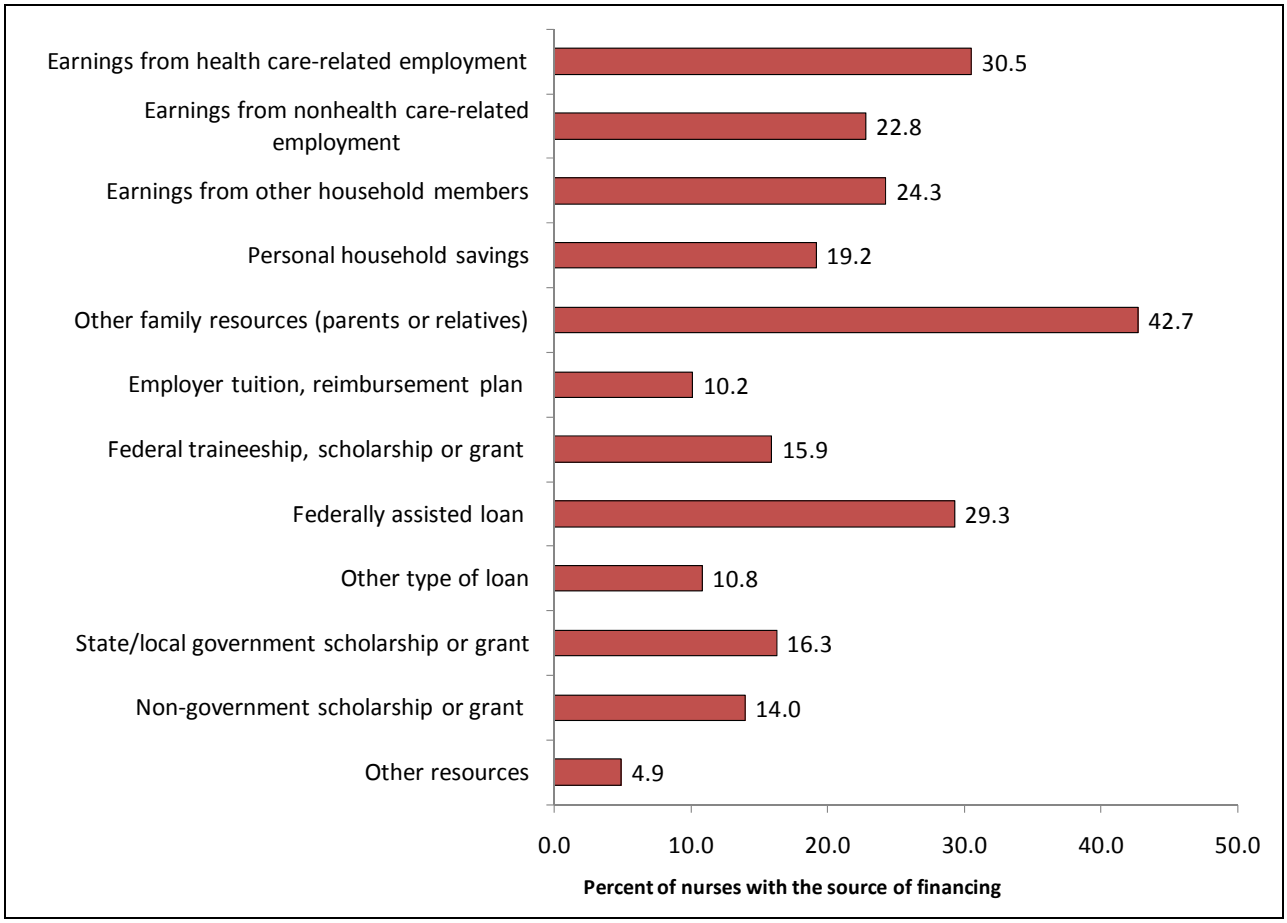
2.4 Sources of Financing

The most common source of educational financing used by RNs for their initial education was from family resources (42.7 percent), with health care-related employment earnings (30.5 percent), and federally assisted loans (29.3 percent) comprising the next highest sources of nursing education

payment sources (Figure 2-3 and Appendix A, Table 3). Details about the sources of financing for recently graduated RNs are presented in Chapter 9.

Registered nurses who completed ADN programs were most likely to have received some financial support for their education from earnings from their health care-related employment (Appendix A, Table 3). RNs prepared in ADN programs, are older than RNs prepared in Bachelor of Science in Nursing (BSN) programs, and may have continued their employment while pursuing their RN education.

Figure 2-3. Sources of financing for initial education for all U.S. registered nurses*



*Entries for sources of financing add to more than 100 percent because more than one source of financing may have been used by an individual RN.

Source: 2008 National Sample Survey of Registered Nurses

2.5 Education and Experience Prior to Initial Nursing Education

Among the 21.7 percent of the RN population in 2008 who had an academic degree prior to their initial nursing degree, 47.8 percent had an ADN, 52.8 percent a bachelor's, and 7.2 percent had a master's or higher degree[1] (Table 2-1 and Appendix A, Table 4). More than 40 percent of all degrees obtained by RNs prior to initial nursing preparation were in a health-related field.

A growing percentage of RNs are earning academic degrees prior to their initial nursing education. From 2000 to 2008, the percentage with prior postsecondary degrees rose from 13.3 percent to 21.7 percent. This trend is discussed in more detail in Chapter 9.

Table 2-1. Degrees prior to initial nursing education, by survey year, 2000-2008

	2000 (percent)	2004 (percent)	2008 (percent)
Nurses with degrees prior to initial nursing education	13.3	16.2	21.7

Source: 2000-2008 National Sample Survey of Registered Nurses

More than two-thirds of RNs (67.2 percent) reported working in a health occupation prior to their initial nursing education. Of these, the majority (68.6 percent) worked as aides or nursing assistants (Table 2-2 and Appendix A, Table 5). A higher percentage of registered nurses whose initial RN education was an ADN had previously worked in a health occupation than RNs with other initial education. The length of time in which RNs worked in these other health occupations and the extent to which this work experience might be important to RNs' careers is unknown.

Among all RNs, 17.9 percent were licensed at one time as a licensed practical or vocational nurse (LPN or LVN) (Table 2-2 and Appendix A, Table 5). Registered nurses whose initial RN education was in an ADN program were more likely to have previously held an LPN or LVN license. In some States, partial completion of an RN education program provides the qualifications to take the exam for LPN/LVN licensure so that RN students may take the exam and work prior to completion of the RN program. Other ADN programs provide flexible fast track education for LPN or LVNs.

[1] The number of degrees adds to more than the total because more than one degree may have been named by an RN.

Table 2-2. Education and health occupation experience prior to initial nursing education, by initial nursing education

	Total (percent)	Initial nursing education		
		Diploma (percent)	Associate (percent)	Bachelor's and higher (percent)
All nurses				
Nurses with prior academic degrees	21.7	9.8	24.6	25.0
Nurses with prior health occupations	67.2	49.1	76.3	66.2
Nurses with prior LPN license	17.9	7.1	30.0	8.3
Of those with prior health occupations				
Nursing aide or assistant	68.6	77.1	61.3	76.1

Source: 2008 National Sample Survey of Registered Nurses

2.6 Nursing Licensure

The majority of RNs who earn their initial nursing education in the United States obtain their first license in the same calendar year they graduate from their initial nursing education program and most RNs are first licensed in the State in which they were educated. Internationally educated nurses have different patterns of graduation and U.S. licensure, as described in Chapter 8.

About 1 percent of RNs obtained their first U.S. nursing license before the calendar year in which they graduated from their initial nursing education program. With the introduction of more nursing master's programs, some State licensing boards permit students who have completed a specific subset of courses and training to take the licensing examination and receive an RN license. Registered nurses are then expected to complete the remaining requirements for their degree, although in some States completion of the degree is not required to retain an RN license. A small number of RNs reported their initial nursing degree or credential as "other" and described such a situation.

More than 90 percent of RNs receive their first license in the State where they were educated. Over time, however, although some RNs may leave their State of initial education, approximately 80 percent remain in the same State at least 5 years after graduation. By 16 to 25 years after graduation however, 30 percent reside in a different State (Appendix A, Table 7). RNs whose initial nursing education is a bachelor's or higher degree are the least likely group of RNs to reside in the State in which they were educated, with 34.8 percent overall living in a different State than that in which they were educated (Appendix A, Table 7). Some RNs may live in a State bordering that in which they were educated and could be commuting to that State.

RNs who work in a State that participates in the Nurse Licensure Compact (the Compact) can work in multiple States even if they hold only one RN license. States in the Compact agree to recognize licenses from other States in the Compact rather than require another RN State license. The effect of the Compact on employment is discussed in Chapter 3.

2.7 Degrees Obtained After Initial Nursing Education

The NSSRN collects data on all academic degrees received after initial RN education; this includes both nursing degrees and non-nursing degrees. Table 2-3 presents the highest nursing degrees of RNs. Among all licensed RNs, 47.2 percent have earned at least a bachelor's degree in nursing.

Table 2-3. Highest nursing degree, by employment status

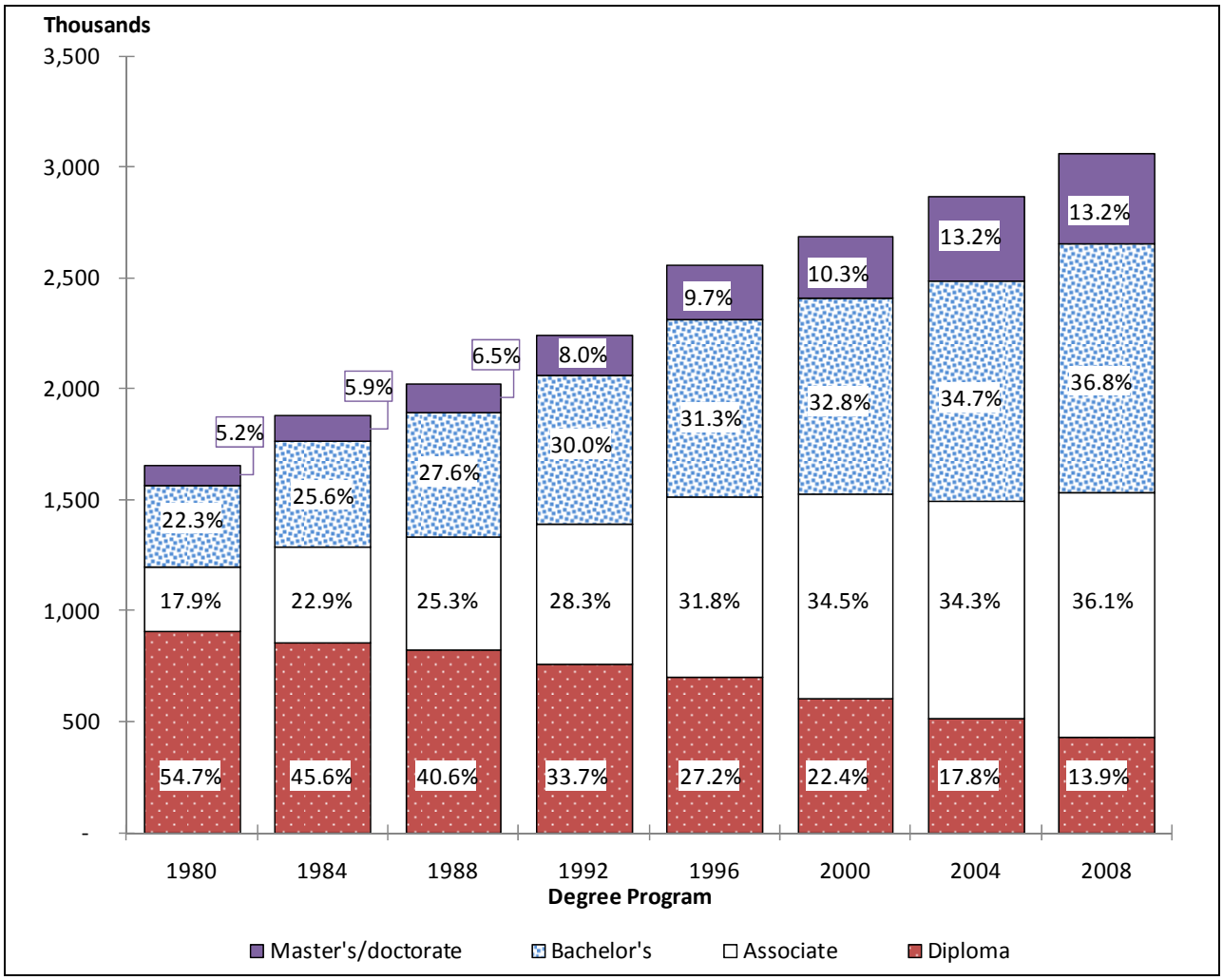
	Total (number)	Total (percent)	Working in nursing (number)	Working in nursing (percent)	Not working in nursing (number)	Not working in nursing (percent)
Total	3,063,162	100	2,596,599	100	466,564	100
Diploma	474,043	15.5	345397	13.3	128,646	27.6
Associate	1,140,465	37.2	1,002,682	38.6	137,783	29.5
Bachelor's and higher	1,444,528	47.2	1,245,180	48.0	199,348	42.7

Source: 2008 National Sample Survey of Registered Nurses

Many RNs hold additional degrees that are not specifically nursing degrees but which are related to their nursing employment. If an RN respondent indicated that a non-nursing degree was related to his or her career in nursing, the degree is described as a "nursing-related" degree. Nursing-related degrees include public health, health administration, social work, education, and other fields. For much of this report, nursing and nursing-related degrees are presented together to provide a measure of the level of education from which RNs draw to complete their jobs.

In 2008, half of the RN population had a bachelor's or higher degree in nursing or a nursing-related field (Figure 2-4 and Appendix A, Table 8). In 2008, 32 percent of RNs with a bachelor's or higher degree reported that their initial RN education was a diploma or an ADN, demonstrating that many RNs pursue additional degrees after completion of their initial RN education. Other data reveal that RNs with graduate degrees have increased significantly in the last 20 years (Figure 2-4).

Figure 2-4. Highest nursing or nursing-related education preparation, 1980-2008*



*The totals in each bar may not equal the estimated numbers for registered nurses in each survey year due to incomplete information provided by respondents and the effect of rounding. Only those who provided nursing education preparation information are included in the calculations used for this figure.

Source: 1980-2008 National Sample Survey of Registered Nurses

- Registered nurses with graduate degrees comprised 13.2 percent of all licensed RNs in 2008, twice the proportion in 1988.
- There has been marked growth in the numbers of RNs with a master's degree in nursing or a related field in less than 10 years rising from 257,812 in 2000 to 375,794 in 2008, a 45.8 percent increase (Table 2-4).
- There were an estimated 28,369 RNs with a doctorate degree in nursing or a nursing-related field in 2008, which is an increase of 64.4 percent since 2000.

Although many RNs pursue additional degrees after their initial RN education, many did not obtain further academic degrees post-licensure (Figure 2-5 and Appendix A, Table 8).

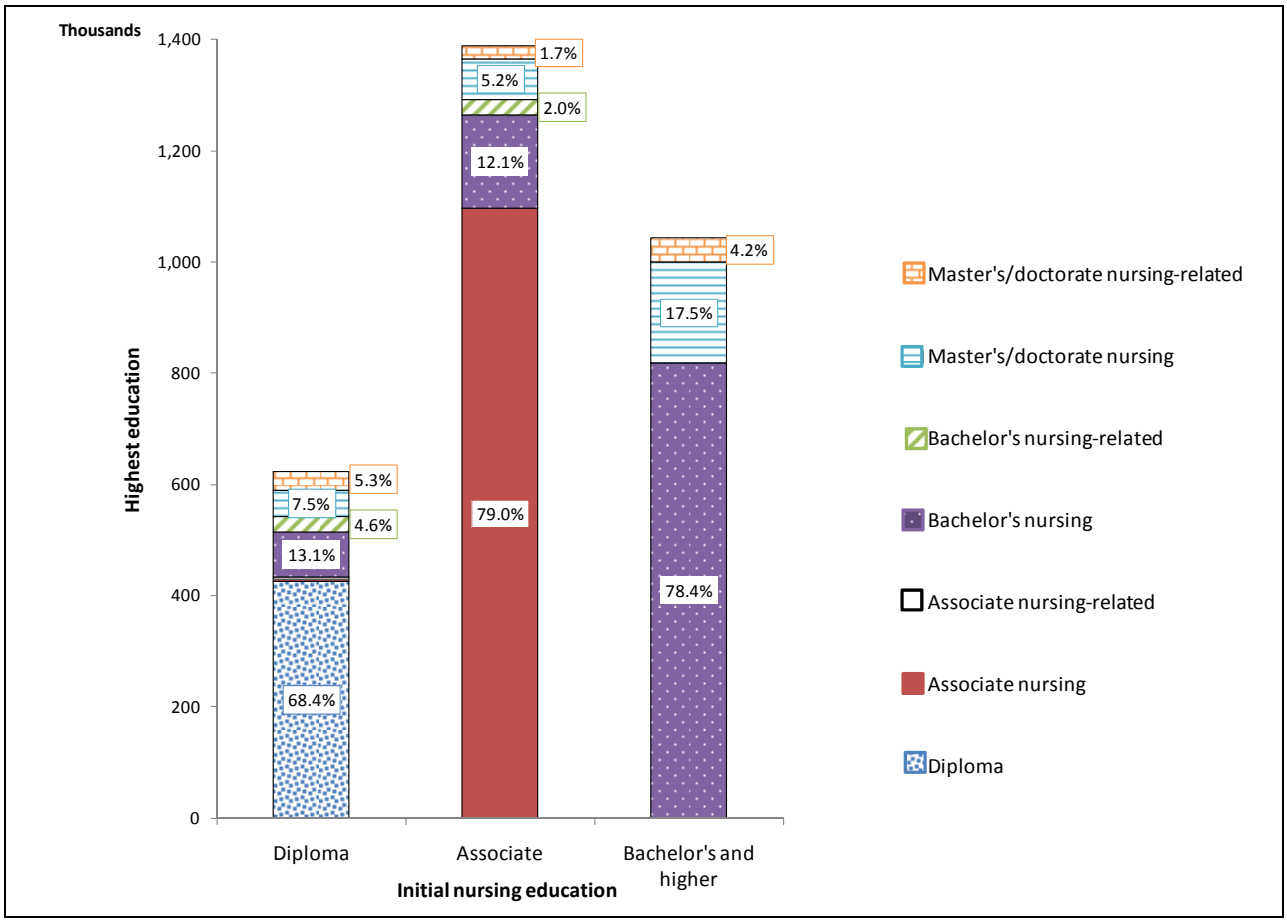
- Among the 623,548 RNs whose initial nursing education culminated in a diploma, 31.6 percent obtained additional degrees after licensure. The degree most commonly obtained was a BSN (81,689, or 13.1 percent).
- Among the 1,388,884 RNs whose initial nursing education culminated in an ADN, 20.8 percent obtained additional degrees after licensure. BSNs were received by 12.1 percent.
- Among the 1,044,306 RNs whose initial nursing education culminated in a bachelor's degree or higher, 21.6 percent held advanced degrees in 2008.

Table 2-4. Master's and doctorate degrees as highest nursing or nursing-related education preparation, 2000-2008

Degree	Estimate 2000	Estimate 2004	Estimate 2008
Master's	257,812	350,801	375,794
MSN nursing degree	202,639	256,415	290,084
Nursing-related master's degree	55,173	94,386	85,709
Percent of master's that are nursing (MSN)	78.6%	73.1%	77.2%
Doctorate	17,256	26,100	28,369
Doctorate in nursing	8,435	11,548	13,140
Nursing-related doctorate degree	8,821	14,552	15,229
Percent of doctorates that are nursing	48.9%	44.2%	46.3%

Source: 2000-2008 National Sample Survey of Registered Nurses

Figure 2-5. Highest education of registered nurses, by initial nursing education



Source: 2008 National Sample Survey of Registered Nurses

There can be considerable time between the initial nursing degree and subsequent degrees (Table 2-5).

- Among diploma-educated nurses who continued their education, there was an average 10.5 year gap between initial RN education and attaining a bachelor's degree. Those whose highest education was a doctorate had a gap of more than 15 years between the diploma and the final doctorate in nursing.
- Nurses whose initial RN education was an ADN averaged 7.5 years between their ADN and attaining a BSN degree.
- Nurses whose initial RN education was a BSN took an average of 8.2 years to reach a master's degree as their highest degree in nursing; they took an average of 12.4 years to obtain a doctorate if that was their highest degree in nursing.

Table 2-5. Average years between completion of initial and highest nursing degrees*

Initial nursing education	Bachelor's	Master's	Doctorate
Diploma	10.5	13.9	15.6
Associate	7.5	11.5	12.5
Bachelor's	–	8.2	12.4

* Average years between diploma and ADN not calculated due to larger than average rates of missing data.

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

Post-licensure graduate degree programs have a variety of foci. Among RNs who obtained a nursing or nursing-related master's degree or doctorate, 46.6 percent reported the focus of those degrees to be clinical practice; 19.2 percent had a focus of administration, business, or management; and 13.3 percent reported a focus of education. Education was the most common focus of doctoral studies (please see Appendix A, Table 9 for similar data).

Only 2.2 percent of RNs obtained an undergraduate or graduate level non-nursing degree that they reported was not related to their career in nursing. The most common focus of these degrees was humanities; liberal arts or social sciences; and administration, business, or management.

Education programs are increasingly being offered through distance-based learning. The flexibility offered by distance-based education permits working professionals and those in nonurban centers to pursue degree programs while continuing to work without having to travel to an educational institution. Just over 15 percent of RNs who completed any additional nursing or nursing-related degree program reported that the program was primarily undertaken through distance-based learning, with more than 50 percent of coursework through correspondence or online. Those who completed doctorate degrees had the highest rates of participation in distance-based programs (16.3 percent). The continued prevalence of distance and online education may influence further growth in RNs continuing education beyond their initial preparation program.

2.8 Currently Enrolled Students

Only 6.6 percent of all RNs were enrolled in March 2008 as students in nursing and nursing-related academic education programs. Of these, 44.5 percent were pursuing a bachelor's degree and 46.3 were pursuing a master's (Table 2-6). Among RNs who were students in 2008, 74.2 percent were working in nursing full-time and 18.7 percent were employed in nursing part-time. Only 7.1 percent were not employed in nursing while they were pursuing additional education (Appendix A, Table 10).

Table 2-6. Enrollment in nursing and nursing-related education programs

Degree pursued	Number enrolled in 2008	Percent of those enrolled	Percent with more than 75 percent distance-based
Associate	3,151	1.5	–
Bachelor's	90,553	44.5	49.1
Master's	94,205	46.3	41.5
Doctorate	13,479	6.6	35.0
Post-master's certificate	2,065	1.0	–
Total	203,453	100.0	44.3

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

Distance-based programs are more common for programs offering a post-licensure bachelor's degree (49.1 percent) than for other post-licensure degrees (Table 2-6). Full-time RNs are more likely than part-time RNs or those not employed in nursing to take more than 75 percent of their coursework in a distance based format. Overall, RNs working full-time in nursing are more likely than any other group of RNs (48.2 percent) to take more than 75 percent of their coursework as distance learning (Appendix A, Table 10).

2.9 Emergency Preparedness

When emergencies and disasters occur, RNs are often required to assume responsibilities for managing and caring for overwhelmingly large numbers of patients with unfamiliar injuries, sometimes in environmental conditions that are extreme. More than half of working RNs (53.8 percent) indicated that they neither received nor provided emergency training in the previous year. Of those who had received or provided training, the most commonly reported training was for infectious disease incidents (71.1 percent) or natural disasters (70.0 percent). Only 31.3 percent of RNs reported receiving or providing training for nuclear or radiological incidents. Of the 46.2 percent of RNs who received training in some form of emergency preparedness training, the training they received averaged 10.5 hours in the year.

Few registered nurses reported feeling well prepared for an emergency. Of those RNs who have received or provided emergency preparedness training, only 10.5 percent feel very prepared, while 44.1 percent feel somewhat or not at all prepared. Nonetheless, 94.9 percent of RNs claim to have some understanding or a full understanding of the disaster plan at their place of work.

2.10 Certifications

After receiving initial RN education and licensure, registered nurses demonstrate knowledge and skill for a population or in a patient care specialty by obtaining national standardized certifications from a variety of organizations. Certifications can be obtained in dozens of fields, ranging from clinical specialties such as oncology, pediatrics, and critical care, to functional specialties such as administration, case management, or legal consulting. A myriad of organizations offer certifications, which are usually conferred only after completing a specified education or training program, a period of clinical practice and/or passing a national test. Advanced practice RNs, such as nurse practitioners, can and often must obtain certification in their advanced area. This is discussed further in Chapter 5.

More than 35 percent of RNs report some type of certification (Table 2-7 and Appendix A, Table 11). The most frequently held certification is life support/resuscitation. More than 31 percent of RNs have life support or resuscitation certification (BLS, ALS, BCLS, CPR, NRP, and others). The most common areas for clinical or managerial certification are critical care, maternal/neonate, oncology, case management, general surgery, and medical/surgical areas. In the 2008 NSSRN, some RNs report certifications that are not specific to nursing but may be relevant to their nursing careers, such as massage therapy.

Table 2-7. Registered nurse certifications*

Type of certification	Total (number)	Total (percent)
Total registered nurses with certifications	1,094,838	35.7
Life support/resuscitation (BLS, ALS, BCLS, CPR, NRP, and others)	956,472	31.2
Trauma nursing/emergency medicine (TNCC, ATCN, ATN, EMT, ENPC, and others)	125,008	4.1
Critical care	58,320	1.9
Maternal/neonate	43,123	1.4
Oncology	36,175	1.2
Case management	31,106	1.0
General surgery	28,599	0.9
Medical/surgical	26,594	0.9

*Table excludes advanced practice RN certifications, which are reported in Chapter 5.

**Entries for types of certification do not add to the total because an individual registered nurse may have reported more than one type of certification.

Source: 2008 National Sample Survey of Registered Nurses

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The Employment of Registered Nurses 3

3.1 Introduction

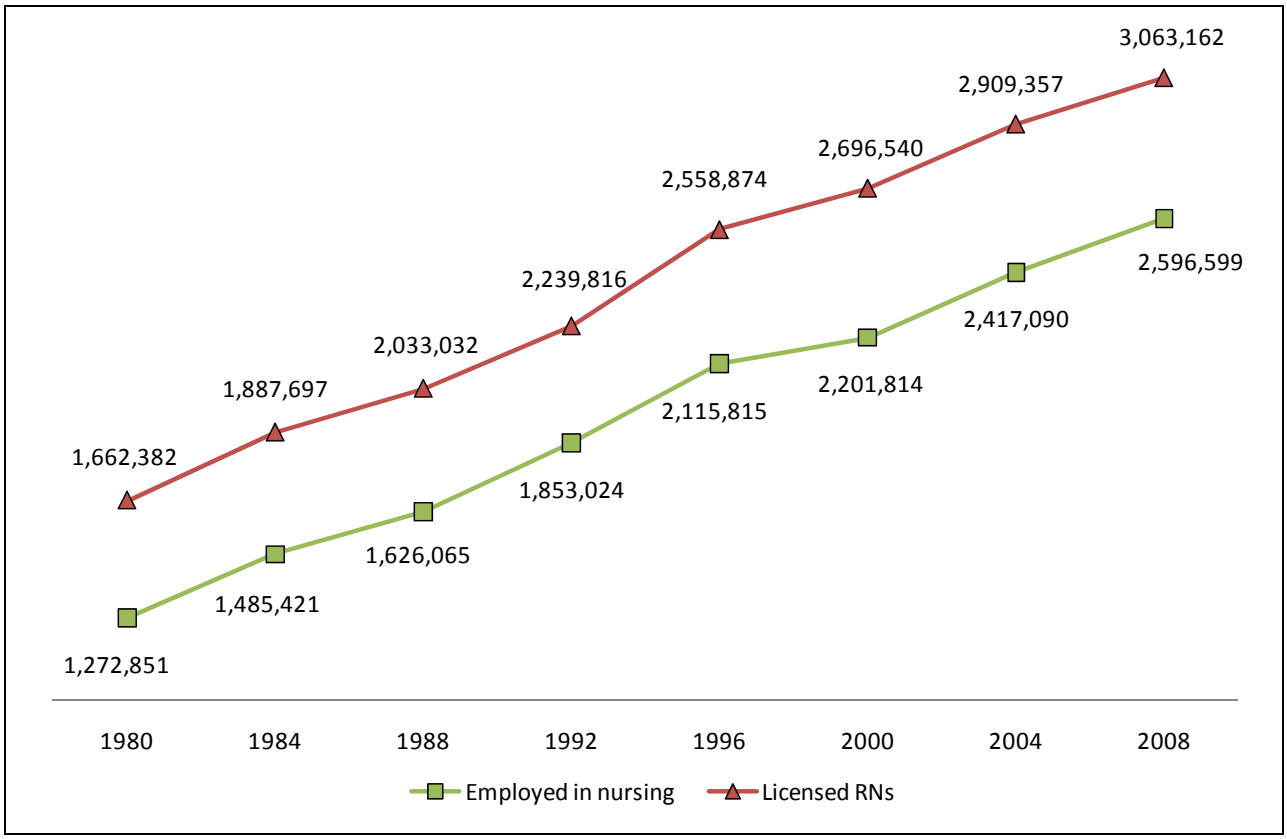
The RN workforce consists of nurses who have valid, active RN licenses and are employed in a nursing position. The vast majority of RNs are employed in nursing. Their attachment to the labor market is high, and in general RNs are satisfied with their work. Although RNs work in a variety of settings and roles, more than half are employed in hospitals and 66.3 percent are in staff nurse roles.

3.2 Nursing Workforce Size

In 2008, an estimated 3,063,162 RNs were in the United States (Figure 3-1 and Appendix A, Table 1), and 84.8 percent of them were employed in nursing positions (2,596,599). This was the highest rate of nursing employment since the NSSRN commenced in 1977 (Figure 3-2). Full-time employment has also increased, rising from 58.4 percent of RNs in 2004 to 63.2 percent in 2008. This is the first increase in the percentage of RNs working full-time since 1996.

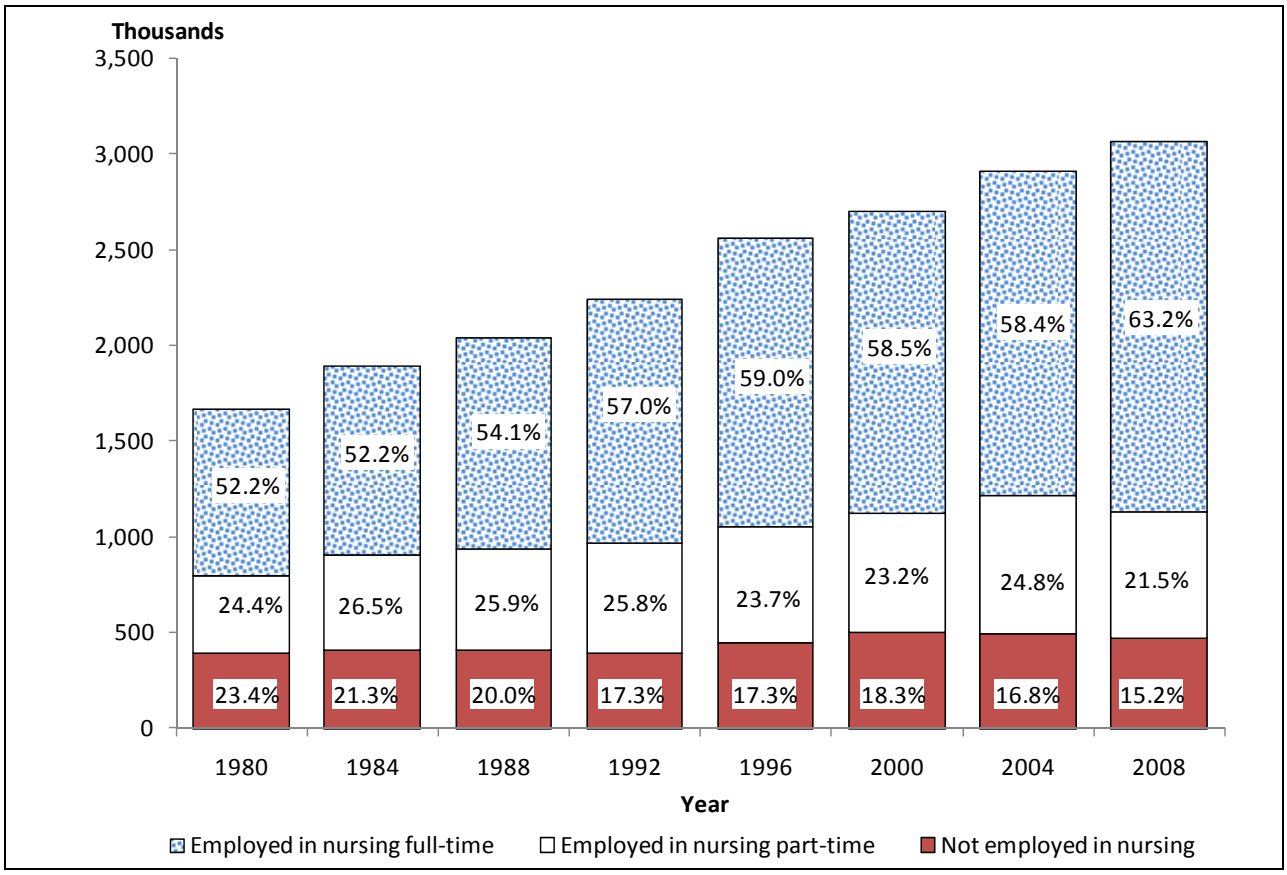
The number of employed RNs per 100,000 population is a ratio used to measure whether the RN workforce is growing more or less rapidly than the U.S. population as a whole. In 2008, there were an estimated 854 employed RNs per 100,000 population, an increase from 825 per 100,000 population in 2004 (Appendix A, Table 57). This measure varies widely among the States. The lowest numbers of employed RNs per 100,000 population were in Utah (598), Nevada (618), and California (638), while the largest numbers were in the District of Columbia (1,868), South Dakota (1,333), and North Dakota (1,273).

Figure 3-1. The nursing population and workforce in the United States, 1980-2008



Source: 1980-2008 National Sample Survey of Registered Nurses

Figure 3-2. Employment status of registered nurses*



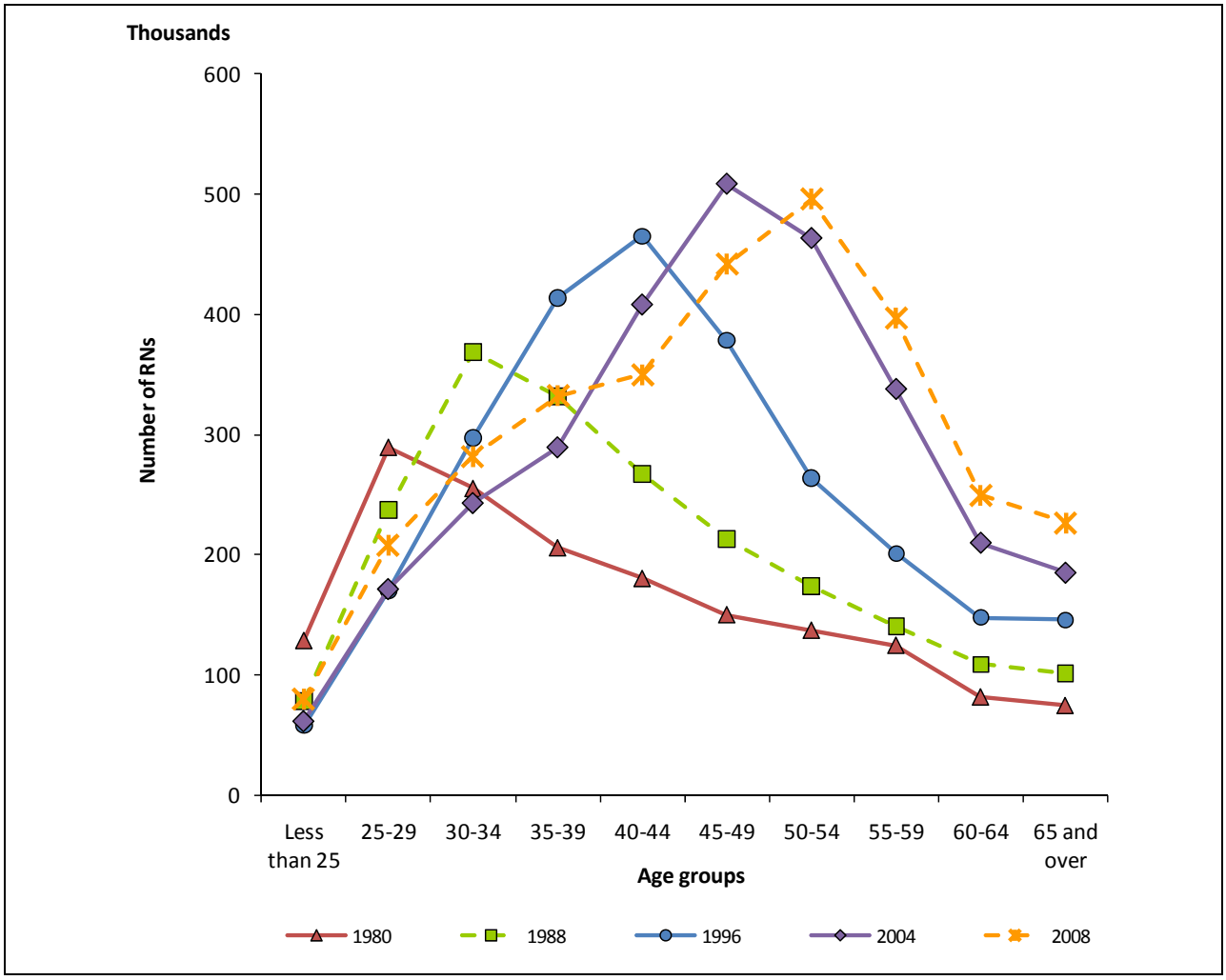
*The totals of full-time and part-time employment may not add to the estimate of all RNs employed in nursing due to incomplete information provided by respondents on employment status and the effect of rounding.

Source: 1980-2008 National Sample Survey of Registered Nurses

3.3 Employment and Age

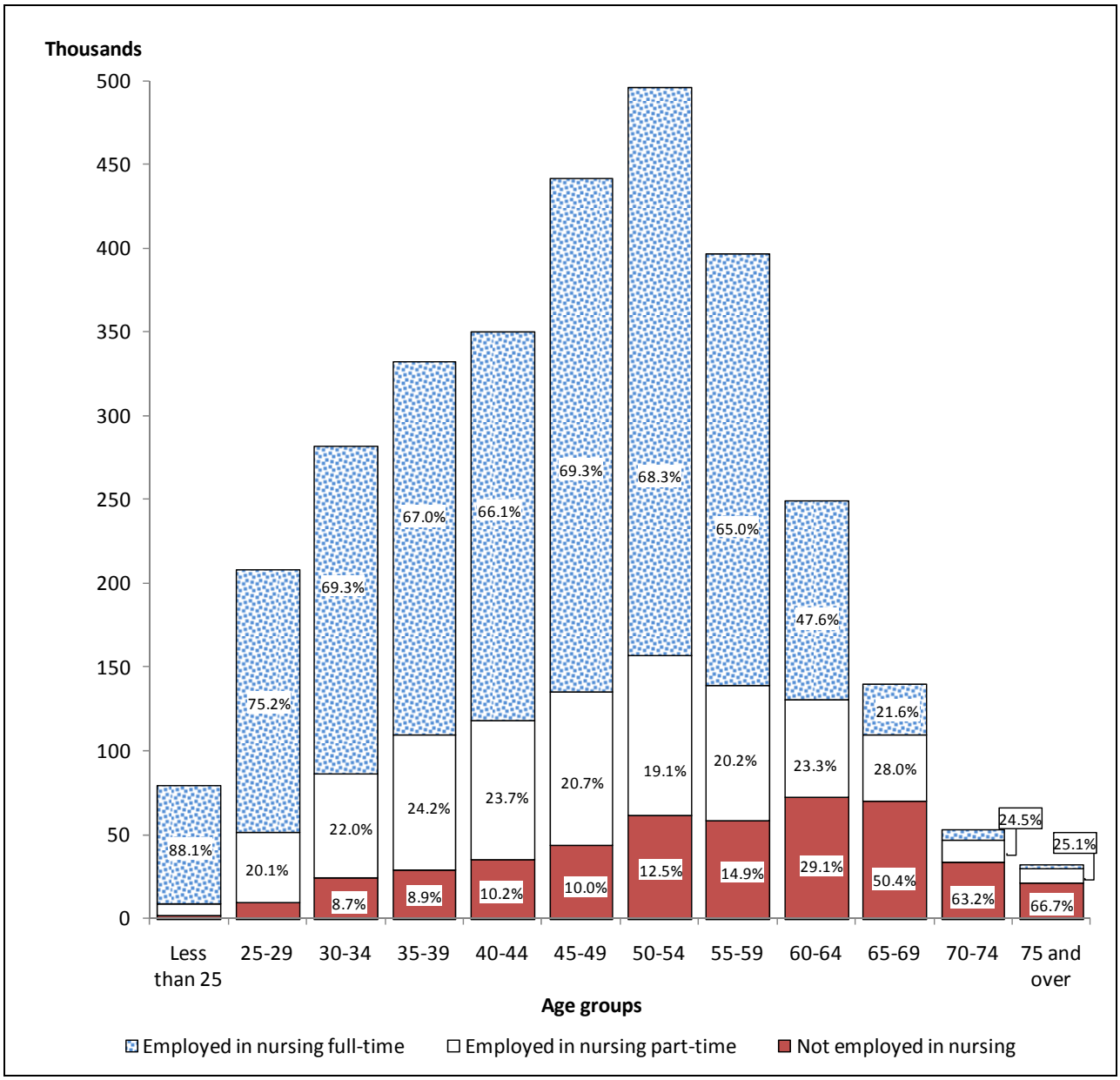
The age distribution of the RN population has been rising for more than two decades (Figure 3-3). In recent years this aging trend has slowed. RNs are less likely to work in nursing positions as they age (Figure 3-4). Among RNs under 50 years old, 90 percent or more are employed in nursing positions. The percentages of RNs working in nursing drops in each age group older than 50, decreasing from 87.5 percent of RNs aged 50-54 to 85.2 percent of RNs aged 55 to 59 years and to less than half of RNs over age 65. More than 70 percent of RNs under 30 years old work full-time. The percentage of RNs aged 30 to 59 years and working full-time ranges between 65 percent and 70 percent. The percent of RNs who work full-time drops rapidly after age 60 though more than 30 percent of RNs over the age of 70 continue to work in nursing in either full-time or part-time positions.

Figure 3-3. Age distribution of the registered nurse population, 1980-2008



Source: 1980-2008 National Sample Survey of Registered Nurses

Figure 3-4. Employment of registered nurses, by age group*



* The total percent of registered nurses across age groups may not equal the estimated total of all RNs due to the effect of rounding.

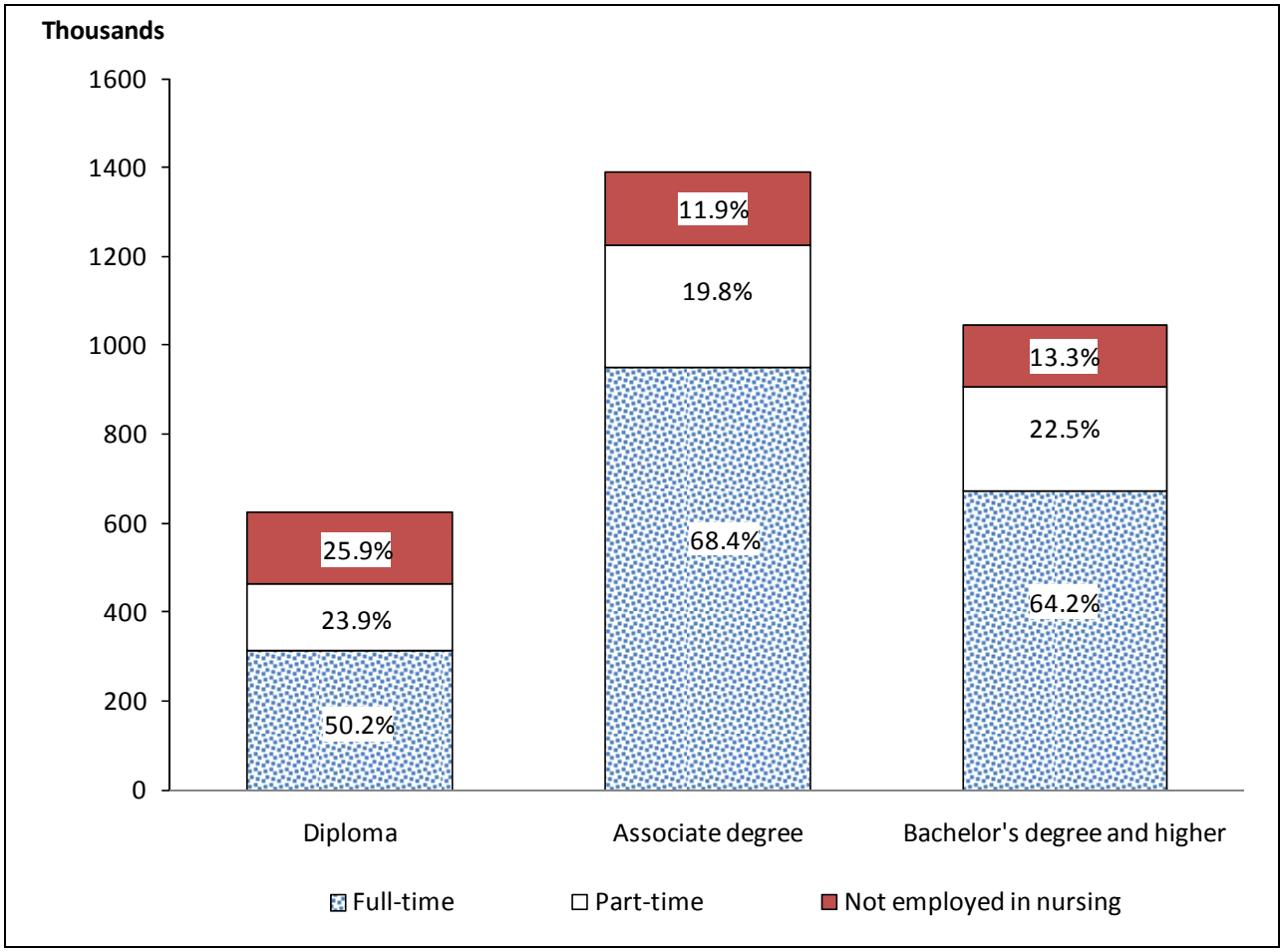
Source: 2008 National Sample Survey of Registered Nurses

3.4 Employment and Education

Employment rates of RNs vary both by initial and highest education. More than 87 percent of nurses whose initial RN education was an ADN, bachelor's, or master's degree report that they are employed in nursing positions, as compared with less than 75 percent of those whose initial

education was a nursing diploma (Figure 3-5 and Appendix A, Table 8). This is consistent with the older average age of diploma graduates, discussed in Chapter 7. Further, RNs whose initial education was in an ADN program have a higher rate of full-time employment than do those who entered the profession with a bachelor's or master's degree.

Figure 3-5. Employment rates, by initial nursing education*



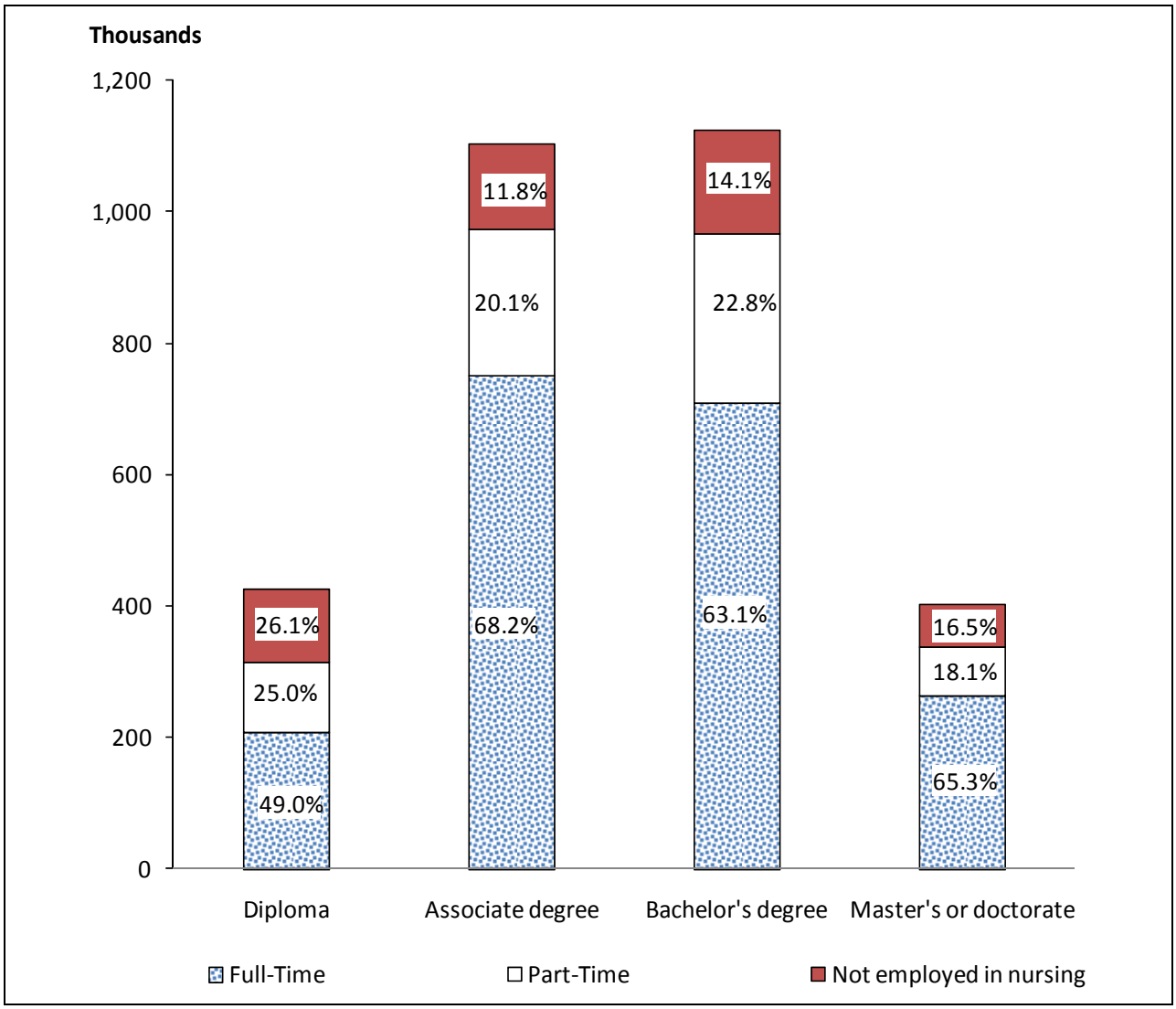
*Percents may not add to 100 due to the effect of rounding. Only those who provided education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

Figure 3-6 illustrates that the relationship between highest education and employment is similar to the relationship for initial education. About 26 percent of RNs for whom diploma-education was their highest education no longer work in nursing, as compared with about 12 percent, 14 percent, and 17 percent for RNs whose highest education is an ADN, bachelor's, and master's/doctorate, respectively. RNs with a bachelor's or master's/doctorate degree are somewhat less likely to work

full-time than RNs with an ADN. Overall, more than 75 percent of RNs, regardless of current education level, work in nursing.

Figure 3-6. Employment rates, by highest nursing or nursing-related education*



*Only those who provided education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

3.5 Employment Settings

RNs work in a variety of settings and have many different roles and responsibilities in each of these settings. For this report, employment settings are defined using industry categories in labor market analyses by the U.S. Bureau of Labor Statistics. For the first time, in the 2008 NSSRN, nursing home

and skilled nursing units that are based within hospitals are grouped as part of the hospital setting. In the 2004 NSSRN, these settings were grouped with nursing homes and extended care facilities. Therefore, in the 2008 NSSRN the number of RNs working in hospital settings versus nursing home and skilled care facilities are not completely comparable to previous surveys.

Hospitals remain the most common employment setting for RNs in the United States, with 62.2 percent of employed RNs reporting that they worked in hospitals in 2008 (Figure 3-7).[1] Ambulatory care is the next most common setting, with 10.5 percent of employed RNs. Public and community health settings, which include schools and public health departments, account for the worksite of almost 8 percent of RNs, while 6.4 percent work in home health settings. Another 5.3 percent work in nursing homes and extended care facilities. Only 3.8 percent work in academic education. Therefore, almost 30 percent of RNs worked in nonacute patient care settings; more than 90 percent of RNs work in patient care settings of some sort.

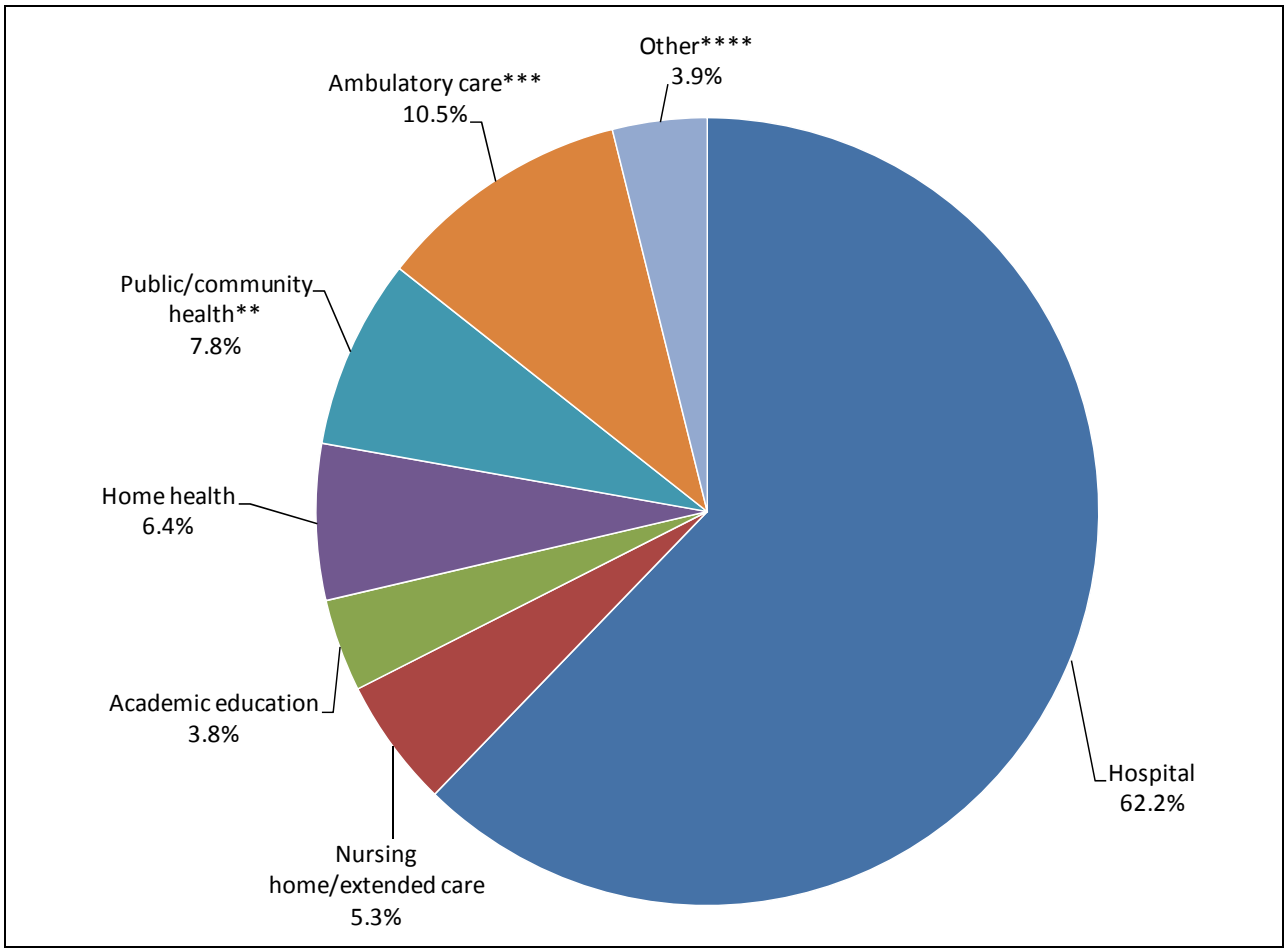
Among RNs who work in hospitals, the majority (82.6 percent) worked in community hospitals. Another 7.8 percent were employed in specialty hospitals (Figure 3-8).

- More than 76 percent of RNs employed in non-Federal specialty hospitals worked in inpatient units (Table 3-1).
- Among RNs who worked in community hospitals, 11.7 percent were employed in outpatient clinics or medical practices.
- Only 1.5 percent of RNs who worked in hospital settings were employed in a long-term hospital, and 2 percent worked in a psychiatric hospital (Appendix A, Table 12).[2]
- Slightly more than 3 percent of RNs who worked in hospital settings were employed in Federal hospitals, such as the U.S. Department of Veterans Affairs (VA), military facilities, or Indian Health Services hospitals.

[1] For the 2008 NSSRN, as with previous administrations, the list of employment settings from which RNs could select was revised. Despite these revisions, the major employment categories are sufficiently distinct to support comparisons over time.

[2] RNs who worked in long-term hospitals are not grouped with nurses employed in other long-term or skilled nursing facilities in this report.

Figure 3-7. Employment settings of registered nurses*



*Percents may not add to 100 due to the effect of rounding. Only RNs who provided setting information are included in the calculations used for this figure.

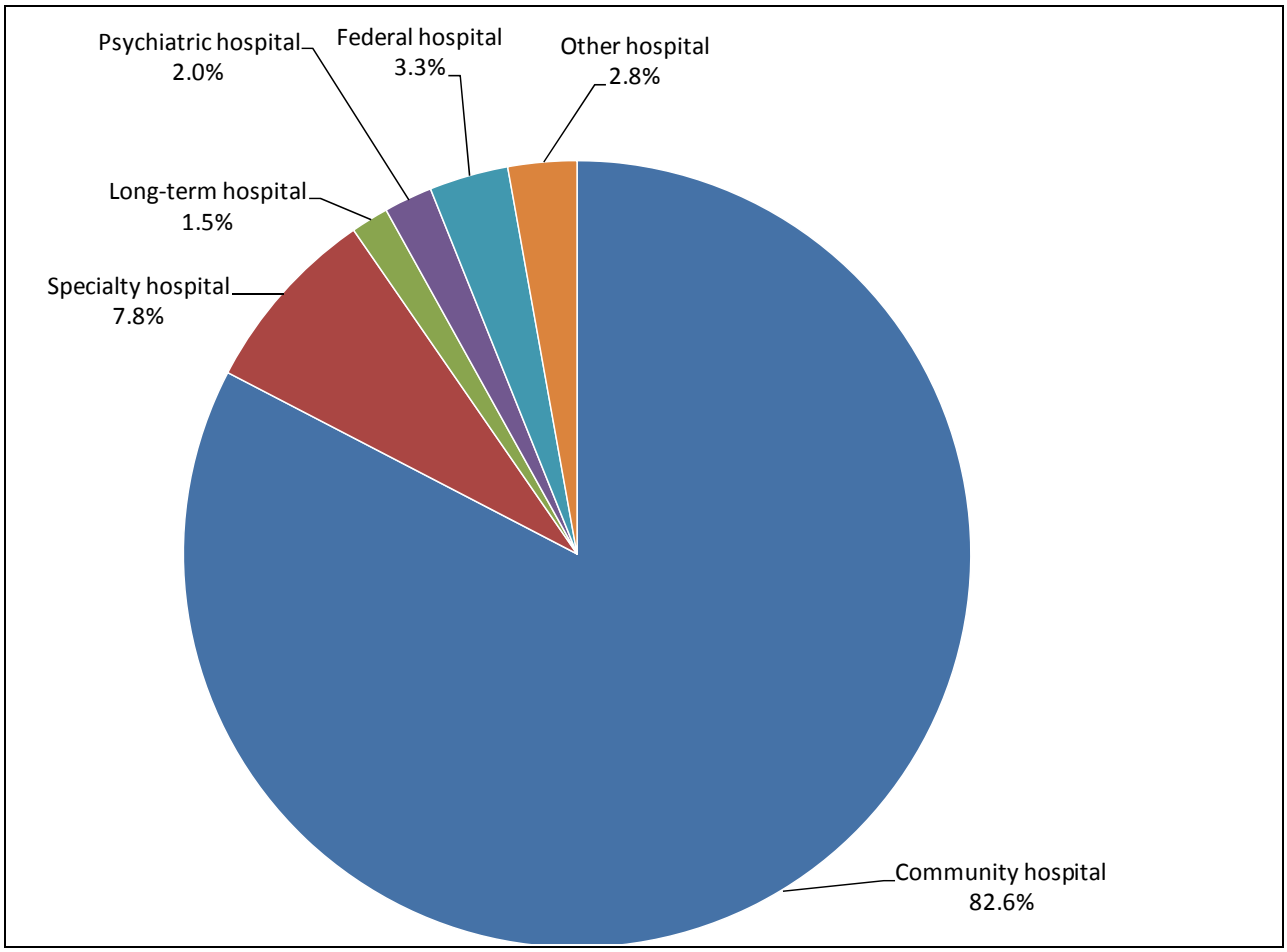
**Public/community health includes school and occupational health.

***Ambulatory care includes medical/physician practices, health centers and clinics, and other types of nonhospital clinical settings.

****Other includes insurance, benefits, and utilization review.

Source: 2008 National Sample Survey of Registered Nurses

Figure 3-8. Types of hospitals in which registered nurses employed in hospital settings work*



*Percents may not add to 100 due to the effect of rounding. Only registered nurses who provided hospital subset information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

Table 3-1. Employment in hospital units, by type of hospital*

	Community hospital (percent)	Specialty hospital (percent)	Long-term hospital (percent)	Psychiatric hospital (percent)	Federal hospital (percent)	Other hospital (percent)	Total (percent)
Inpatient	78.1	76.5	80.6	82.1	52.9	61.7	76.8
Nursing home unit	0.0	0.0	9.2	1.6	3.5	1.1	0.7
Outpatient	11.7	15.6	0.0	7.1	26.8	14.3	12.3
Other	9.8	8.0	10.2	9.1	16.8	22.9	10.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Percents may not add to 100 due to the effect of rounding. Only registered nurses who provided hospital subset information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

3.5.1 Employment Setting Trends

The employment settings of RNs have changed over the decades (Figure 3-9). In 2004, 57.4 percent of RNs worked in hospitals. The increase in the percentage of RNs working in hospitals between 2004 and 2008 is the first increase since 1984. The 17.7 percent growth in the number of RNs employed in hospitals is consistent with American Hospital Association (AHA) data. The AHA reported that between 2004 and 2008, RN full-time equivalent (FTE) employment increased 16.6 percent. The AHA also reported that RN FTE percent of total hospital employment rose from 25.4 to 27.[3] Hospitals are employing more RNs than in 2004.

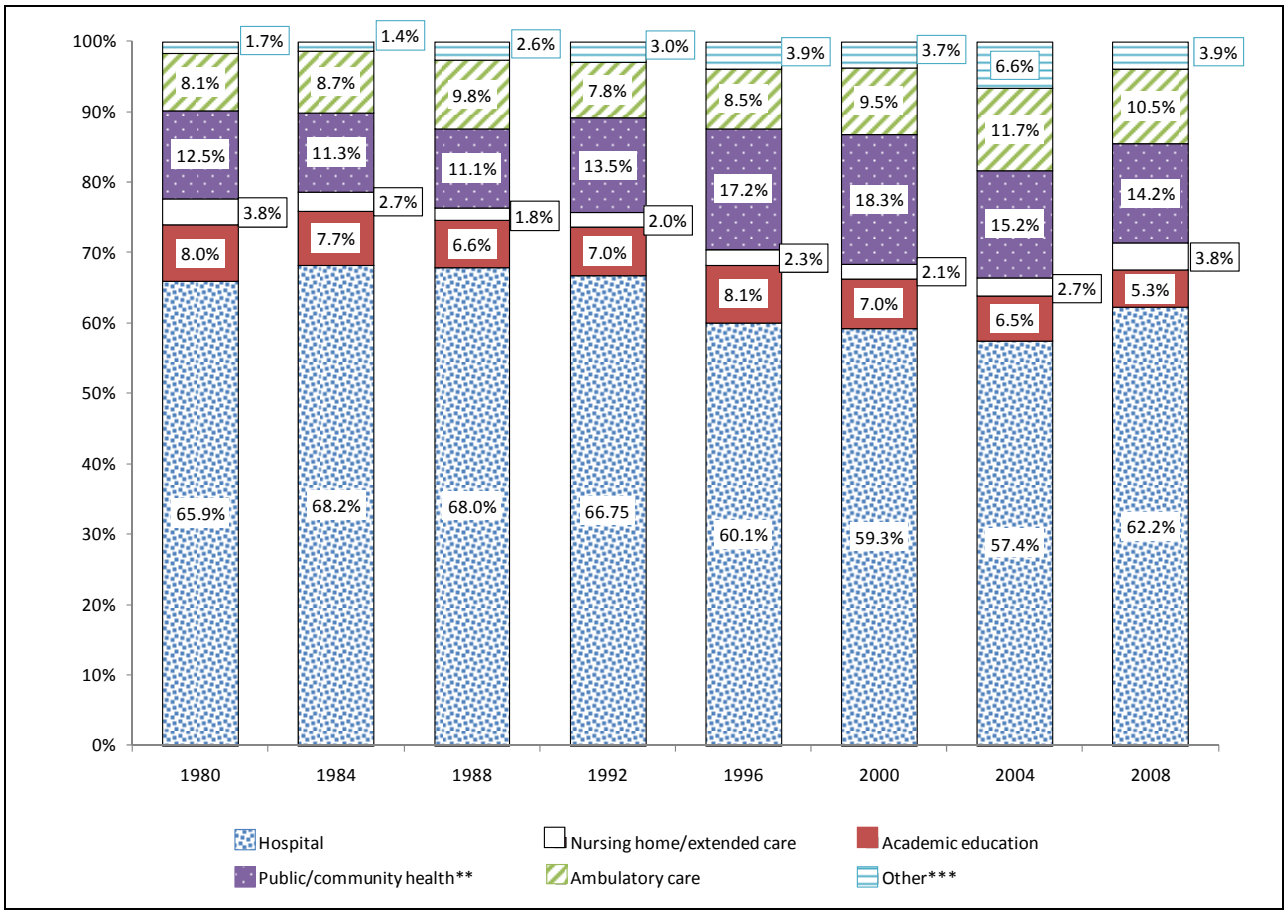
There also was a 68 percent increase from 2004 to 2008 in the percentage of RNs working in home health services from 3.8 percent in 2004 to 6.4 percent in 2008. Between 2004 and 2008, little else changed in the percentage of RNs employed in other settings.

3.5.2 Employment Settings and Age

Registered nurses' employment settings change with nurses' ages (Table 3-2 and Appendix A, Table 13). Nearly 85 percent of RNs under 30 years old work in hospitals, but this percentage declines steadily with age; less than 50 percent of RNs age 55 and older work in hospitals. Hospitals have historically been viewed as offering a good initial career development opportunity for a new RN because new RNs can gain hands-on experience with patients with varied and complex needs while having the support of other experienced clinicians inherent in the hospital setting. Nonhospital settings such as home health, public and community health, nursing homes and extended care, and academic education are employment settings for increasing percentages of the older RN age groups. It is not surprising that RNs working in academic education are older because RNs need to complete graduate education before moving into faculty positions.

[3] Data retrieved from American Hospital Association, Trendwatch Chartbook 2009, available at http://www.aha.org/aha/research-and-trends/chartbook/index.html. This publication lists non-Federal resources in order to provide additional information to consumers. The views and contents in these resources have not been formally approved by the U.S. Department of Health and Human Services (HHS). Listing these resources is not an endorsement by HHS or its components.

Figure 3-9. Employment settings of registered nurses, 1980-2008*



*The total percent by setting may not equal the estimated total of all registered nurses due to incomplete information provided by respondents and the effect of rounding.

**Public/community health includes school health, occupational health, and home health.

***Other includes insurance, benefits, and utilization review.

Source: 1980-2008 National Sample Survey of Registered Nurses

Table 3-2. Employment settings, by age group*

Employment setting	Age group (percent)								
	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over
Hospital	84.5	73.5	68.3	64.7	61.3	55.9	53.0	46.5	35.5
Nursing home/ extended care	2.1	3.4	4.7	4.5	5.6	5.9	6.5	7.6	10.7
Academic education	1.7	1.8	2.4	2.7	3.8	4.5	5.1	6.6	10.5
Home health	2.6	4.3	6.6	6.7	6.7	7.2	7.7	7.8	10.5
Public/community health**	2.7	4.3	4.1	7.4	8.3	9.9	9.9	13.7	14.8
Ambulatory care	5.8	10.6	9.7	10.5	10.7	11.5	12.6	12.1	11.3
Other***	0.8	2.1	4.1	3.6	3.5	5.1	5.2	5.8	6.8

*Percents may not add to 100 due to the effect of rounding. Only registered nurses who provided setting information are included in the calculations used for this table.

**Public/community health includes school and occupational health.

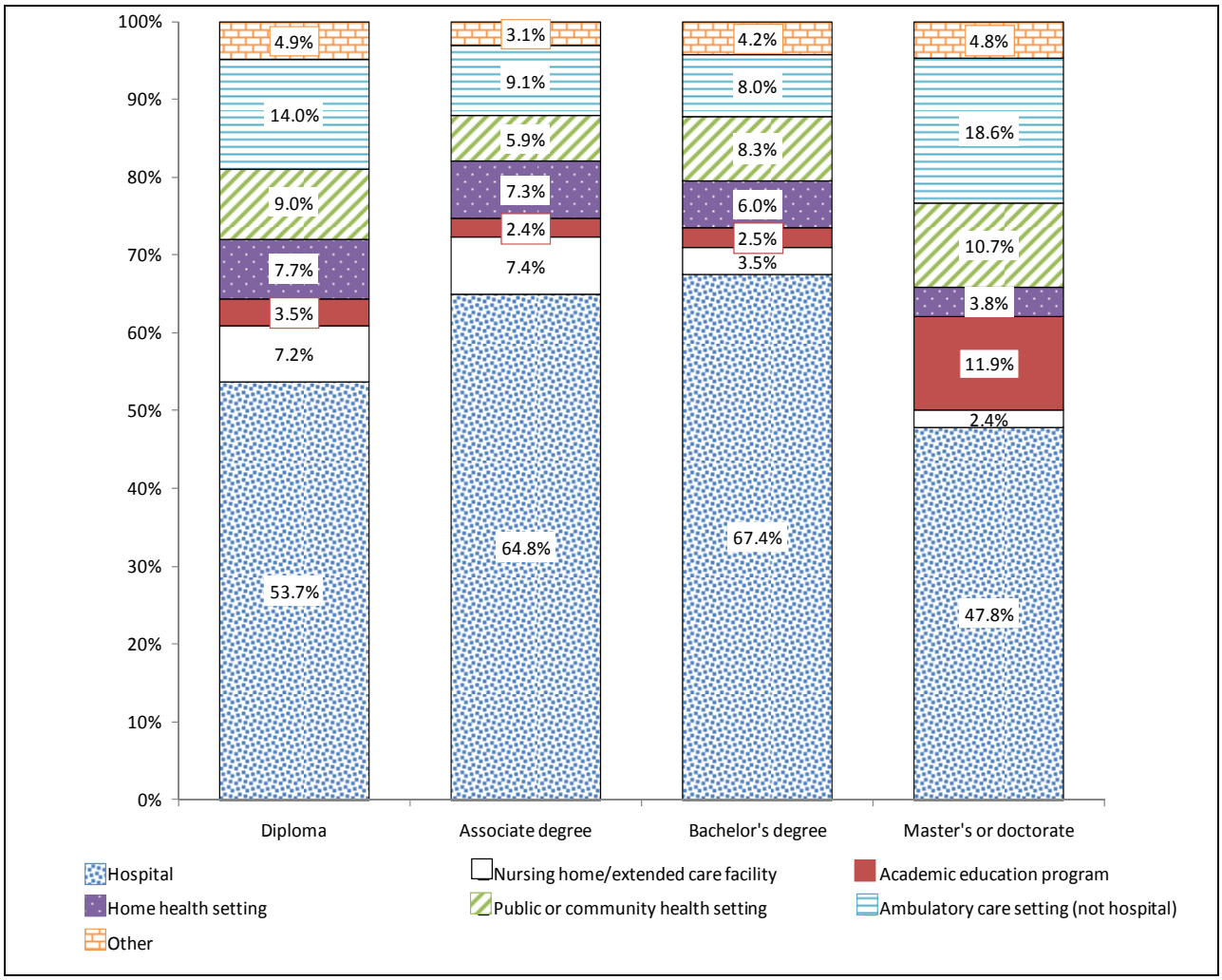
***Other includes insurance, benefits, and utilization review.

Source: 2008 National Sample Survey of Registered Nurses

3.5.3 Employment Settings and Education

The highest level of nursing or nursing-related education varies with employment setting (Figure 3-10 and Appendix A, Table 14). A larger percentage of RNs whose highest education is a bachelor's degree are employed in hospitals as compared to RNs with an ADN or diploma. Fewer than half of RNs with master's or doctorate degrees work in hospitals; more than 18.6 percent are in ambulatory care settings, and nearly 12 percent are in academic education. The relatively high percentage in ambulatory care reflects the large number of advanced practice registered nurses with master's degrees who work in ambulatory settings as discussed in Chapter 5. Among diploma-educated RNs, 14 percent work in ambulatory care settings, and more than 7 percent work in each of long-term care and home health. These results are consistent with the fact that diploma-educated RNs are older than other RNs, on average, and that older RNs are more likely to work in nonhospital settings.

Figure 3-10. Employment settings, by highest nursing or nursing-related education*



*Percents may not add to100 because of rounding. Only those who provided education preparation information are included in the calculations for this figure.

Source: 2008 National Sample Survey of Registered Nurses

3.6 Job Titles

The specific roles of RNs are defined by their job titles within each employment setting. RNs have a variety of roles and job titles. Different settings and employers often use different terminology to describe the same type of work performed by RNs. For example, some hospitals use the title "direct care nurse," while others use the title "staff nurse" even when the work of RNs with these titles is essentially the same. Job titles can indicate the clinical area or expertise of an RN, but even within a clinical area a variety of job titles can be found. Moreover, some RNs work in several roles within

the same facility. For the purposes of the 2008 NSSRN, RNs were asked to report a single job title corresponding to their position.

The most common job title of RNs in the United States is "staff nurse" or an equivalent title (Table 3-3). The percentage of RNs reporting this title increased from 64.1 percent in 2004 to 66.3 percent in 2008. Job titles of RNs in 2008 also included management and administration titles (12.5 percent) and patient coordinator (5.4 percent). The number responding with advanced practice titles (nurse practitioner, clinical nurse specialist, nurse anesthetist, and nurse midwife) were relatively unchanged since 2004.

Table 3-3. Job titles of registered nurses*

Job title	2004 (percent)	2008 (percent)
Staff nurse	64.1	66.3
First-line management	6.2	4.1
Middle management	5.9	6.0
Senior management	2.5	2.4
Patient coordinator	5.5	5.4
Nurse practitioner	3.5	3.8
Clinical nurse specialist	1.2	0.9
Nurse anesthetist	1.1	1.1
Nurse midwife	0.3	0.3
Instruction	2.6	3.7
Patient educator	0.3	0.7
Consultant	1.5	0.9
Researcher	0.8	0.7
Informatics	0.4	0.3
Survey/auditor/regulator	0.5	0.4
Other**	3.5	3.0
Total	100.0	100.0

*Only those who provided job title information are included in the calculations used for this table. The response categories for job title were slightly different across the 2004 and 2008 survey administrations which may account for some of the change in distribution.

**Other includes registered nurses who reported they had no job title.

Source: 2004 and 2008 National Sample Survey of Registered Nurses

3.6.1 Job Titles and Employment Settings

Within hospitals, RNs are most likely to be a staff nurse or have an equivalent title (Appendix A, Table 16). Within nursing homes, 40.5 percent of RNs have management or administration job titles. These titles also are common among RNs in home health settings (20.9 percent). Patient

coordinator job titles are frequently reported in insurance claims/utilization review (40.1 percent) and home health (19.6 percent) employment settings.

3.6.2 Job Titles and Experience

Job titles of RNs change with experience and age, much as do the settings in which they work. A higher percentage of recently graduated RNs have staff nurse job titles, and the percentage of RNs with this title declines with increasing years of experience. The percentage of RNs with advanced practice titles is relatively similar for RNs with 6 or more years of experience (Table 3-4). After 10 years of experience, RNs tend to move from staff nursing to management and other positions, though even after 40 years of experience, 50 percent of RNs reported being staff nurses.

Table 3-4. Job titles, by experience in nursing*

	Years since graduation from initial nursing education								
Job title	5 or fewer years	6 to 10 years	11 to 15 years	16 to 20 years	21 to 25 years	26 to 30 years	31 to 35 years	36 to 40 years	More than 40 years
Staff nurse	88.4	72.2	65.5	63.2	57.3	55.4	53.8	55.2	50.1
First-line management	2.1	4.0	4.6	5.0	4.8	5.6	4.7	3.5	2.8
Middle/senior management	2.2	6.1	8.9	9.4	11.1	11.9	12.0	11.8	11.8
Advance practice registered nurse	2.0	6.2	5.9	5.9	8.4	8.4	8.9	6.3	6.3
Instruction	0.8	3.0	3.6	3.9	4.7	4.5	5.4	5.5	8.0
Other job title	4.6	8.5	11.5	12.5	13.6	14.1	15.2	17.7	21.0

*Percents may not add to 100 because of rounding. Only those who provided job title information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

3.6.3 Job Titles and Education

Nursing and nursing-related education can support registered nurses' career goals and education is associated with RN job titles. More than 69 percent of RNs whose highest education is a nursing diploma, ADN, or bachelor's degree have staff nurse job titles, whereas less than 20 percent of those with graduate degrees hold a staff nurse job title (Table 3-5 and Appendix A, Table 18). Approximately 70 percent of RNs with graduate degrees have advance practice, management, and instruction titles.

Table 3-5. Job titles, by highest nursing or nursing-related education*

Job title	Highest nursing or nursing-related education preparation (percent)			
	Diploma	Associate degree	Bachelor's degree	Master's/ doctorate
Staff nurse	69.7	76.4	71.4	19.4
First-line management	4.6	4.1	4.2	3.4
Middle/senior management	7.7	7.1	7.5	15.5
Certified registered nurse anesthetist	1.0	0.1	0.5	6.1
Clinical nurse specialist	0.5	0.5	0.5	3.2
Certified nurse-midwife	0.1	0.0	0.1	1.5
Nurse practitioner	0.9	0.3	0.4	26.3
Patient educator	0.7	0.6	0.8	0.8
Instruction	1.7	1.5	3.1	13.6
Patient coordinator	7.2	5.2	5.9	3.1
Informatics nurse	0.3	0.3	0.4	0.5
Consultant	1.1	0.5	0.9	1.8
Researcher	0.6	0.5	0.9	0.8
Surveyor/auditor/regulator	0.5	0.4	0.4	0.4
Other	3.5	2.5	3.1	3.4

*Percents may not add to 100 because of rounding. Excludes registered nurses for whom education preparation was not known and registered nurses for whom job title was not known.

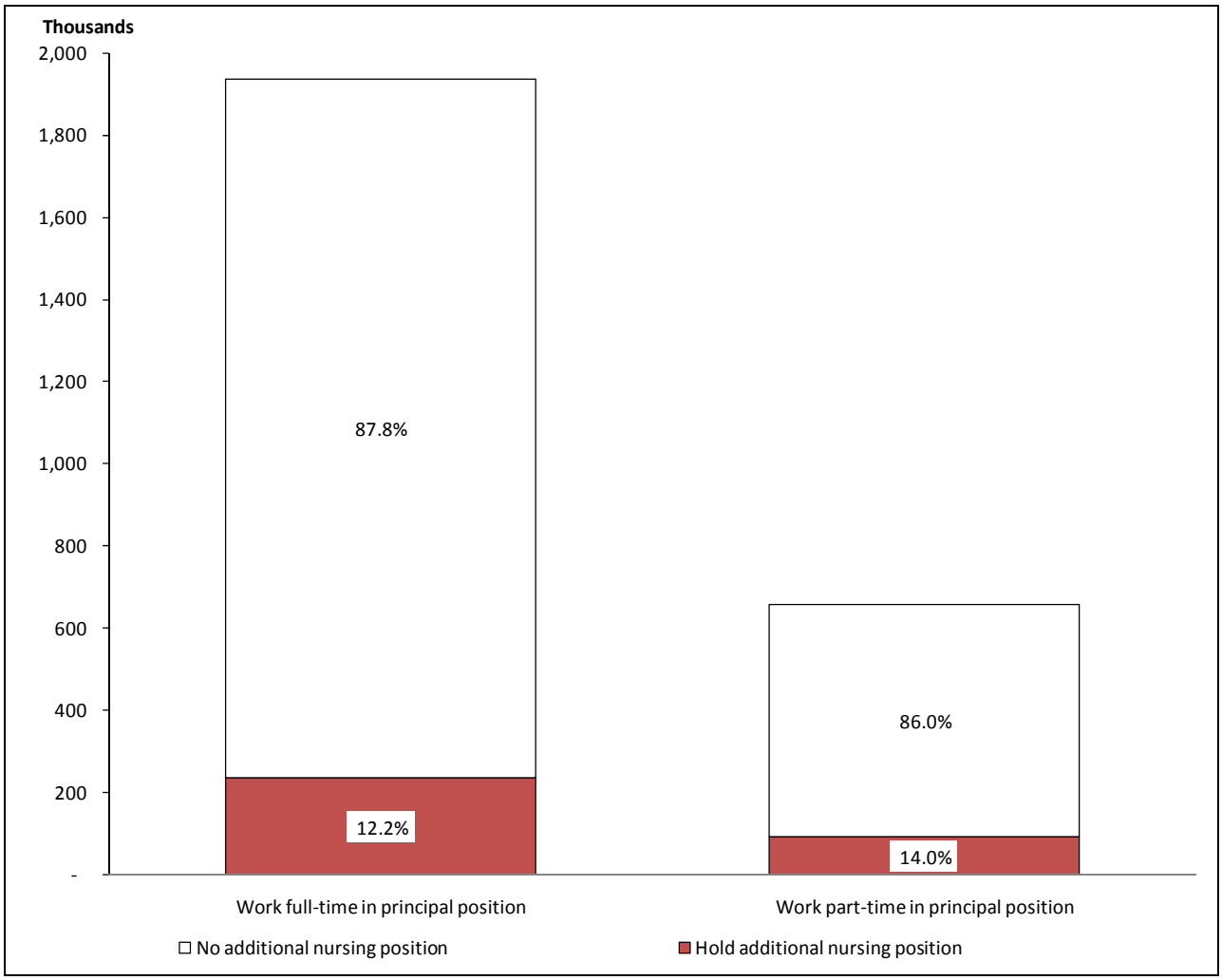
Source: 2008 National Sample Survey of Registered Nurses

3.7 Secondary Nursing Jobs

Overall, 327,259 RNs have more than one nursing position (Appendix A, Table 19), slightly less than the 352,027 who held more than one nursing position in 2004. More than 12 percent of RNs who have a full-time principal nursing position have reported at least one other nursing job, and 14 percent of those with part-time principal positions have reported more than one nursing job (Figure 3-11).

RNs may hold their secondary positions as employees of health care facilities or temporary placement agencies, or as consultants. Some RNs work "per diem" for hospitals, nursing homes, home care agencies, and outpatient facilities as facility employees or through agencies. Per diem employment arrangements allow RNs to work shifts for specific employers on an as needed basis, often without employee benefits but at a slightly higher pay rate than scheduled employees, based on employers' requests and the nurses' willingness to fill these requests. Per diem employment is often possible for all levels of RN clinicians including both staff nurses and advanced practice registered nurses.

Figure 3-11. Registered nurses holding multiple positions, by primary employment status



Source: 2008 National Sample Survey of Registered Nurses

More than half of RNs who hold secondary nursing positions report that, for at least one of their secondary positions, they are regular employees of some firm (Table 3-6). About 36 percent of RNs with secondary nursing jobs report that at least one of these secondary positions is per diem or they are self-employed. Another 8.4 percent of full-time RNs and 4.9 percent of part-time RNs say their secondary nursing jobs involved employment through a temporary placement agency that does not require them to travel long distances for assignments. Agency employment may afford the same flexibility as do per diem arrangements, allowing RNs to work a schedule of their own choosing.

Table 3-6. Employment arrangements in secondary nursing positions*

Secondary nursing position	Principal nursing position (percent)		
	Full-time	Part-time	All nurses with multiple positions
Regular employee	57.1	62.6	58.6
Nontravel agency	8.4	4.9	7.4
Travel agency	1.8	1.3	1.7
Self-employed or per-diem	36.7	36.3	36.6

*Percents will not add to 100 because RNs could select more than one employment arrangement.

Source: 2008 National Sample Survey of Registered Nurses

Hospitals have the largest percent of secondary nursing positions, with 43.3 percent of RNs who have secondary nursing employment working in this setting (Table 3-7). Ambulatory care secondary positions are reported by 13.5 percent of RNs who have secondary employment, while home health is reported by 11.4 percent. Academic education is another setting for secondary employment (10.6 percent); employment in academic education is discussed in more detail in Chapter 4.

Table 3-7. Employment settings of secondary nursing positions*

Employment setting	Percent
Hospital	43.3
Nursing home/extended care	9.4
Academic education program	10.6
Home health	11.4
Public/community health	7.2
School health services	4.4
Occupational health	1.7
Ambulatory care	13.5
Insurance claims/benefits	1.5
Telehealth/telenursing/call center	0.8
Military/reserves/national guard	1.0
Medical legal	0.7
Consultant/contractor	0.9
Other	1.4

*Percents will not add to 100 because RNs could select more than one secondary employment setting.

Source: 2008 National Sample Survey of Registered Nurses

3.8 Supply of Registered Nurses

The amount of hours that RNs work per week and per year are measures of the supply of nursing services available for patient care, management, and other services. In the 2008 NSSRN, RNs were asked to report the number of months they work per year in their principal nursing position and the

number of weeks they work per year in their secondary nursing positions. RNs also were asked about the number of hours per week they work in each of their nursing positions.

The vast majority of RNs (92.7 percent) report that they work at least 11 months per year in their principal nursing position (Figure 3-12). This level of employment is equivalent to full-year employment for most positions. Another 5 percent of RNs work 9 to 10 months per year, which is full-year for the academic or school calendar. The remaining 2.3 percent work 8 or fewer months per year.

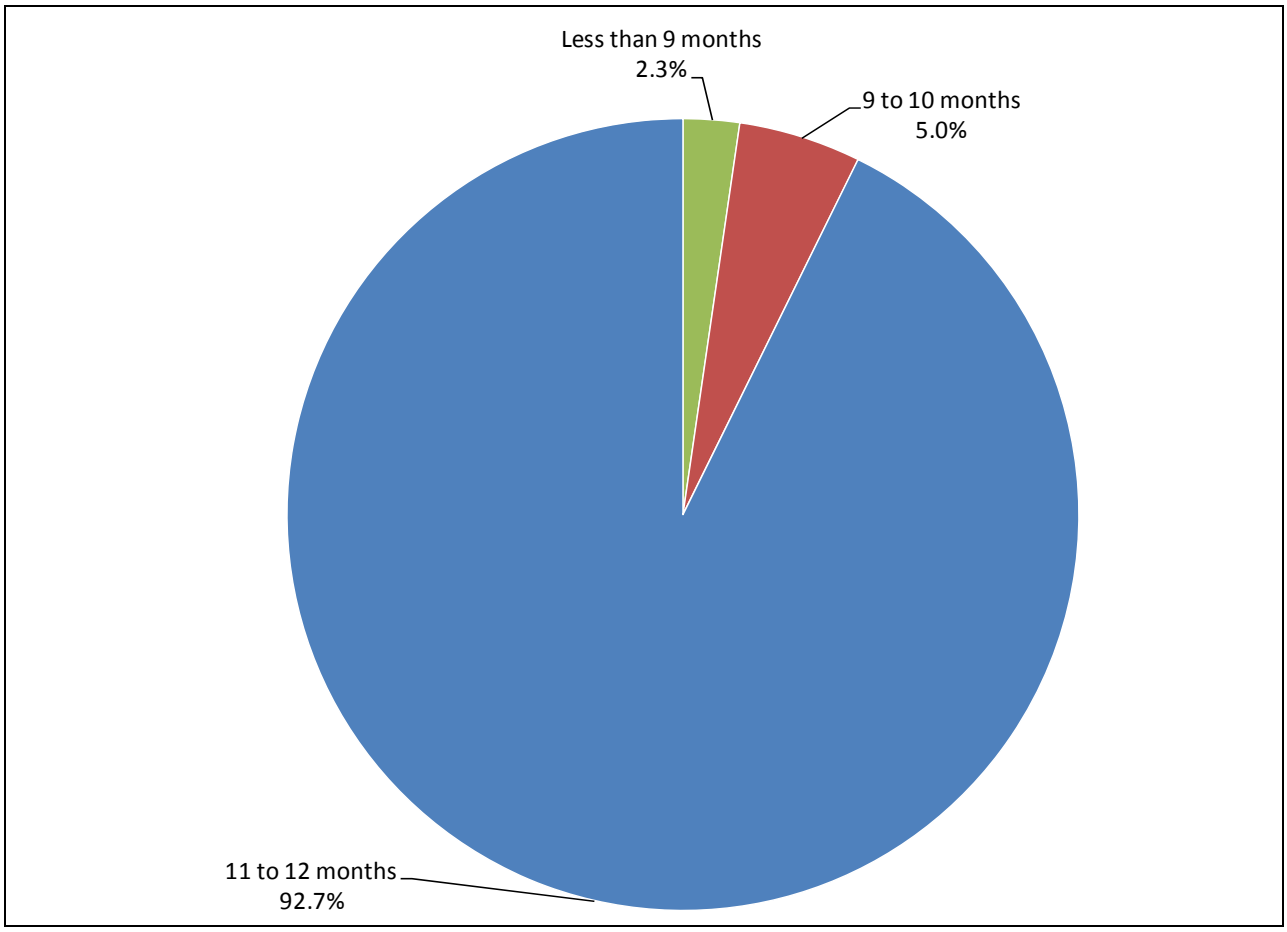
More than half of RNs work at least 2,000 hours per year in their nursing positions (54.2 percent).[4] Only 7.6 percent of employed RNs work fewer than 1,000 hours per year in nursing (Figure 3-13). More than half of RNs work at least 40 hours per week in their principal nursing position (Figure 3-14), and another 24.2 percent work 32 to 39 hours per week. Some hospitals use 12-hour shifts for their schedules and consider three 12-hour shifts per week (36 hours) a full-time position. In this arrangement, RNs who choose to work one extra shift per week will normally work 48 hours. Only 4.5 percent of RNs work fewer than 16 hours per week in their principal nursing position; this is consistent with the small percentage of RNs that work fewer than 1,000 hours per year. RNs work an average of 1,944 hours per year in their principal nursing position (Appendix A, Table 20). Almost 17 percent of RNs work more than 2,500 hours per year.

RNs who hold one additional nursing position work an average of 29.6 weeks per year and 15.2 hours per week in their second job (Table 3-8). These data indicate that many RNs work only part of the year and part of the week in their second positions. RNs who work in third jobs average only 23.1 weeks per year and 11.7 hours per week, while those who work four and more jobs work even fewer hours in these additional jobs.

RNs employed in multiple nursing positions work more hours per year than do those with only one nursing position (Table 3-9). However, RNs employed in four or more positions work fewer hours per year on average than do RNs with three positions, suggesting that RNs with more positions may work several part-time positions.

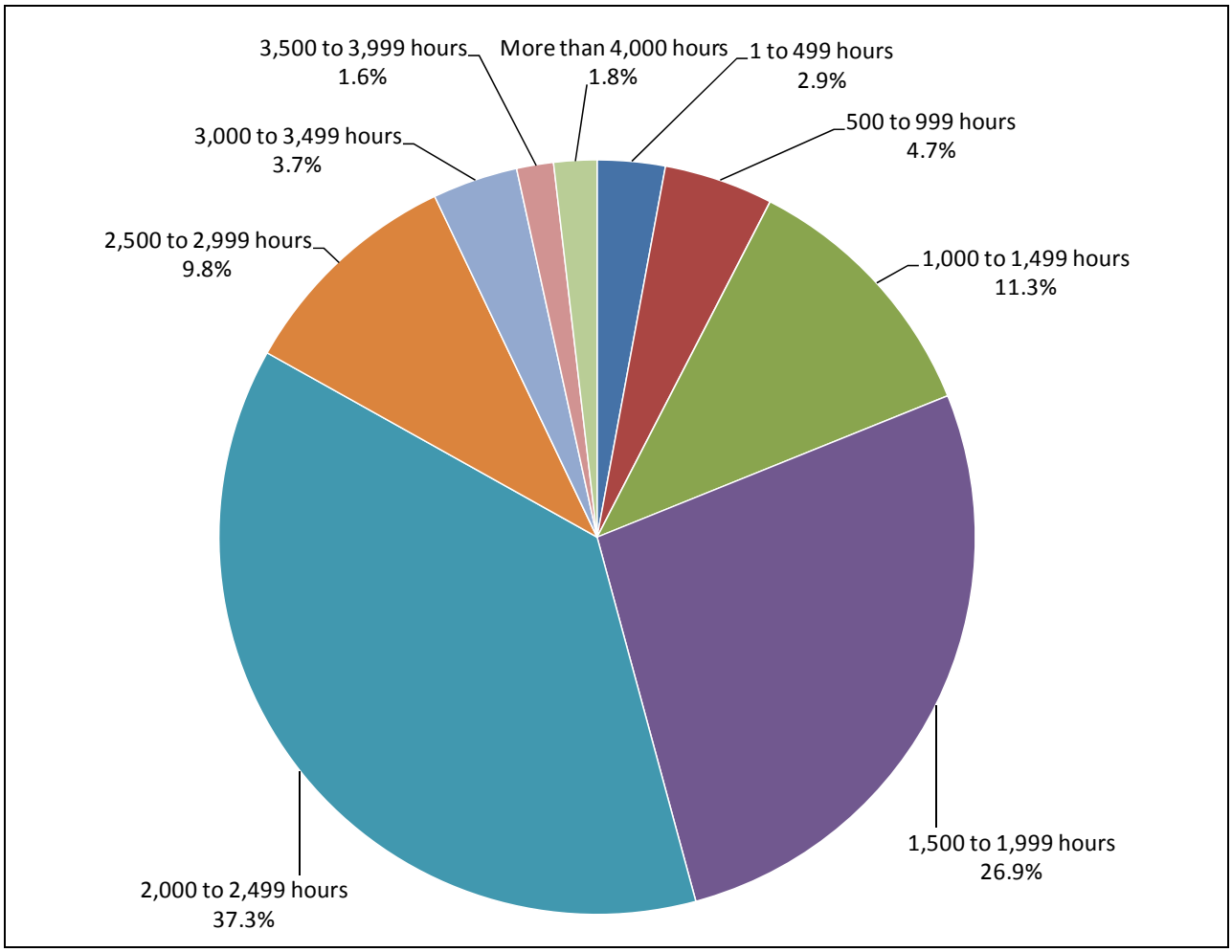
[4] A full-time position of 40 hours per week for 52 weeks is equal to 2080 hours per year. A registered nurse who works 48-50 weeks per year, allowing for vacation time, at 40 hours per week would work from 1920–2000 hours per year.

Figure 3-12. Months worked per year in principal nursing position



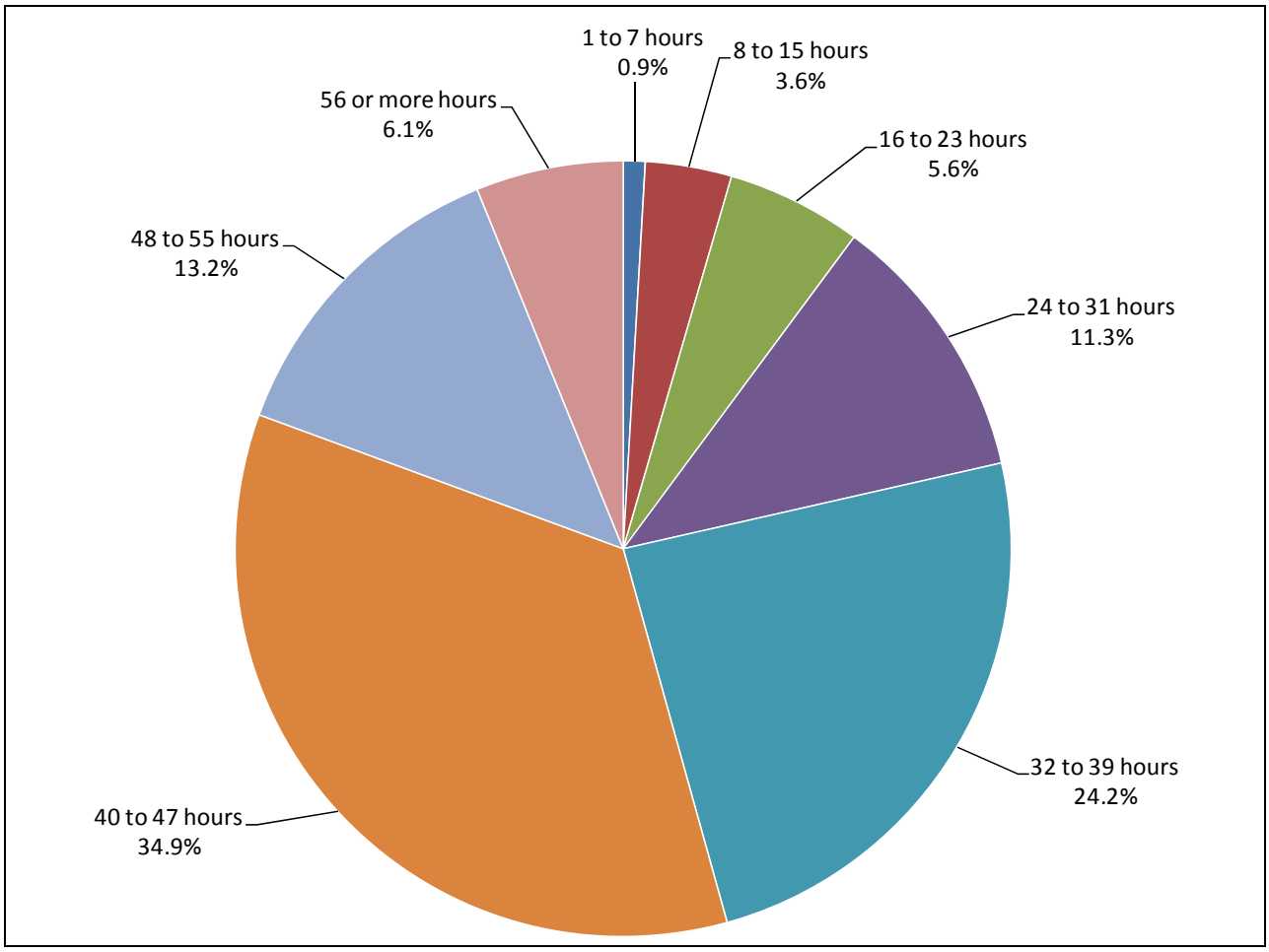
Source: 2008 National Sample Survey of Registered Nurses

Figure 3-13. Hours worked per year in all nursing positions



Source: 2008 National Sample Survey of Registered Nurses

Figure 3-14. Hours worked per week in principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

Table 3-8. Average hours and weeks worked in secondary nursing positions

	Weeks per year	Hours per week
Second nursing job	29.6	15.2
Third nursing Job	23.1	11.7
Fourth or more nursing jobs	11.9	7.8

Source: 2008 National Sample Survey of Registered Nurses

Table 3-9. Average hours per year worked in all nursing jobs, by number of nursing jobs

	Average hours worked per year
One nursing job	1,945.4
Two nursing jobs	2,349.9
Three nursing jobs	2,859.7
Four or more nursing jobs	2,519.4

Source: 2008 National Sample Survey of Registered Nurses

3.8.1 Hours and Weeks Worked and Age Group

RNs tend to work fewer hours as they grow older, in addition to being less likely to work in nursing (Table 3-10). RNs through age 60 worked, on average, more than 2,000 hours per year. After age 65, the average number of hours per year drops rapidly. Still, RNs who are 65 years or older do work an average of 1,393 hours of nursing work per year.

Table 3-10. Average hours worked per year in all nursing positions, by age group

Age group	Average hours worked per year
Under 30	2,020.2
30-34	2,005.7
35-39	2,007.2
40-44	2,003.5
45-49	2,095.0
50-54	2,092.0
55-59	2,047.0
60-64	1,826.9
65 and over	1,392.7

Source: 2008 National Sample Survey of Registered Nurses

3.8.2 Hours and Weeks Worked and Highest Education

The number of hours per year that RNs work in nursing positions is least for RNs whose highest nursing or nursing-related education is a diploma (Table 3-11). This is not surprising, since the average age of diploma-educated RNs is higher than for RNs with other types of education and older RNs work less hours. RNs with master's and doctorate degrees report the most hours worked per year. These are RNs who are also likely to be managers, faculty, or advanced practice registered nurses.

Table 3-11. Average hours worked per year in all nursing positions, by highest nursing and nursing-related education

Degree	Average hours worked per year
Diploma	1,864.9
Associate degree	2,047.1
Bachelor's degree	1,966.6
Master's or doctorate	2,122.7

Source: 2008 National Sample Survey of Registered Nurses

3.8.3 On-Call Work

Some RNs work in an "on-call" arrangement for at least some of their total hours. In this type of arrangement, an RN is not physically present at an employer's facility (or at a patient's home in the case of hospice or home care services) but is available to be on-call to work during a prescheduled time. For example, a surgical nurse or nurse anesthetist might be on-call to assist in a surgery between 8 p.m. and 6 a.m. or a nurse midwife may be on-call for deliveries at night or on weekends. Often advanced practice primary care nurses take telephone calls for patient care issues after normal hours. RNs can be paid additionally for these on-call hours usually at a lower rate than is paid for regular work. However, if the RN is called in to work, the RN is paid the normal hourly rate often with an added premium for working after normal scheduled hours. Sometimes, if an RN works in a salaried position, the RN may be on-call but may not receive additional hourly standby pay.

In their principal nursing positions, 19.1 percent of RNs report that they worked on-call or were on standby in a typical work week. Most RNs who reported any on-call activity indicated that they were on standby or worked 20 or fewer hours in a typical week (Table 3-12). RNs who had any on-call activity indicated that they were called to work an average of 12.5 hours per week. They were on standby without being called to work an average of 23.1 hours per week. An average of 14 percent of on-call hours were paid at a standby rate.

Table 3-12. Average hours on standby or worked from on-call per week in the principal nursing position

Hours	Percent
0 hours	80.9
1 to 20 hours	12.2
21 to 40 hours	3.8
41 to 60 hours	1.4
61 or more hours	1.6
Total	100.0

Source: 2008 National Sample Survey of Registered Nurses

3.8.4 Overtime Work

Typically, RNs paid on an hourly wage basis may be paid for overtime work beyond 40 hours a week and may be compensated at a premium rate. Salaried RNs normally do not receive additional payment for overtime work but may sometimes take paid extra time off later to compensate for working extra hours. While overtime work is ideally a match between an employer's need for

additional effort and the nurse's willingness to provide additional hours, sometimes RNs are required to work overtime ("mandatory overtime"). Mandatory overtime may sometimes be voluntarily accepted as part of the employment arrangement, rather than being totally involuntary. Moreover, in States or facilities where RNs are unionized, overtime may be subject to union contract.

The majority of RNs do not work overtime. Among RNs employed full-time in nursing positions, 27.5 percent report that they worked overtime and received pay for such work (Appendix A, Table 21). Mandatory overtime was reported by 7 percent of RNs. RNs work an average of 7.5 overtime hours per week and averaged 6.6 hours per week of mandatory overtime.

3.8.5 Hours Worked and Employment Setting

The number of hours RNs work per week and per year varies across employment settings (Table 3-13 and Appendix A, Tables 20, 21, and 22).

- RNs whose principal nursing position is in a school health setting reported the fewest hours per year, with an average of 1,443 hours per year; this low work rate is likely related to their work schedules being based on an academic calendar and the holidays, vacation periods, and other time off related to the school calendar. They also reported the fewest hours worked per week, averaging 39 hours for full-time RNs.
- The greatest number of average hours RNs worked per year in their principal nursing position (2,107 hours) was in nursing homes and extended care facilities.
- Among RNs working full-time, the greatest number of hours per week was reported by RNs whose principal position was in a nursing home (45.8), followed by those in home health (45.3).
- For RNs working part-time, the greatest number of hours per week was reported by RNs whose principal position was in a hospital (25.2), followed by home health (24.4).
- The average number of hours worked per week in principal nursing positions was more than 40 for full-time RNs in all settings, except those in school health.

Table 3-13. Average hours per week in principal nursing position, by full-time/part-time status and employment setting

Employment setting	Mean hours/week full-time nurses	Mean hours/week part-time nurses
All settings	42.9	24.1
Hospital	42.6	25.2
Nursing home/extended care	45.8	22.4
Academic education	44.0	22.8
Home health	45.3	24.4
Public/community health	42.7	21.6
School health	39.0	18.9
Occupational health	42.4	22.5
Ambulatory care	42.5	22.3
Insurance/benefits/utilization review	43.1	21.0
Other	45.1	23.0

Source: 2008 National Sample Survey of Registered Nurses

Overtime work was more common among RNs who worked in hospital settings than among those in other settings; 33.8 percent of full-time hospital RNs reported that they worked paid overtime, with an average of 7.5 hours per week (Appendix A, Table 21). Mandatory overtime was reported by 8.2 percent of these RNs, averaging 6.4 hours per week. Among part-time RNs who worked in hospital settings, 19.9 percent worked paid overtime, with an average of 5.5 hours per week. Only 3.7 percent reported any mandatory overtime, with those who worked mandatory overtime averaging 4.5 hours per week (Appendix A, Table 22). On-call work was most prevalent in nonhospital work settings.

- The settings in which the fewest full-time RNs reported that they worked paid overtime were school health and insurance claims. In all other settings, at least 10 percent of RNs worked some paid overtime.
- After hospital-based RNs, full-time home health RNs were the second most likely group to report that they worked mandatory overtime (7.9 percent).

Full-time RNs in home health settings reported the highest rate of on-call hours (30.1 percent), with the second-highest percentage being among those in nursing homes and extended care facilities (15.9 percent) (Appendix A, Table 21).

- Full-time RNs in home health settings also had the highest rate of standby on-call hours, with 25.5 percent listing that they had some standby hours.
- Full-time RNs who worked in ambulatory care settings and had some standby hours (6.9 percent) reported an average of 40.9 standby hours per week. Less than half of these RNs were paid at a standby rate.

- Full-time home health RNs had the highest percentage of RNs whose standby hours were paid.

3.8.6 Hours Worked and Job Title

The number of hours that RNs work per week, which includes overtime and on-call hours worked, is associated with job title (Table 3-14).

Table 3-14. Average hours per week in principal nursing position, by full-time/part-time status and job title*

Job title	Mean hours/week full-time nurses	Mean hours/week part-time nurses
Staff nurse	41.6	24.4
First-line management	46.3	24.2
Middle/senior management	48.1	25.3
Consultant	46.2	21.7
Instruction	43.8	21.1
Nurse practitioner	44.2	24.3
Nurse midwife	48.7	23.1
Clinical nurse specialist	43.9	25.8
Nurse anesthetist	45.1	26.4
Researcher	42.6	23.9
Informatics	45.6	21.7
Surveyor/auditor/regulator	42.2	24.7
Patient coordinator	43.2	24.6
Patient educator	40.0	21.3
Other	42.5	20.6

*Excludes registered nurses for whom job title was not known.

Source: 2008 National Sample Survey of Registered Nurses

- Full-time staff nurses work an average of 41.6 hours per week, which is less than the average for all job titles except patient educators.
- The greatest number of hours per week is worked by full-time RNs with nurse midwife job titles (48.7 hours), followed by those with middle or senior management job titles (48.1 hours).
- Among part-time RNs, those with the greatest number of average hours per week are nurse anesthetists (26.4 hours), followed by clinical nurse specialists (25.8 hours), and nurses in middle or senior management positions (25.3 hours).

3.9 Employment Settings and Level of Care

RNs work in a variety of clinical settings, providing care at different levels of acuity or patient need. Tables 3-15, 3-16, and 3-17 present data on the level of care, types of patients, and clinical specialties of nurses. (Further detail can be found in Appendix A, Tables 23, 24, 25, and 26.)

Table 3-15. Levels of care in nursing work for hospital and nonhospital settings*

Level of care	Hospital setting (number)	Hospital setting (percent)	Nonhospital setting (number)	Nonhospital setting (percent)
General or specialty inpatient	595,742	37.9	101,768	10.8
Critical/intensive care	328,932	20.9	15,265	1.6
Step down/transitional/progressive/telemetry	187,973	12.0	8,707	0.9
Subacute care	44,131	2.8	25,258	2.7
Emergency	174,635	11.1	24,194	2.6
Urgent care	22,717	1.4	26,190	2.8
Rehabilitation	45,278	2.9	39,569	4.2
Long-term care/nursing home	17,610	1.1	134,362	14.2
Surgery	304,117	19.3	70,671	7.5
Ambulatory care	136,200	8.7	221,145	23.5
Home health	3,969	0.3	151,332	16.0
Public/community health	8,042	0.5	116,892	12.4
Education	61,002	3.9	117,291	12.4
Business/administration/review	93,509	5.9	133,281	14.1
Other**	43,548	2.8	30,819	3.3
Total number of registered nurses	1,571,861		943,026	

*Only registered nurses who provided setting and level of care information are included in the calculations used for this table. Percents add to more than 100 as RNs may have reported more than one level of care.

**Other level of care/type of work includes ancillary care, research, informatics, flight nurse, and other.

Source: 2008 National Sample Survey of Registered Nurses

Among RNs who worked in hospital settings, the largest percentage (37.9 percent) worked in general or specialty inpatient environments, followed by 20.9 percent of RNs who worked in critical or intensive care, and 19.3 percent who worked in surgical services.

Among RNs in nonhospital settings, the most common nonhospital level of care is ambulatory care (23.5 percent), followed by home health (16 percent of nonhospital RNs). Nearly 11 percent of RNs who do not work in hospitals report that they spend the majority of their time in a general or specialty inpatient setting. The largest percentage of these RNs work in school health (35.3 percent) and academic education (21.4 percent).

RNs care for patients across the age span in all settings (Table 3-16). Among RNs who worked in hospital settings, more than half reported that they spend at least 50 percent of their patient care time with adult patients (56 percent). Geriatric patients are the second most commonly reported patient population in hospital settings, with 11.9 percent of RNs spending the majority of time with these patients. Slightly more than 10 percent of hospital-based RNs provided care for children.

Among RNs employed in nonhospital settings, adult patients consume roughly one-third of RN time for patient care. An additional 25 percent of RN time is devoted to geriatric patients. Pediatric and adolescent patients are the majority of patients for 13.4 percent of nonhospital RNs probably reflecting school based and home care nursing populations.

Table 3-16. Primary patient age group cared for in principal nursing position, for hospital and nonhospital settings*

Patient Type	Hospital setting (number)	Hospital setting (percent)	Nonhospital setting (number)	Nonhospital setting (percent)
Adult	891,482	56.0	342,703	35.5
Geriatric	189,969	11.9	240,652	25.0
Prenatal	34,119	2.1	13,116	1.4
Newborn or neonatal	88,723	5.6	6,368	0.7
Pediatric/adolescent	90,185	5.7	129,546	13.4
Multiple age groups	192,472	12.1	88,587	9.2
No patient care	104,312	6.6	143,255	14.9
Total number of nurses	1,591,261	100.0	964,227	100.0

*Only registered nurses who provided setting and patient type information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

Table 3-17 presents the clinical specialty in which RNs spend most of their time in their principal nursing position.

Among RNs who worked in hospital settings, the most common clinical area is general medical or surgical care, in which 29.3 percent of RNs provide care. Critical care and cardiac/cardiovascular care are common clinical specialties for hospital-employed RNs, with 19.2 and 16.7 percent of RNs, respectively.

Among RNs working in nonhospital settings, the most common clinical area is general medical or surgical care (21.1 percent), with primary care being reported by nearly as many RNs (19.7 percent). A relatively high percentage of nonhospital RNs report that their primary clinical area is chronic care

(13.6 percent), indicating that RNs may be providing care to chronically ill patients in homes and extended care facilities.

Table 3-17. Primary clinical specialty in principal nursing position for hospital and nonhospital settings*

Clinical Specialty	Hospital setting (number)	Hospital setting (percent)	Nonhospital setting (number)	Nonhospital setting (percent)
Critical care	301,271	19.2	16,465	2.0
Cardiac care	262,175	16.7	46,518	5.7
Chronic care	60,237	3.8	110,942	13.6
Emergency/trauma care	186,451	11.9	31,888	3.9
Gastrointestinal	85,806	5.5	34,610	4.2
General medical surgical	459,315	29.3	172,075	21.1
Gynecology (women's health)	60,739	3.9	37,878	4.6
Hospice	22,459	1.4	58,713	7.2
Infectious/communicable disease	50,647	3.2	44,084	5.4
Labor and delivery	86,271	5.5	8,180	1.0
Neurological	67,151	4.3	17,771	2.2
Obstetrics	102,300	6.5	30,296	3.7
Oncology	89,611	5.7	29,919	3.7
Primary care	57,861	3.7	161,041	19.7
Psychiatric/mental health	79,638	5.1	53,130	6.5
Pulmonary/respiratory	85,602	5.5	34,774	4.3
Renal/dialysis	57,094	3.6	31,295	3.8
Other specialty**	95,595	6.1	140,565	17.2
No patient care	17,526	1.1	42,628	5.2
Total number of nurses	1,566,645		816,982	

*Only registered nurses who provided setting and clinical specialty information are included in the calculations used for this table. Percents add to more than 100 as registered nurses may report more than one clinical specialty.

**Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, radiology, urology, no specific area, and other specialties.

Source: 2008 National Sample Survey of Registered Nurses

3.9.1 Education and Areas of Clinical Specialty

An RN's highest nursing or nursing-related education is associated with the clinical specialty in which the RN works (Table 3-18).

- General medical-surgical care is the most common specialty of RNs, regardless of education. However, the percentage in this area is lower for RNs with graduate degrees.
- RNs with master's degrees and doctorates are more likely to work in primary care (19.2 percent) than are RNs at other education levels. They also are more likely to work in gynecology/women's health (6.2 percent), obstetrics (6.9 percent), and mental health

(8.9 percent). These are fields in which advanced practice registered nurses with graduate degrees often have specific preparation.

- RNs with bachelor's degrees are more likely to work in critical care (17.4 percent), cardiac care (15.0 percent), labor and delivery (4.6 percent), neurological (4.1 percent), and oncology (6.1 percent) than are RNs with other education preparation.
- RNs with ADNs are more likely to work in general medical surgical care (29.3 percent), chronic care (8.5 percent), emergency/trauma (10.7 percent), hospice (4.1 percent), infectious disease (4.3 percent), pulmonary/respiratory (5.7 percent), and renal/dialysis (4.6 percent) than are RNs with other education preparation.
- RNs with diplomas are somewhat more likely to work in gastrointestinal (6 percent) than are other RNs. More than 10 percent work in primary care.

Table 3-18. Primary clinical specialty in principal nursing position, by highest nursing and nursing-related education*

Clinical Specialty	Diploma (percent)	Associate degree (percent)	Bachelor's degree (percent)	Master's or doctorate (percent)
Critical care	10.6	12.8	17.4	9.5
Cardiac care	11.1	14.1	15.0	9.4
Chronic care	7.6	8.5	6.5	7.2
Emergency/trauma care	7.6	10.7	9.7	7.3
Gastrointestinal	6.0	5.7	5.2	3.3
General medical surgical	27.6	29.3	27.2	23.9
Gynecology (women's health)	4.8	4.1	3.8	6.2
Hospice	3.8	4.1	3.3	2.3
Infectious/communicable disease	3.7	4.3	4.2	4.1
Labor and delivery	3.7	4.0	4.6	3.6
Neurological	2.7	3.8	4.1	3.5
Obstetrics	6.6	5.1	5.9	6.9
Oncology	4.7	4.5	6.1	5.2
Primary care	10.4	8.4	7.8	19.2
Psychiatric/mental health	5.9	6.4	4.3	8.9
Pulmonary/respiratory	4.9	5.7	5.5	3.6
Renal/dialysis	2.9	4.6	4.0	2.2
No patient care	3.1	2.1	2.7	4.1
Other specialty**	12.0	10.3	9.8	10.5

*Only registered nurses who provided clinical specialty and highest education information are included in the calculations used for this table. Percents add to more than 100 as registered nurses may have reported more than one clinical specialty.

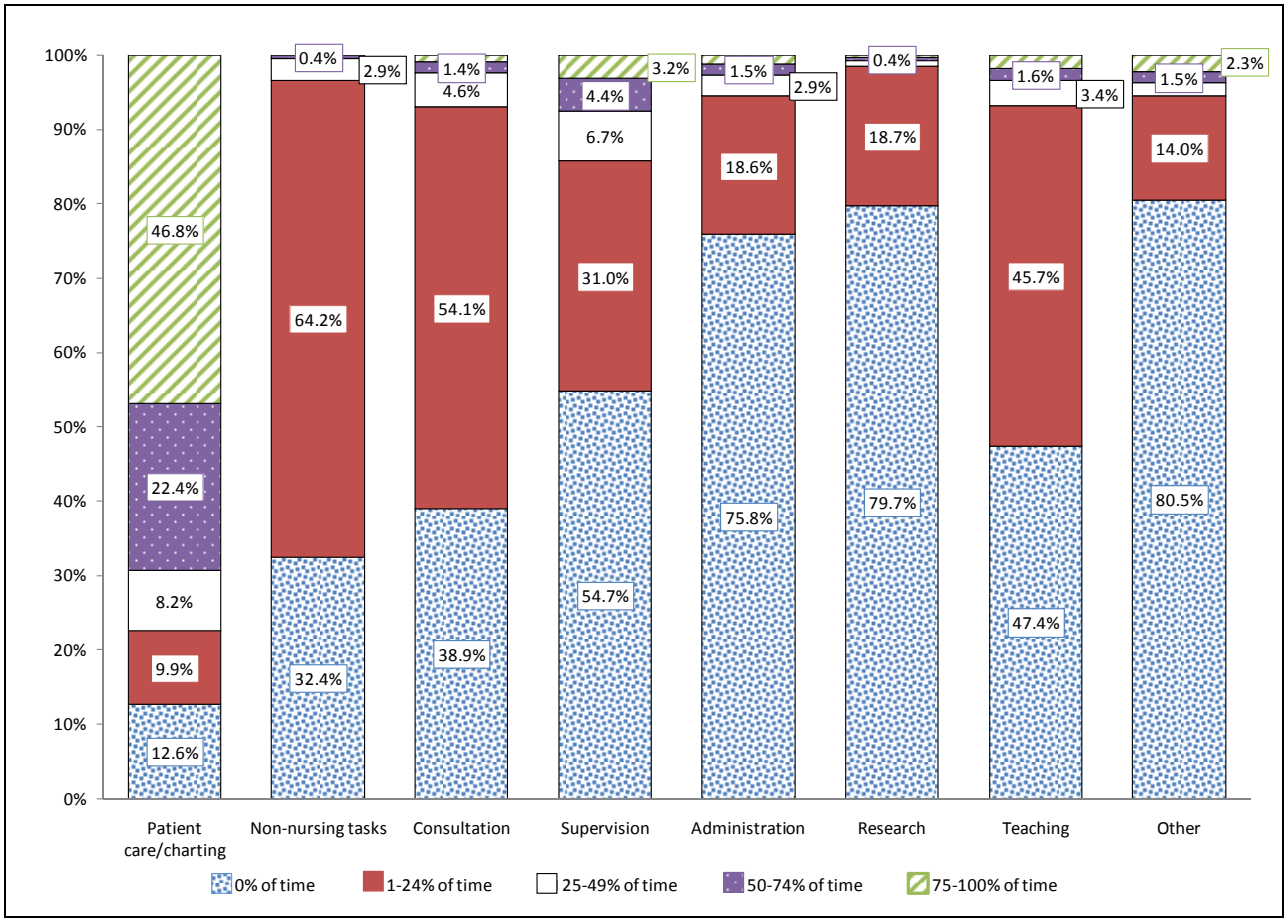
**Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, radiology, urology, no specific area, and other specialties.

Source: 2008 National Sample Survey of Registered Nurses

3.10 Composition of Nursing Work

RNs spend the majority of their time performing direct patient care and recordkeeping related to patient care called "charting" (Figure 3-15 and Appendix A, Table 27). Nearly half of RNs (46.8 percent) spend at least 75 percent of their day in these activities, and nearly 70 percent spend at least half their day in this area.

Figure 3-15. Time spent by registered nurses in various activities



Source: 2008 National Sample Survey of Registered Nurses

Non-nursing tasks, which include housekeeping and searching for supplies do not appear to be significant tasks for RNs; only 3.3 percent of RNs reported that non-nursing activities occupy 25 percent or more of their time.

Consultation with other professionals and agencies occupies at least 25 percent of the time of 7 percent of RNs. Nearly 40 percent of RNs do not engage in consultation at all (38.9 percent).

Teaching, precepting, or orienting students or new hires occupies at least some work time of 52.6 percent of RNs. Only 6.9 percent of RNs say they spend at least 25 percent of their time in teaching-related activities.

3.10.1 Composition of Work and Job Title

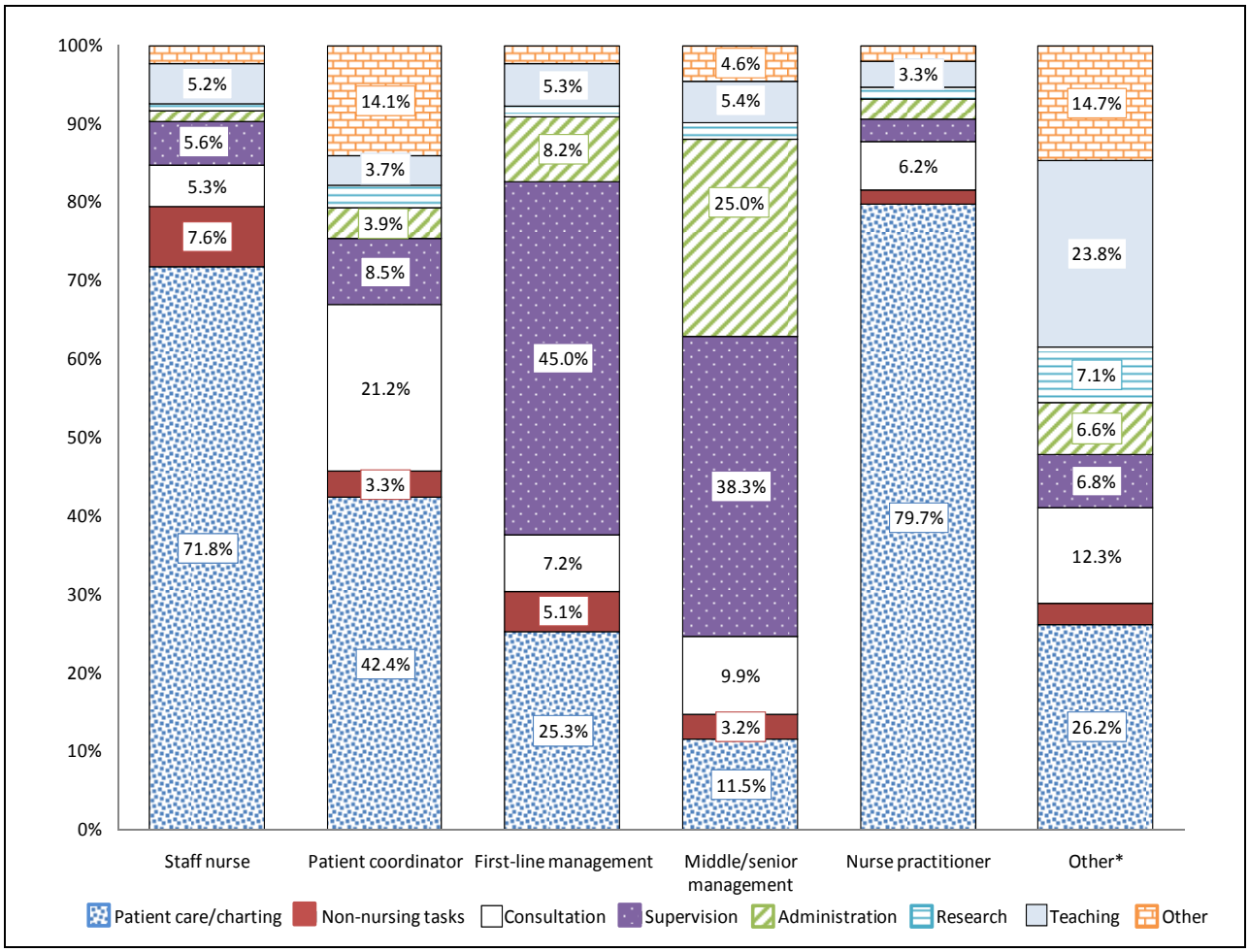
The activities of RNs vary by job title (Figure 3-16).

- Staff nurses spend an average of 71.8 percent of their time performing patient care and keeping patient care records. Non-nursing tasks occupy an average of 7.6 percent of staff nurse time.
- RNs in first-line management positions spend an average of 45 percent of their time supervising others and 25.3 percent of their time providing patient care and charting.
- Middle and senior managers spend an average of 38.3 percent of their time in supervision, 25 percent performing administrative responsibilities, and 11.5 percent providing patient care and charting. An average of 9.9 percent of their time is spent consulting with other providers or agencies.
- Nurse practitioners spend an average of 79.7 percent of their time providing patient care and charting patient care information.

3.10.2 Composition of Work and Education

The highest nursing or nursing-related education of RNs is associated with the activities performed by RNs (Table 3-19 and Appendix A, Table 28). While RNs with graduate degrees spend less time doing patient care and charting on average than do other RNs, this is probably associated with the fact that RNs who are managers and educators would have less patient care activities than staff nurses. Only nurse practitioners, nurse midwives, and nurse anesthetists would have patient contact similar to staff nurses (Table 3-5).

Figure 3-16. Time spent by registered nurses in various activities, by job title



*Excludes registered nurses for whom job title was not known.

Source: 2008 National Sample Survey of Registered Nurses

Table 3-19. Average percent time spent on various activities, by highest nursing or nursing-related education

Functional Area	Diploma	Associate degree	Bachelor's degree	Master's degree	Doctorate
Patient care/charting	60.3	61.4	58.1	48.2	18.1
Non-nursing tasks	6.0	6.9	6.5	3.0	1.6
Consultation	7.2	6.7	7.9	8.9	8.8
Supervision	10.3	9.9	10.2	10.7	8.7
Administration	3.3	3.2	3.9	9.7	19.6
Research	1.5	1.7	1.9	2.5	9.7
Teaching	5.6	6.1	7.0	12.4	26.7
Other	6.0	4.1	4.6	4.7	6.7

Source: 2008 National Sample Survey of Registered Nurses

3.11 Temporary and Travel Work

An estimated 88,495 RNs, or 3.4 percent of all employed RNs, are employed through temporary employment agencies. Temporary agencies may provide either temporary local placements for RNs, often on a per-shift basis, or short- to mid-term placements with nonlocal employers. The latter type of agency focuses on "travel" placements that typically last from 3 months to 1 year and often occur in a State other than where the travel RN resides.

About 2.5 percent of RNs employed in hospital settings report that they are employed by a temporary service for their principal nursing position, and 1 percent say they are employed by a temporary service for at least one secondary nursing position (but not their principal position) (Table 3-20 and Appendix A, Table 29). Temporary agency employment is somewhat more common among RNs whose principal nursing position is in a hospital.

Table 3-20. Employment by temporary employment services (TES), for primary and secondary nursing positions, by principal nursing position in a hospital

	Hospital setting (percent)	Nonhospital setting (percent)
TES principal position only	2.5	2.0
TES secondary position only	1.0	1.1
Both principle and secondary position	0.1	0.1
Not employed by TES	96.4	96.8
Total	100.0	100.0

Source: 2008 National Sample Survey of Registered Nurses

More than half of RNs who have secondary employment through a nontravel temporary placement agency report that they are placed in a hospital (Table 3-21).

Table 3-21. Employment settings of secondary employment through a nontravel temporary employment service

Employment setting	Number	Percent
Hospital	13,096	53.8
Nonhospital setting	11,241	46.2
Total	24,337	100.0

Source: 2008 National Sample Survey of Registered Nurses

3.12 Crossing State Lines and Compact States

As of December 2008, 23 States participated in the Nurse Licensure Compact. A multi-State or mutual recognition licensure model, the Compact allows a nurse to have an RN license in the State where she or he resides and practice with that license in other States that are part of the Compact. Thus, an RN may practice across State lines unless otherwise restricted. RNs who do not reside in a Compact State must have a separate license for each State in which they work. Advanced practice nursing licenses are not part of the Compact model in any state.

An estimated 824,662 RNs live in a Compact State (Table 3-22). Of these, 96 percent live and work in the same State, 1.6 percent work in a different State that is part of the Compact, and 2.4 percent work in a State different from that in which the nurse lives, which is not a Compact State.

Table 3-22. Licensure in a Compact State, by where registered nurses live and work

	Number	Percent
Live and work in same Compact State	791,444	96.0
Live in one Compact State and work in another Compact State	13,537	1.6
Live in a Compact State and work in non-Compact State	19,681	2.4
Total	824,662	100.0

Source: 2008 National Sample Survey of Registered Nurses

3.13 Unionization in Principal Nursing Positions

Table 3-23 presents unionization by employment setting for registered nurses' principal nursing positions. Among RNs who work in hospital settings, 18.6 percent are unionized.

Unionization is most prevalent among RNs whose principal positions are in school health (40.4 percent), public health (26.0 percent), and academic education (19.2 percent). This is consistent with the comparatively high rate of unionization in school systems, among academic faculty, and among public sector and government employees.

Table 3-23. Unionization, by employment setting*

Employment setting	Unionized (percent)
Hospital	18.6
Nursing home/extended care	5.8
Academic education	19.2
Home health	5.9
Public/community health**	26.0
School health	40.4
Ambulatory care	6.0
Other***	7.3

*Only registered nurses who provided employment setting information are included in the calculations used for this table.

**Public/community health includes occupational health.

***Other includes insurance/benefits/utilization review.

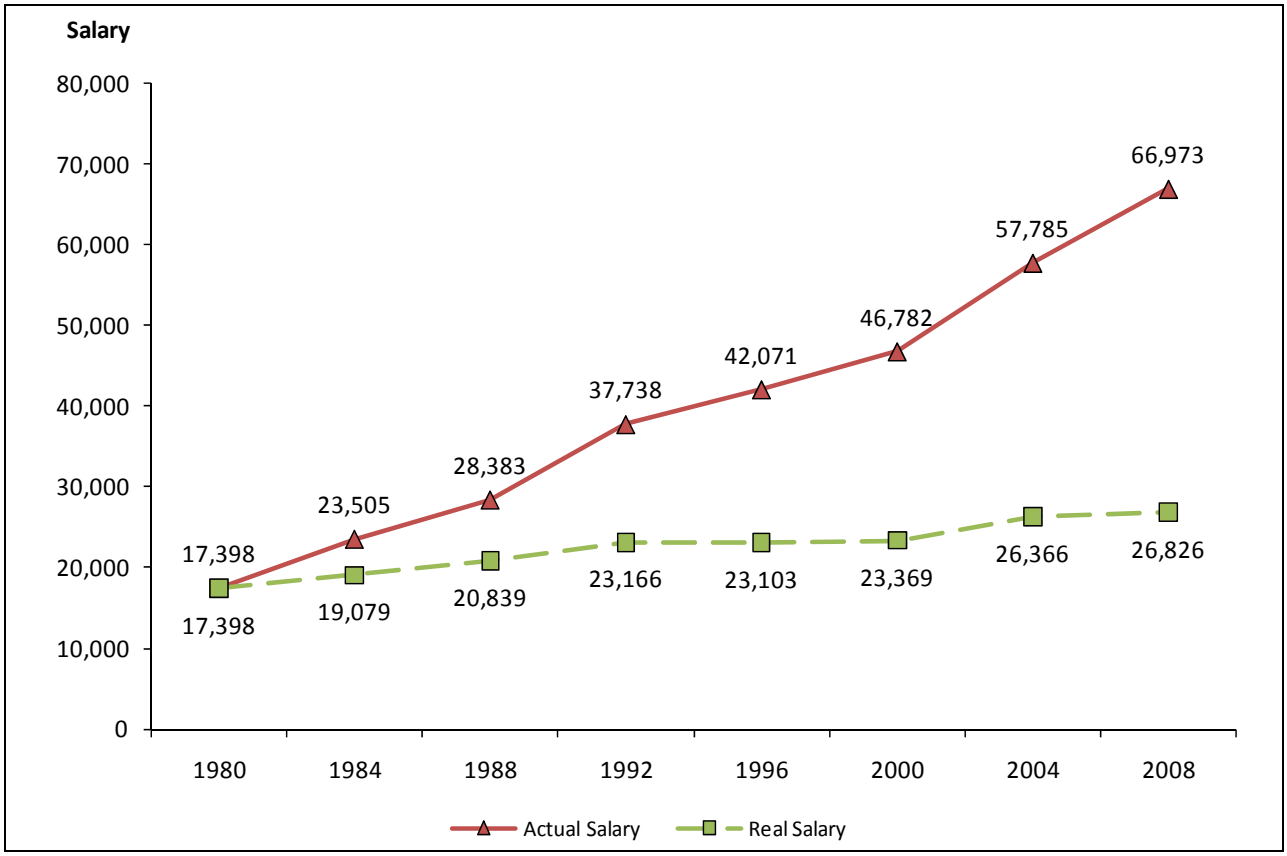
Source: 2008 National Sample Survey of Registered Nurses

3.14 Earnings of Registered Nurses

Average annual earnings for full-time employed RNs were $66,973 in 2008, rising 15.9 percent since the 2004 average of $57,785 (Figure 3-17 and Appendix A, Table 32). When annual earnings are adjusted for inflation using the Consumer Price Index (CPI), earnings in 2008 were $26,826, which is only a 1.7 percent increase from average real (inflation-adjusted to a 1980 base) 2004 earnings of $26,366. Thus, growth in earnings of full-time RNs between 2004 and 2008 only slightly outpaced inflation.

Total annual earnings from nursing work are closely associated with the total number of hours RNs work per year in principal and secondary positions (Table 3-24). In general, total earnings from all nursing positions increase with the number of hours worked in these positions, up to 3,500 hours per year.

Figure 3-17. Actual and inflation-adjusted "real" average earnings for full-time registered nurses in their principal nursing position*



*Only registered nurses who provided earnings information are included in the calculations used for this figure.

Source: 1980-2008 National Sample Survey of Registered Nurses

Table 3-24. Average annual earnings from all nursing positions, by total number of hours worked per year in all nursing positions*

Hours per year	Average annual earnings
1 to 499 hours	13,850
500 to 999 hours	26,271
1,000 to 1,499 hours	42,582
1,500 to 1,999 hours	58,140
2,000 to 2,499 hours	68,327
2,500 to 2,999 hours	80,537
3,000 to 3,499 hours	92,254
3,500 to 3,999 hours	85,117
More than 4,000 hours	93,865

*Only registered nurses who provided earnings information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

3.14.1 Earnings and Job Titles

The average annual earnings of full-time RNs are reported by job title in Table 3-25 and Appendix A, Table 30.

- The highest earnings are reported by nurse anesthetists, who average $154,221 per year.
- The lowest earnings are reported by patient educators, at $59,421 per year.
- Staff nurses earn $61,706 per year, on average.
- Nurse practitioners average $85,025 per year, while nurse midwives average $82,111.
- RNs whose positions involved instruction of health professions students average $65,844 per year.

Table 3-25. Average annual earnings, by job title of principal nursing position, for registered nurses working full-time*

Job title	Average annual earnings
Staff nurse	61,706
Management/administration	78,356
First-line management	72,006
Middle management	74,799
Senior management	96,735
Nurse anesthetist	154,221
Clinical nurse specialist	72,856
Nurse midwife	82,111
Nurse practitioner	85,025
Patient educator	59,421
Instruction	65,844
Patient coordinator	62,978
Informatics nurse	75,242
Consultant	76,473
Researcher	67,491
Surveyor/auditor/regulator	65,009
Other**	64,003
Total	66,973

*Only registered nurses who provided earnings and job title information are included in the calculations used for this table.

**Other job title includes registered nurses for whom job title is unknown.

Source: 2008 National Sample Survey of Registered Nurses

3.14.2 Earnings and Employment Setting

Earnings of RNs vary across the setting of their principal nursing position (Table 3-26 and Appendix A, Table 31).

- RNs who work full-time in hospitals earn an average of $69,079 per year and staff nurses in hospitals earn an average of $63,809 per year.
- The setting with the lowest average pay for full-time RNs is school health service, although this may be because school health RNs typically work only an academic year rather than a full calendar year.

Table 3-26. Average annual earnings, by employment setting of principal nursing position, for registered nurses working full-time*

Employment setting	Overall average	Staff nurse
Hospital	69,079	63,809
Nursing home/extended care facility	61,507	54,239
Academic education program	66,701	66,542
Home health setting	63,490	59,289
Public or community health setting	60,580	55,708
School health service	47,851	46,416
Occupational health	65,947	62,086
Ambulatory care setting (not hospital)	65,976	55,657
Insurance claims/benefits/utilization review	67,897	61,370
Other**	72,750	67,660
Total	66,973	61,706

*Only registered nurses who provided earnings and setting information are included in the calculations used for this table.

**Other employment setting includes registered nurses for whom employment setting is unknown.

Source: 2008 National Sample Survey of Registered Nurses

3.14.3 Earnings From Secondary Jobs

Secondary nursing positions are held by 12.6 percent of RNs employed in nursing. Appendix A, Table 19 presents details about the earnings of RNs in their principal and secondary nursing positions, according to whether they hold only one nursing job or multiple nursing jobs.

- RNs who work full-time in their principal position and have multiple nursing jobs earn more in their principal position ($68,618) than do RNs who do not have multiple jobs ($66,742).

- Average earnings in secondary positions are $15,201 for RNs whose principal position is full-time and $13,392 for those with a part-time principal position.

These data indicate that RNs who hold multiple positions earn more overall and in their principal positions. The reasons for this are not known based on 2008 NSSRN data findings. RNs with two or more positions earn an average of $74,894 annually from all nursing jobs. For those whose principal position is full-time, the average for all earnings is $83,818 per year.

3.14.4 Earnings and Experience

RNs employed full-time receive higher earnings from their principal nursing position as they gain experience up to 30 years (Table 3-27). However, after 30 years of experience, average annual earnings decline, largely due to older RNs working fewer hours. Nonetheless, earning differentials based on years of experience are relatively modest. RNs at the height of their earning potential with 30 years experience earn, on average, only $19,281 more than RNs with less than 5 years experience.

Table 3-27. Average annual earnings for registered nurses working full-time in their principal nursing position, by years since initial nursing education*

Years since initial nursing education	Average annual earnings
Less than 5 years	56,118
6 to 10 years	65,604
11 to 15 years	67,212
16 to 20 years	69,388
21 to 25 years	71,216
26 to 30 years	75,399
31 to 35 years	73,733
36 to 40 years	71,551
More than 40 years	70,358

*Only registered nurses who provided earnings information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

3.14.5 Earnings and Education

The highest nursing or nursing-related education level of RNs is associated with job titles and subsequent earnings. Some RNs with graduate degrees earn substantially more than do other nurses (Table 3-28 and Appendix A, Table 32). In part, they earn more because they command high earnings when they hold management job titles or are in advanced specialties. The earnings of RNs

who work as faculty are somewhat less than other RNs with advanced degrees. RNs working as faculty are discussed further in Chapter 4.

- RNs with graduate degrees earn an average of at least $20,000 more than do RNs with other levels of education.
- Staff nurses with graduate degrees average about $6,000 more than other staff RNs.
- Diploma RNs earn, on average, more than ADN nurses but not more than bachelor's degree RNs for the same job titles.

Table 3-28. Average annual earnings of registered nurses working full-time in their principal nursing position, by highest nursing or nursing-related education and job title*

Job title	Diploma	Associate degree	Bachelor's degree	Master's/ doctorate	Overall average
All nurses	65,349	60,890	66,316	87,363	66,973
Staff nurse	63,027	59,310	63,382	69,616	61,706
First-line management	68,089	66,138	75,144	85,473	72,006
Senior/middle management	74,090	69,871	79,878	101,730	81,391
Patient coordinator	62,693	60,240	64,068	71,516	62,978

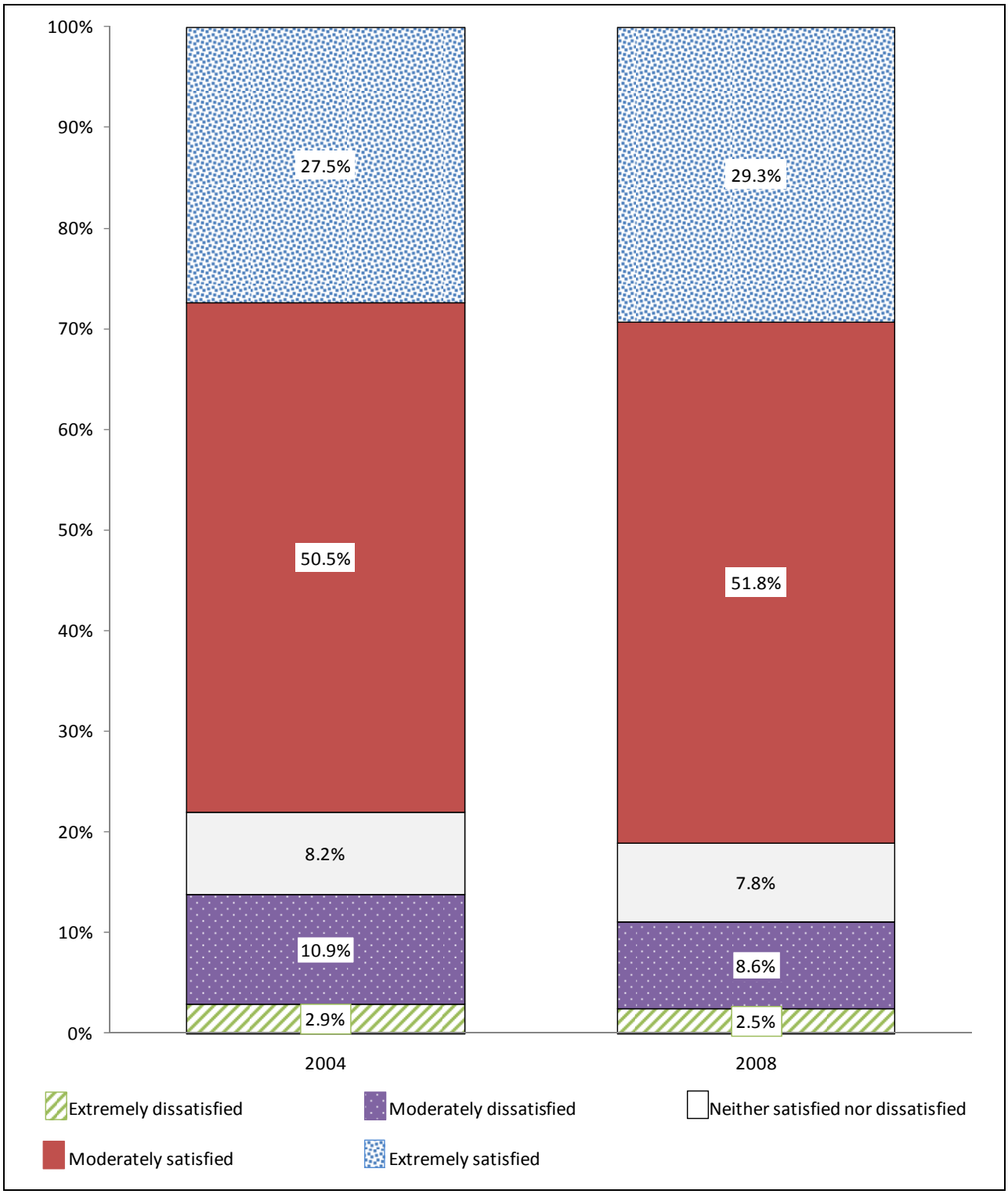
*Only registered nurses who provided earnings and job title information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

3.15 Job Satisfaction

The 2004 and 2008 surveys asked RNs to report their satisfaction with their principal job. In 2008, 29.3 percent of RNs reported that they were extremely satisfied with their principal nursing position, compared with 27.5 percent in 2004. In 2004, 50.5 percent where moderately satisfied while in 2008, 51.8 percent were moderately satisfied (Figure 3-18). Only 11.1 percent were dissatisfied in 2008, compared with 13.8 percent in 2004. While the differences from 2004 to 2008 are small, RN job satisfaction may be somewhat improved.

Figure 3-18. Job satisfaction of registered nurses*



* Only registered nurses who provided job satisfaction information are included in the calculations used for this figure.

Source: 2004-2008 National Sample Survey of Registered Nurses

3.15.1 Job Satisfaction and Employment Setting

Employment setting is associated with overall satisfaction. Appendix A, Table 33 presents satisfaction ratings for RNs according to the setting of their principal nursing position. Figure 3-19 provides data for the most common employment settings.

- Registered nurses who work in academic education programs, ambulatory care, and home health settings, although paid less than RNs in other settings, reported the highest rates of job satisfaction (86.6 percent, 85.5 percent, and 82.8 percent, respectively).
- Working in nursing homes/extended care was associated with the lowest rate of RNs being moderately or extremely satisfied with their work (74.5 percent). These RNS also reported the most dissatisfaction with their work (moderate or extreme dissatisfaction at 16.9 percent; extreme dissatisfaction at 4.8 percent).
- Almost 12 percent of RNs employed in hospitals reported moderate or extreme dissatisfaction (11.8 percent).

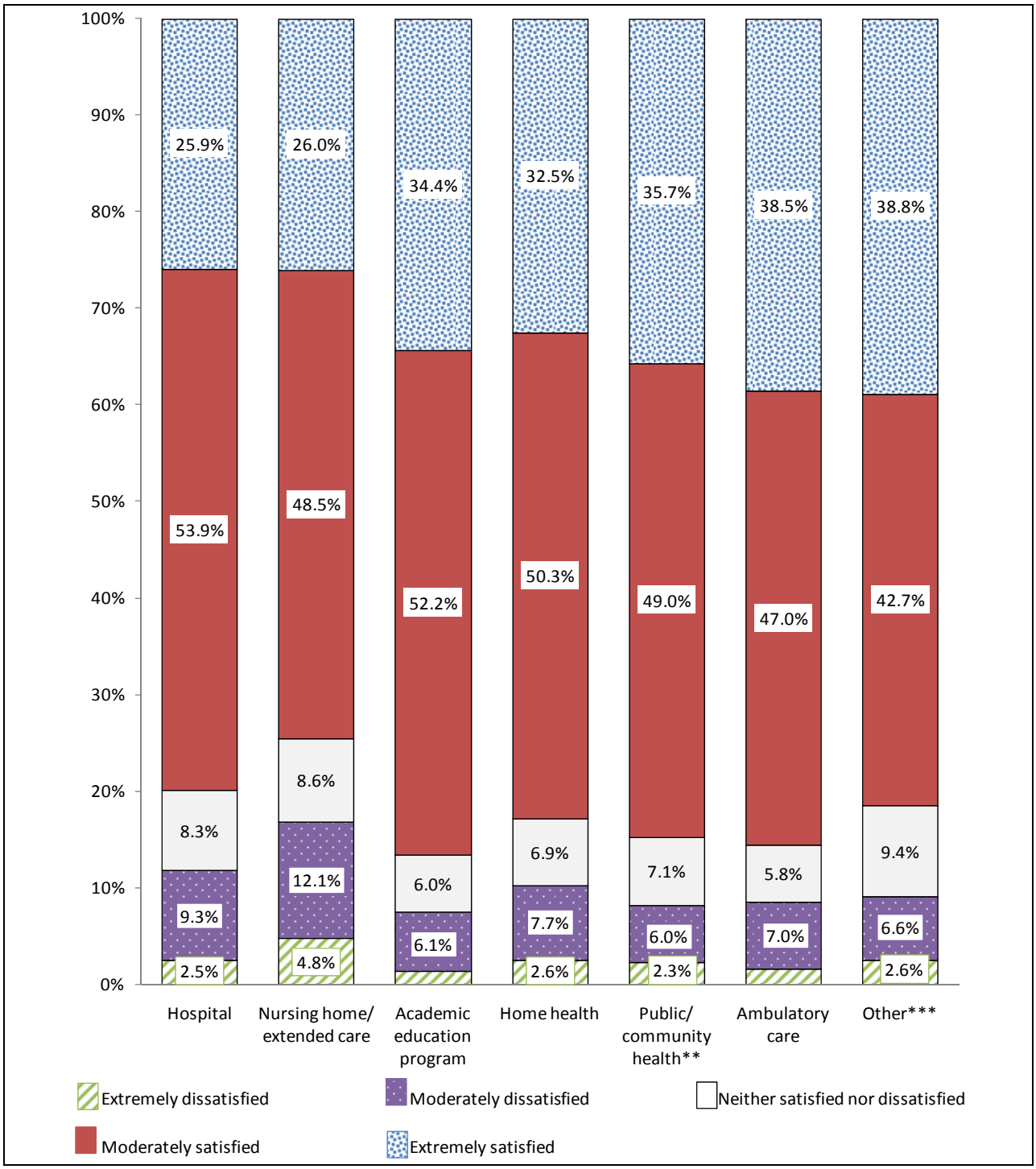
3.15.2 Job Satisfaction and Job Titles

Registered nurses' satisfaction with their jobs also varies with their job title. Appendix A, Table 34 provides information for all job titles; Figure 3-20 provides data for the largest groups.

- Staff nurses were less likely to report that they were moderately or extremely satisfied than RNs with other job titles.
- Being "extremely satisfied" was reported more often by RNs in senior or middle management (39.2 percent) or other job titles (40.2 percent). The "other job titles" category includes advanced practice fields and education.
- Moderate or extreme dissatisfaction was reported more often by RNs in first-line management positions (12.3 percent) and staff nurses (12 percent).
- "Extremely dissatisfied" was reported more often by RNs in senior or middle management positions (2.9 percent).

These data suggest that RNs in positions of the most autonomy and agency, middle managers, faculty, and advanced practice registered nurses, were most likely to be extremely satisfied with their jobs. Staff nurses were least likely to be fully satisfied with their positions.

Figure 3-19. Job satisfaction, by employment setting of principal nursing position*



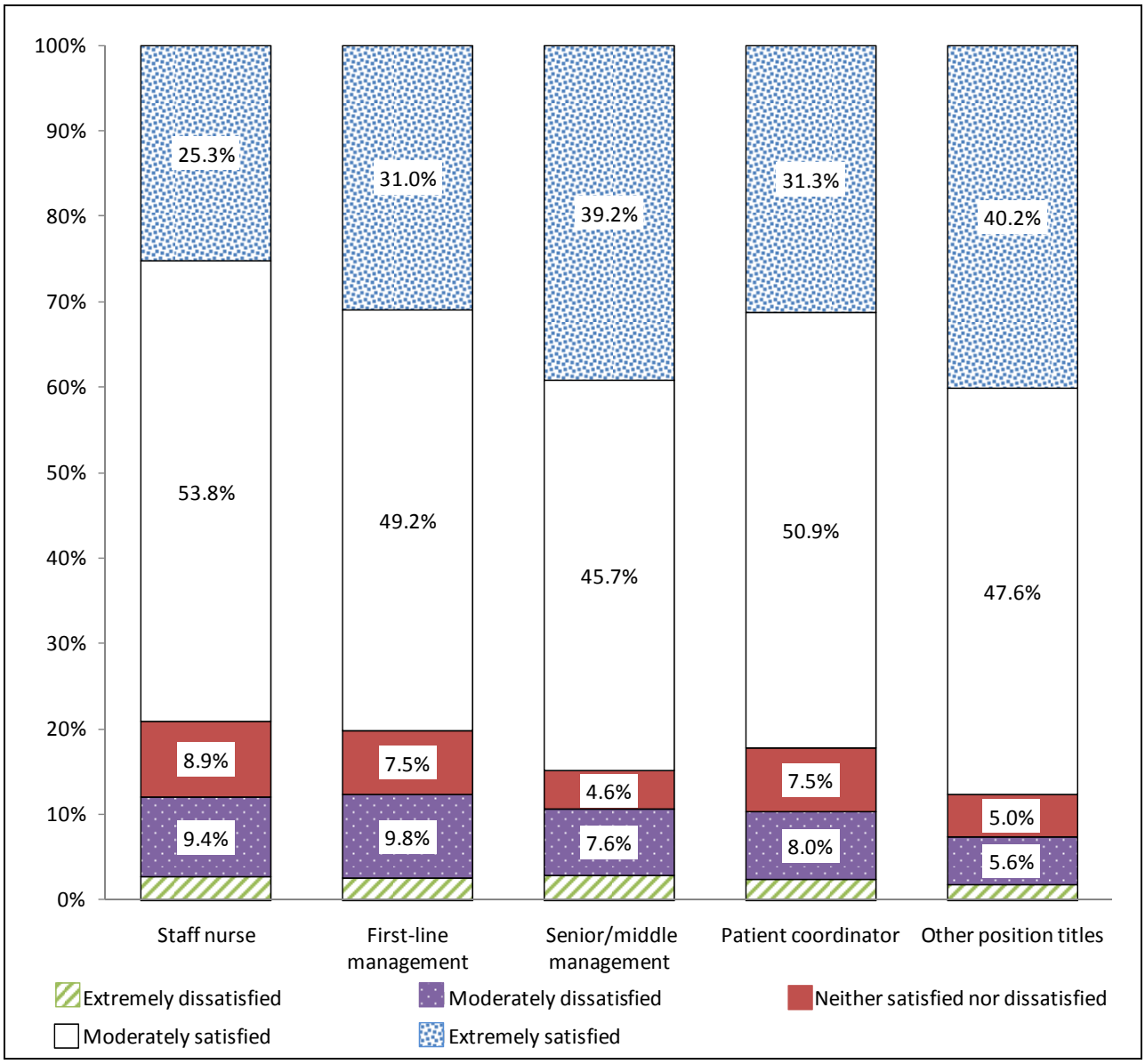
*Only registered nurses who reported employment setting information are included in the calculations used for this figure. Percents may not add to100 due to the effect of rounding.

**Public/community health includes school and occupational health.

***Other includes insurance, benefits, and utilization review, and other settings.

Source: 2008 National Sample Survey of Registered Nurses

Figure 3-20. Job satisfaction, by job title in principal nursing position*



*Only registered nurses who provided job title information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

3.15.3 Job Satisfaction and Age

RN satisfaction generally increases with age (Figure 3-21 and Appendix A, Table 35). This may be because those who are dissatisfied have changed to positions or employment situations which are more satisfying for them.

- The percentage of employed RNs who are extremely satisfied continues to increase with age through age 74 years.
- The percent of employed RNs who are moderately to extremely satisfied averages around 78 percent for RNs under 35 years old. It averages about 80 percent for RNs who are ages 35 to 49 years. About 82 percent of RNs in their 50s report that they are moderately to extremely satisfied, and after age 60 job satisfaction rises to more than 85 percent.
- Moderate and extreme dissatisfaction is greatest between ages 40 and 50, averaging 12.4 and 12.5 percent, respectively.

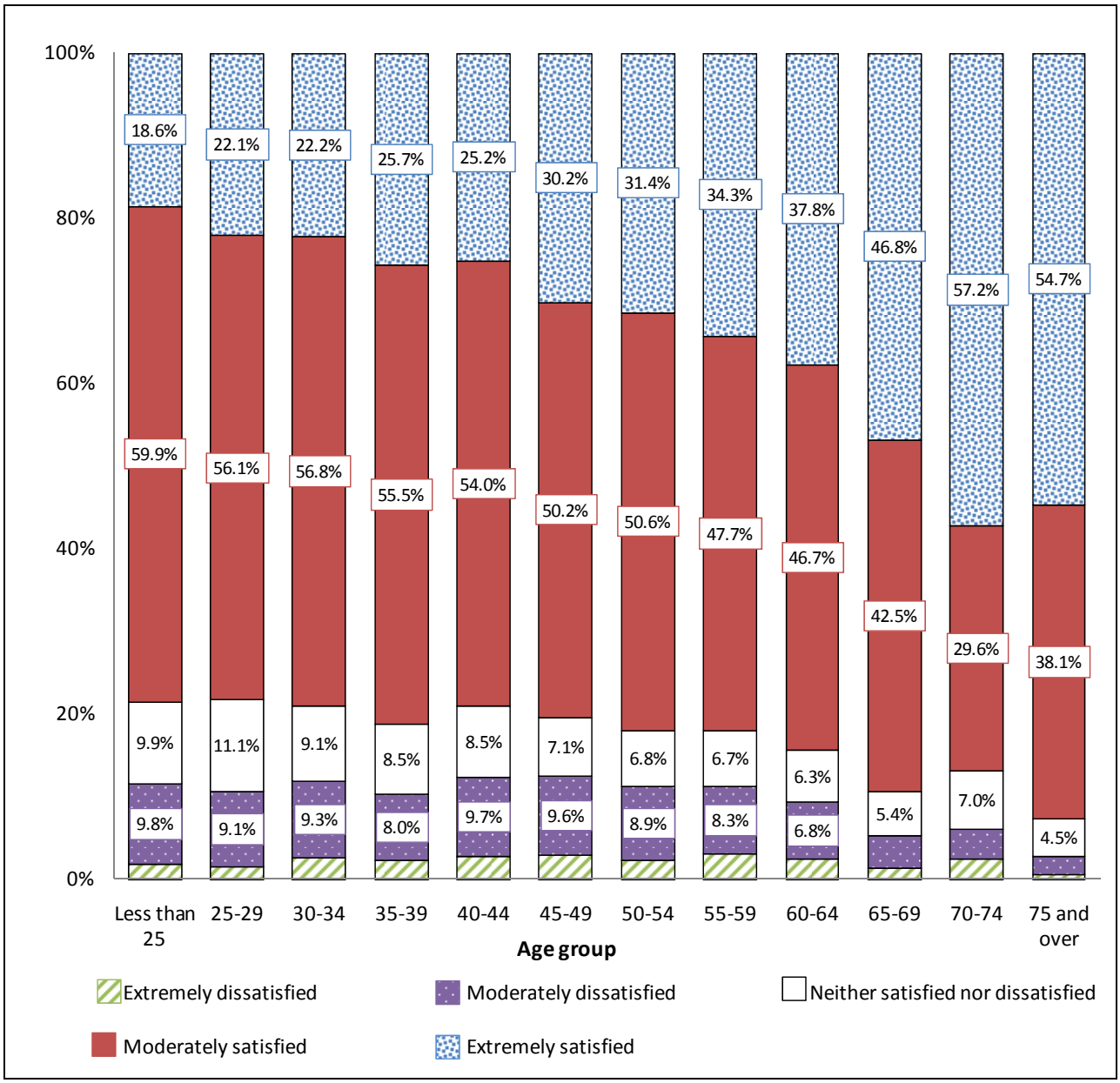
This should not necessarily be interpreted to mean that age is a factor in job satisfaction. Rather, perhaps young RNs or recent graduates who are dissatisfied with a position may change jobs until they find a position that is more satisfactory. Registered nurses who cannot find a satisfactory position may leave nursing altogether.

3.15.4 Job Satisfaction and Education

Figure 3-22 and Appendix A, Table 36 present data on RNs' job satisfaction according to their highest nursing or nursing-related education.

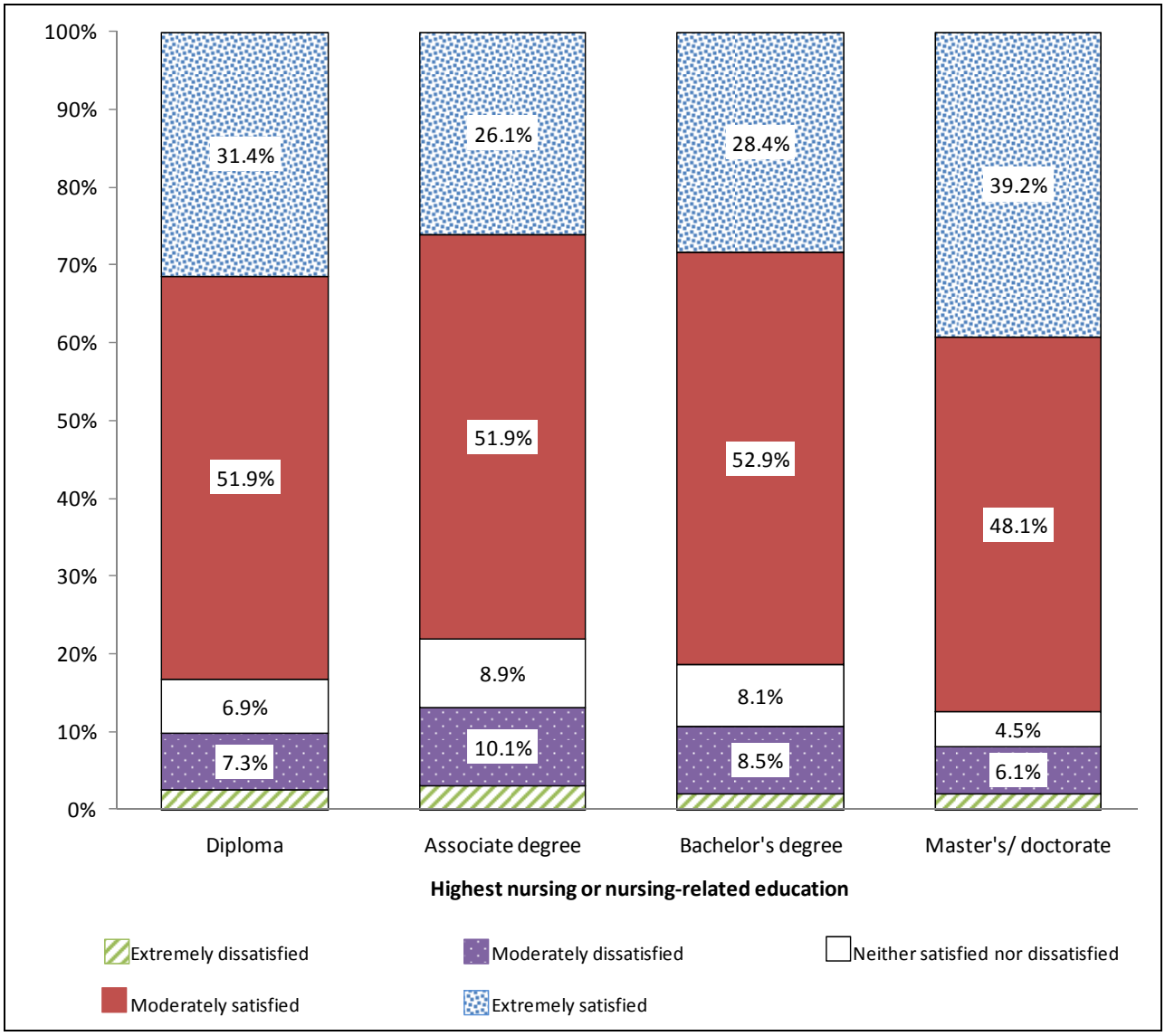
- RNs with graduate-level education report the highest rates of being extremely satisfied (39.2 percent).
- A high percentage of diploma-educated RNs (31.4 percent) are extremely satisfied; diploma-educated RNs also tend to be older than other nurses, and age is correlated with satisfaction.
- RNs with ADNs most often report being moderately to extremely dissatisfied (13.1 percent).

Figure 3-21. Job satisfaction of registered nurses employed in nursing, by age



Source: 2008 National Sample Survey of Registered Nurses

Figure 3-22. Job satisfaction of registered nurses employed in nursing, by highest nursing or nursing-related education*



*Only registered nurses who provided information on education preparation are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

3.16 Job Changes of Registered Nurses

The 2008 NSSRN asked RNs to provide information about their employment status in 2007. Nearly 80 percent of RNs were employed in nursing in both 2007 and 2008 (Figure 3-23). Another 12.3 percent were not employed in nursing in either year. Nearly 3 percent were employed in nursing in 2007, but not in 2008. Conversely, 2.4 percent were employed in 2008 but had not been employed in 2007. Of those who were employed in 2007 but not in 2008, 27.3 percent (24,430) reported that they stopped working due to retirement. A group comprising 2.5 percent of RNs graduated in 2007 or 2008 and was employed only in 2008. These data indicate that departures from nursing work are often short-lived.

Table 3-29 provides more information about principal nursing employment in 2008 compared with 2007.

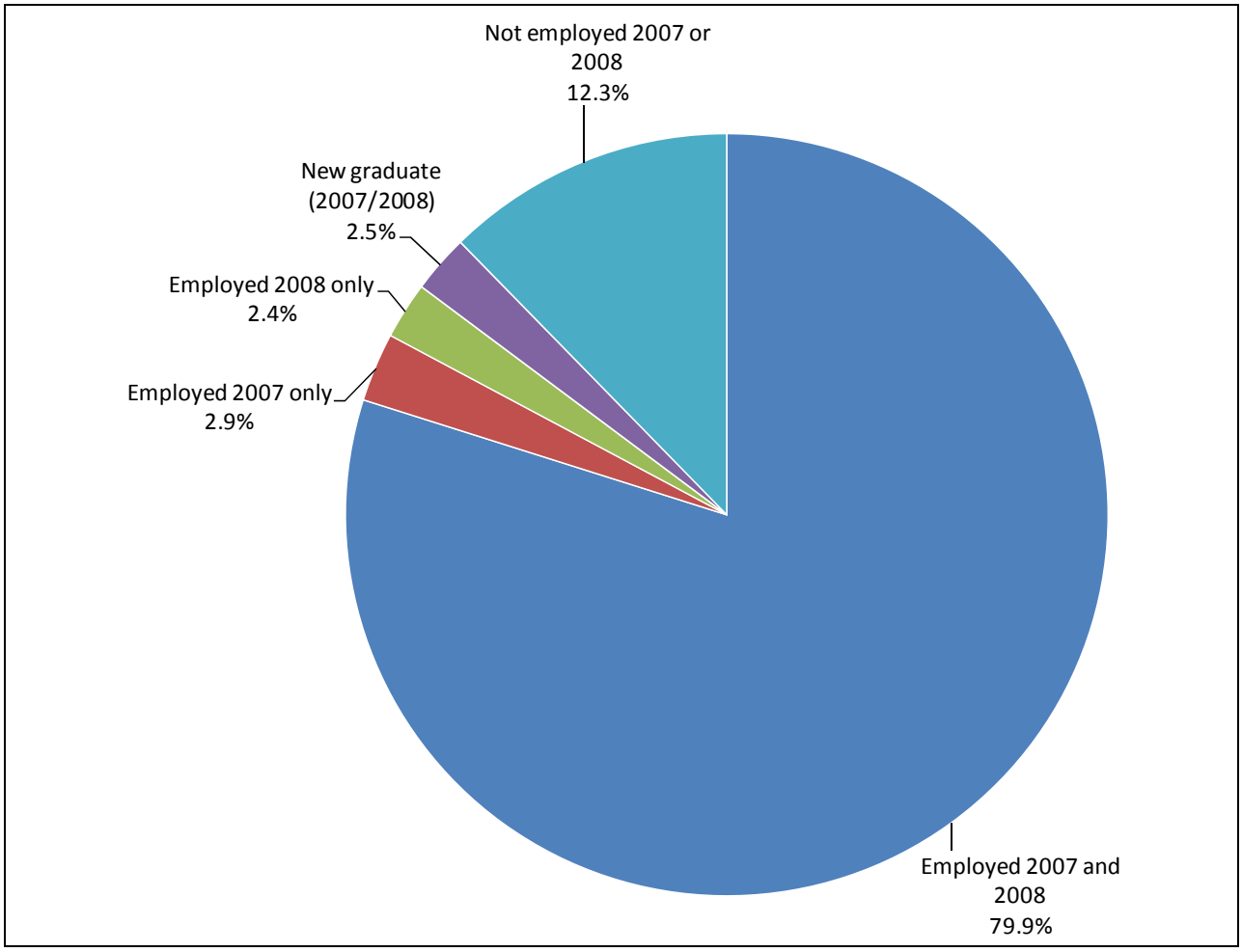
- Among RNs who worked full-time in 2007, 91.5 percent continued to work full-time in 2008. Another 5.8 percent worked part-time in 2008.
- Among RNs who worked part-time in 2007, 82.9 percent continued to work part-time in 2008, while 11.2 percent changed to full-time work.

Employment changes of RNs who were employed in both 2007 and 2008 are described in Table 3-30 and Appendix A, Table 37. Many RNs change positions and employers from year to year.

- Among RNs who worked full-time in 2007, 11.6 percent changed employer by 2008. Another 6.5 percent worked with the same employer but held a different position.
- Among RNs who worked part-time in 2007, 9.7 percent changed employers. These data suggest that part-time RNs are slightly less likely to change employers or positions than are full-time RNs.

Appendix A, Table 38 presents the employment settings of RNs in 2008 as compared with 2007. Among RNs employed in hospital settings in 2008, 90.8 percent had been employed in a hospital in 2007. However, other settings draw many RNs from hospitals. For example, while 82.5 percent of RNs employed in home health in 2008 had worked in that setting in 2007, 7.9 percent had worked in a hospital in 2007. Among RNs employed in ambulatory care in 2008, 8.2 percent had worked in a hospital in 2007.

Figure 3-23. Comparison of employment status of registered nurse population in 2007 and 2008



Source: 2008 National Sample Survey of Registered Nurses

Table 3-29. Employment status in 2008, compared with status in 2007

	Year 2007 employed in nursing full-time (number)	Year 2007 employed in nursing full-time (percent)	Year 2007 employed in nursing part-time (number)	Year 2007 employed in nursing part-time (percent)
2008 employed in nursing full-time	1,753,305	91.5	69,166	11.2
2008 employed in nursing part-time	110,737	5.8	513,551	82.9
2008 not employed in nursing	52,628	2.7	36,773	5.9

Source: 2008 National Sample Survey of Registered Nurses

Table 3-30. Employment changes among registered nurses employed in nursing in both 2007 and 2008

	Year 2007 employed in nursing full-time (number)	Year 2007 employed in nursing full-time (percent)	Year 2007 employed in nursing part-time (number)	Year 2007 employed in nursing part-time (percent)
Same position and employer in 2008	1,525,839	81.9	497,398	85.4
Different position, same employer in 2008	120,474	6.5	28,764	4.9
Different employer in 2008	216,327	11.6	56,430	9.7

Source: 2008 National Sample Survey of Registered Nurses

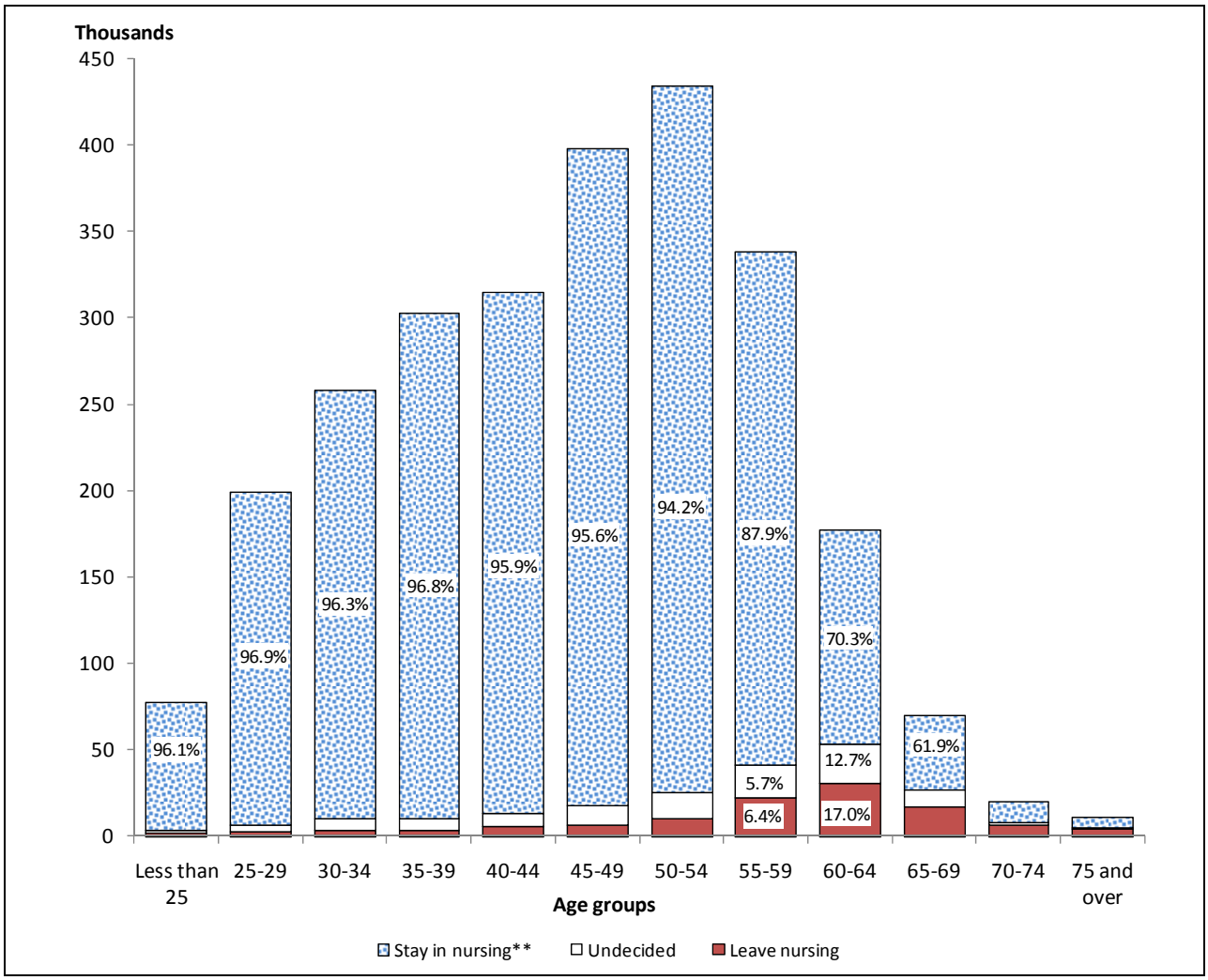
Workplace issues are significant reasons for job change among RNs. The reasons RNs changed principal employment are presented in detail in Appendix A, Table 39. RNs could indicate multiple reasons for a change of employment.

- More than 73 percent of RNs reported that they changed positions or employers due at least in part to workplace issues such as stressful work environment (29.6 percent), lack of good management (27.8 percent), or inadequate staffing (20.1 percent).
- Personal career reasons, often involving advancement, were a factor in job changes for 37.5 percent of RNs. Such reasons included interest in another position (29.5 percent) and improved pay or benefits (19.2 percent).
- Nearly 30 percent of RNs changed jobs at least in part for personal family reasons, which included relocation (14.9 percent), disability (1.3 percent), and unspecified personal/family issues (15.4 percent).

3.17 Plans for Future Employment

Employed RNs were asked if they planned to leave their principal nursing position within 3 years and if so, whether they intended to continue to work in nursing. Among RNs under 55 years old, the percentage of RNs that intended to leave nursing within 3 years is quite small, at 3 percent or less (Figure 3-24). Among RNs 55 and older who work in nursing, 76,915 (12.5 percent) intend to leave the nursing profession within 3 years; another 54,539 (8.9 percent) intend to leave their current nursing jobs and are unsure if they will remain in nursing afterward. Overall, a high proportion of RNs in all age groups intend to stay in nursing.

Figure 3-24. Intentions to stay in nursing over the next 3 years, by age group*



*The total percent of registered nurses across age groups may not equal the estimated total of RNs due to the effect of rounding.

**Stay in nursing includes registered nurses who do not plan to leave their current nursing position in the next 3 years, those who plan to leave their current position but stay in nursing, and those who are undecided about staying in their current nursing position who were not asked about their intention regarding nursing work in general.

Source: 2008 National Sample Survey of Registered Nurses

3.18 Non-Nursing Jobs

Some RNs are employed in positions outside nursing, including those who also hold a nursing position. RNs who work in non-nursing positions report a variety of fields of employment. The largest percentage (31.4 percent) is employed in non-nursing health-related service fields (Figures 3-25 and 3-26 and Appendix A, Table 42). Other common fields of employment are retail

and food sales and services (14.4 percent), elementary and secondary education (10.4 percent), and pharmaceuticals and medical equipment (9.0 percent).

Among all RNs, an estimated 208,427 held a non-nursing position. Of the RNs employed outside of nursing, 97,365 also had a nursing position (Table 3-31). Among RNs not working in nursing, 23.8 percent held a non-nursing position.

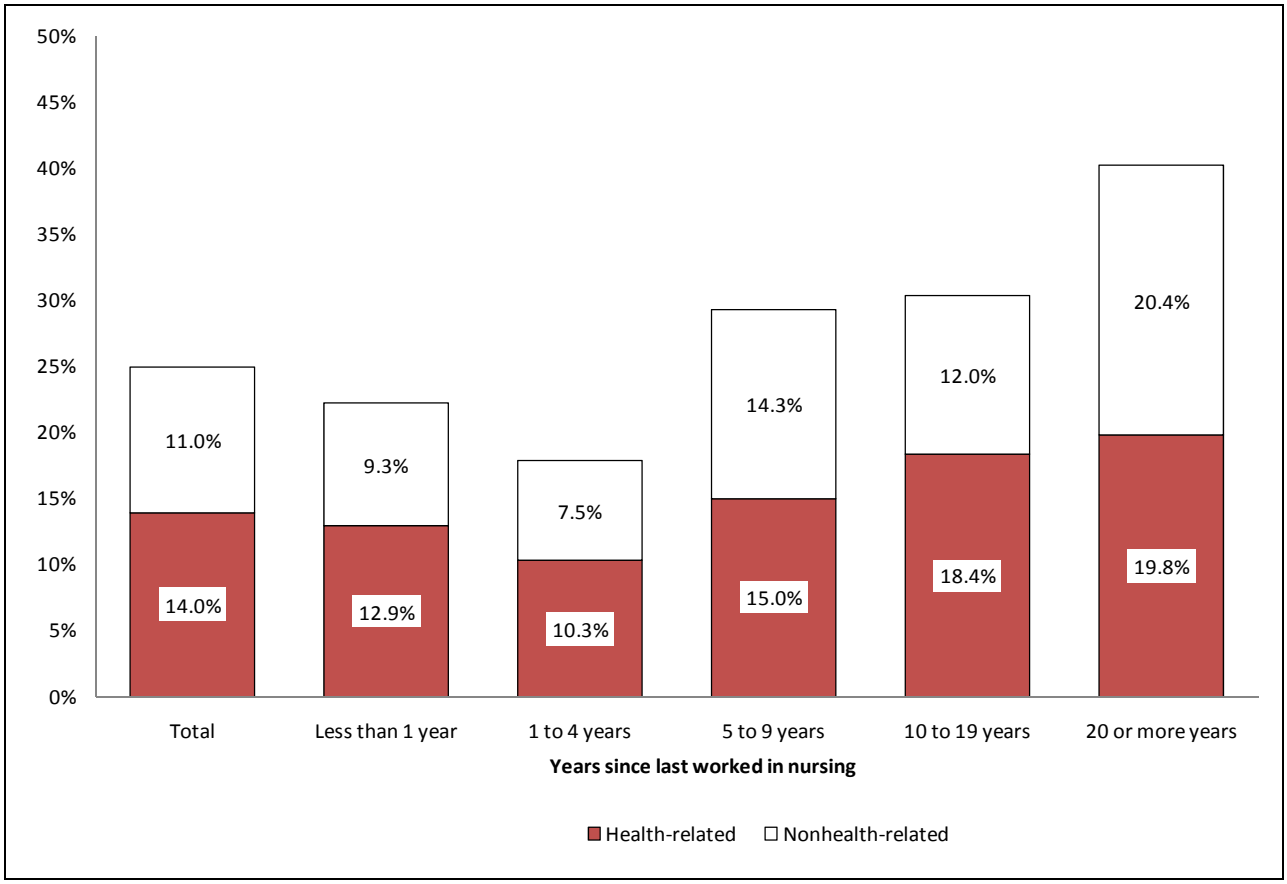
More than half of RNs (54.7 percent) who are not working in nursing and hold a non-nursing job report that their position is health-related (Appendix A, Table 41). The percent of RNs who do not work in nursing and have a non-nursing position generally increases with the number of years since they last worked in nursing (Figure 3-25). Forty percent of RNs who have not worked in nursing for 20 years or more hold non-nursing jobs.

- Most RNs who work in health-related occupations that are non-nursing work full-time (73.7 percent) (Appendix A, Table 41).
- Only half of RNs who work in nonhealth-related occupations work full-time (50.6 percent).

RNs hold many job titles in their non-nursing fields of employment (Figure 3-27 and Appendix A, Table 43).

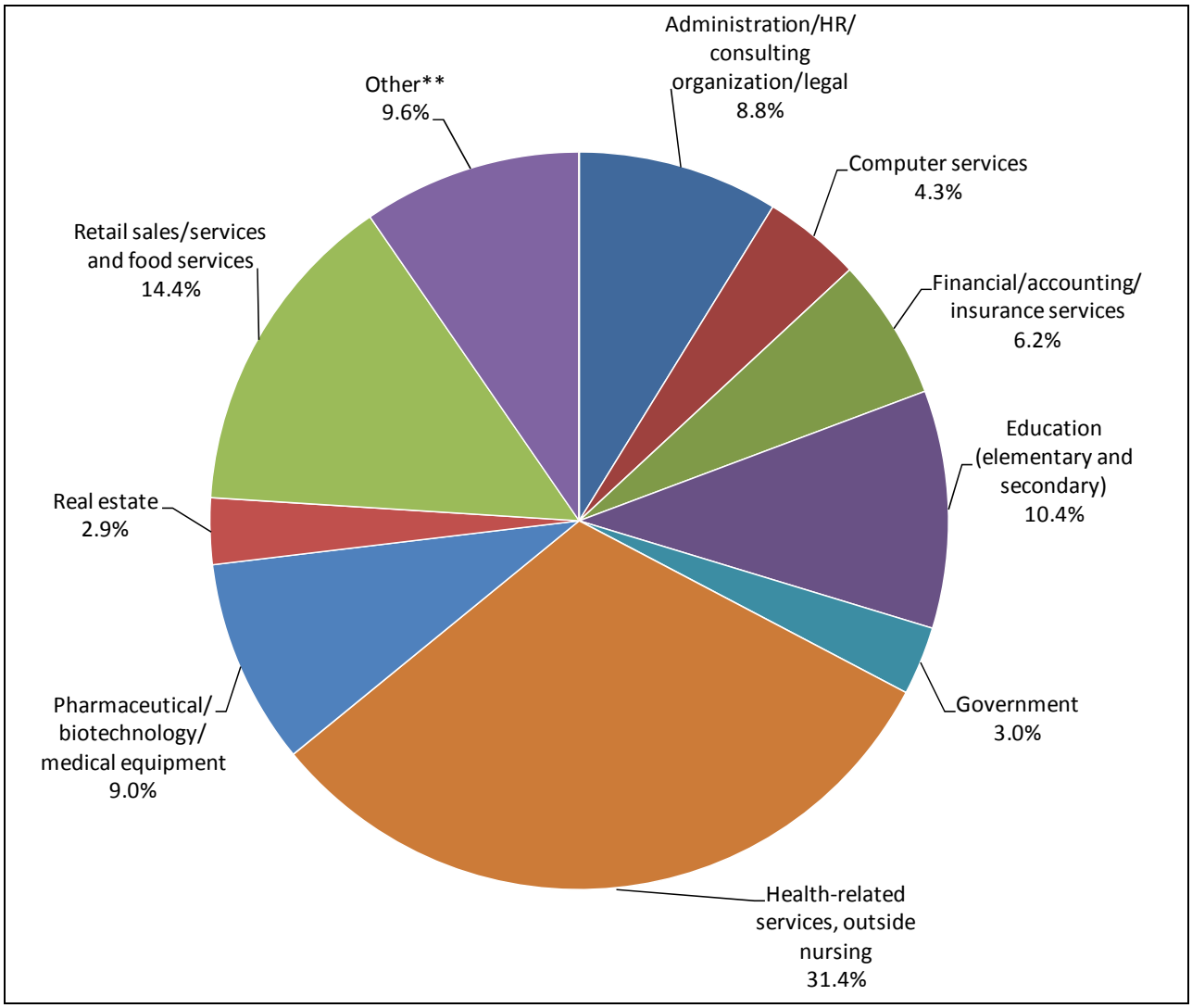
- More than 75 percent of RNs who work outside nursing and have a management job title say their position is health-related.
- Only 26.8 percent of RNs who work outside nursing and are business owner/proprietors say their work is health-related.

Figure 3-25. Non-nursing positions among registered nurses not employed in nursing, by years since last worked in nursing



Source: 2008 National Sample Survey of Registered Nurses

Figure 3-26. Employment settings of registered nurses employed outside of nursing*



*Excludes registered nurses who are employed in nursing but have other employment outside of nursing.

**Other includes agriculture/farming/ranching, fine arts/performing arts, emergency response, fitness/sport, religious organizations, and others.

Source: 2008 National Sample Survey of Registered Nurses

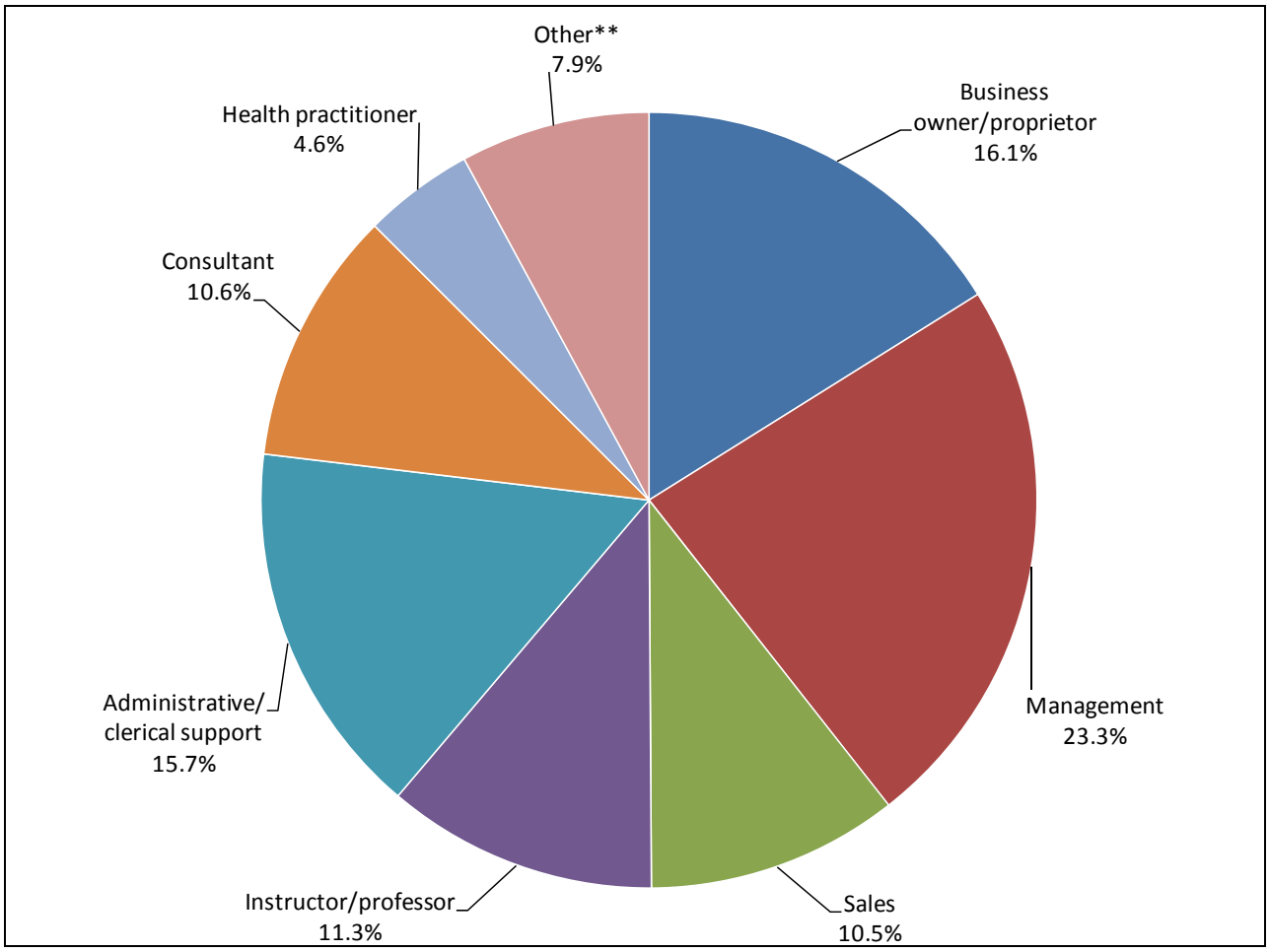
Table 3-31. Employment in non-nursing occupations, by nursing employment status*

	Licensed nurses (number)	Working in non-nursing occupations (number)	Working in non-nursing occupations (percent)
Employed in nursing	2,596,599	97,365	3.7
Not employed in nursing	466,564	111,062	23.8
Total	3,063,162	208,427	6.8

*Includes an estimated 5,073 registered nurses who are employed in non-nursing and are actively seeking nursing employment. Excludes an estimated 97,365 registered nurses who are employed in nursing and have other employment in non-nursing.

Source: 2008 National Sample Survey of Registered Nurses

Figure 3-27. Job titles of registered nurses employed outside of nursing*



*Excludes registered nurses who are employed in nursing but have other employment outside of nursing.

**Other includes such job titles as emergency response, clinical research, construction, clergy, chef, IT, etc.

Source: 2008 National Sample Survey of Registered Nurses

Nurse Faculty 4

4.1 Introduction

Registered nurses who are nursing education program faculty fill an important role in the nursing workforce and help to ensure that there are adequate numbers of new nurses entering the profession. RNs can serve as faculty or instructors in both their principal and secondary nursing positions. Most RNs whose principal position is in a full-time faculty position teach theoretical and didactic material in the classroom as well as provide clinical education. Those whose faculty work is part-time usually focus on clinical education by teaching and supervising students in clinical settings, or by teaching only one or two didactic courses a year. Depending on the type of nursing program (ADN, diploma, BSN, or higher degree) faculty may be required to teach or may also have other faculty responsibilities such as research, producing scholarly publications, engaging in community and professional organization service, serving on academic committees, and advising students. Faculty members who teach in nurse practitioner programs must also continue clinical practice to maintain national certification and/or State licensure as Advanced Practice Registered Nurses (APRNs) in their area of clinical specialty, which is usually a requirement for RNs who teach clinical courses in nurse practitioner programs.

This chapter includes not only those RNs who reported that their principal position was instructor/lecturer or professor and that their setting was an academic RN program, but also those RNs who reported a secondary nursing job in an academic education program. Nurses whose principal job title was managerial, administrative, or related to patient care in an academic setting are not included as faculty. Nurses with these titles do not primarily provide instruction to nursing students; rather, they provide patient care within academic medical centers, manage education programs, and have other nonteaching responsibilities. Nurses who reported that at least one of their secondary nursing positions is in an academic setting are assumed to have a secondary position as faculty; job titles were not reported for secondary positions.

4.2 Number of Nurses Working in Faculty Roles

In 2008 an estimated 31,056 RNs worked as faculty in their principal nursing position. This number is smaller than the total who worked in academic settings because nurses can work in academic settings while also providing patient care or working in administrative roles (Table 4-1). The majority of RNs in faculty roles worked in programs that provide education at the BSN and higher level (60 percent). Another 38.3 percent worked in ADN or LPN/LVN education programs.

Table 4-1. Registered nurses employed as faculty in their principal nursing position, by type of nursing education program*

	Number	Percent
Associate and LPN/LVN program	11,901	38.3
Bachelor's and higher, Associate and BSN program	18,626	60.0

*Registered nurses who work in diploma nursing programs were not included in the table because there were too few respondents to estimate the data accurately.

Source: 2008 National Sample Survey of Registered Nurses

An additional 34,666 RNs worked in academic education settings as a secondary nursing position (Table 4-2). More than 45 percent of RNs with secondary positions in academic settings reported that their job title for their principal nursing position is staff nurse. Nurses whose job title is management or nurse practitioner accounted for another 15 percent each. Just over 12 percent of nurses whose job title was in instruction also held a secondary position in an academic setting.

Table 4-2. Registered nurses employed as faculty in their secondary nursing position(s), by job title of principal nursing position*

	Number	Percent
Management	5,395	15.6
Instruction	4,230	12.2
Staff nurse	15,743	45.4
Nurse practitioner	5,455	15.7
Other**	3,843	11.1
Total	34,666	100.0

*Only registered nurses who provided job title information are included in the calculations for this table.

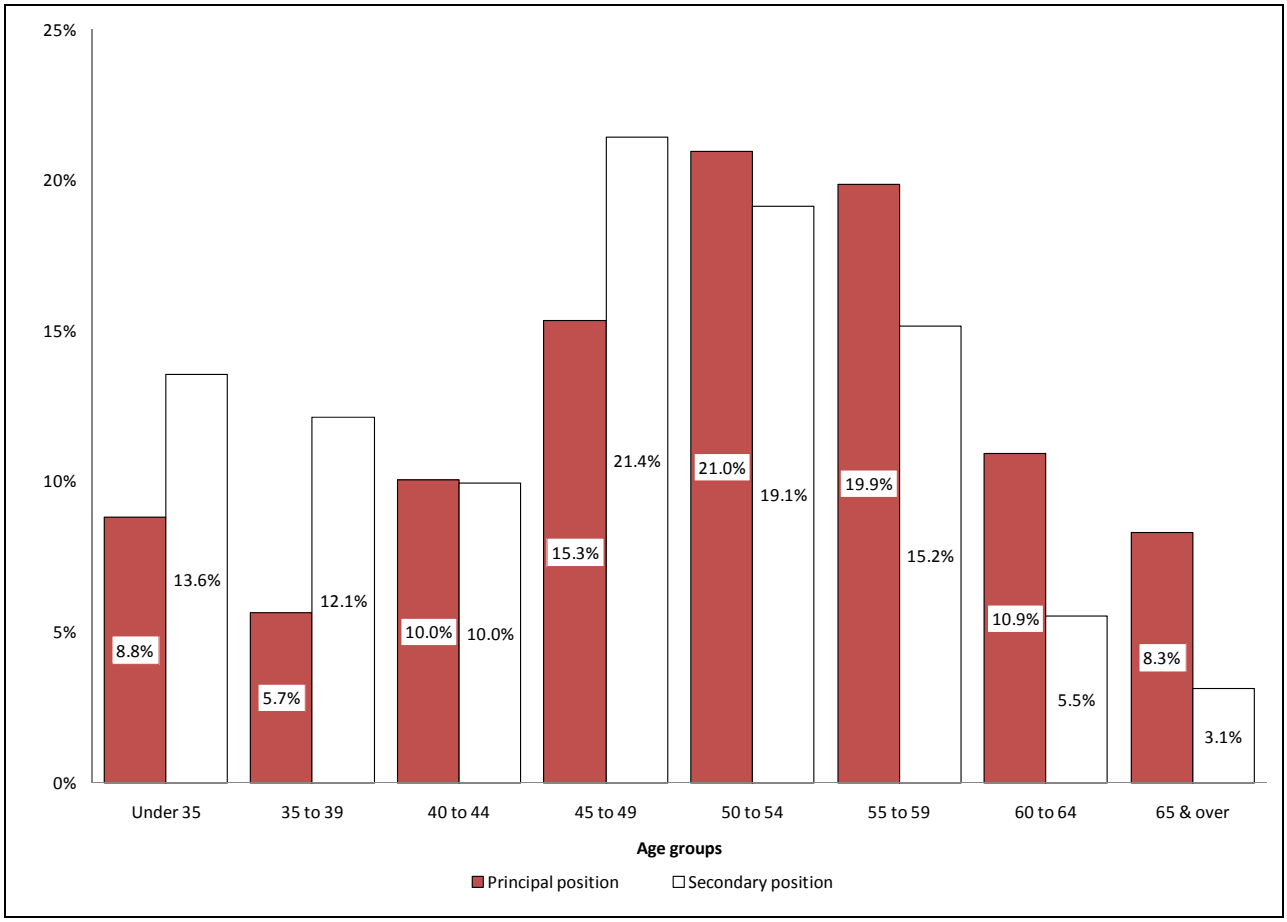
**Other includes consultant, nurse midwife, CNS, NA, researcher, informatics, patient coordinator, and patient educator.

Source: 2008 National Sample Survey of Registered Nurses

4.3 Faculty and Age

More than 40 percent of RNs working as faculty in their principal nursing position are between the ages of 50 to 59 (Figure 4-1). More than 19 percent of RNs whose principal position is as faculty were 60 years or older in 2008. Therefore, almost 60 percent of nursing faculty are over age 50. RNs whose secondary position is in an academic setting tend to be younger; among RNs under 50 years old, more worked in academic settings as a secondary position than as their primary position. Only 8.7 percent of RNs who have a secondary position in academic settings were 60 years or older. Nonetheless, the lack of younger RNs in faculty positions is apparent.

Figure 4-1. Age distribution of registered nurses who work as faculty

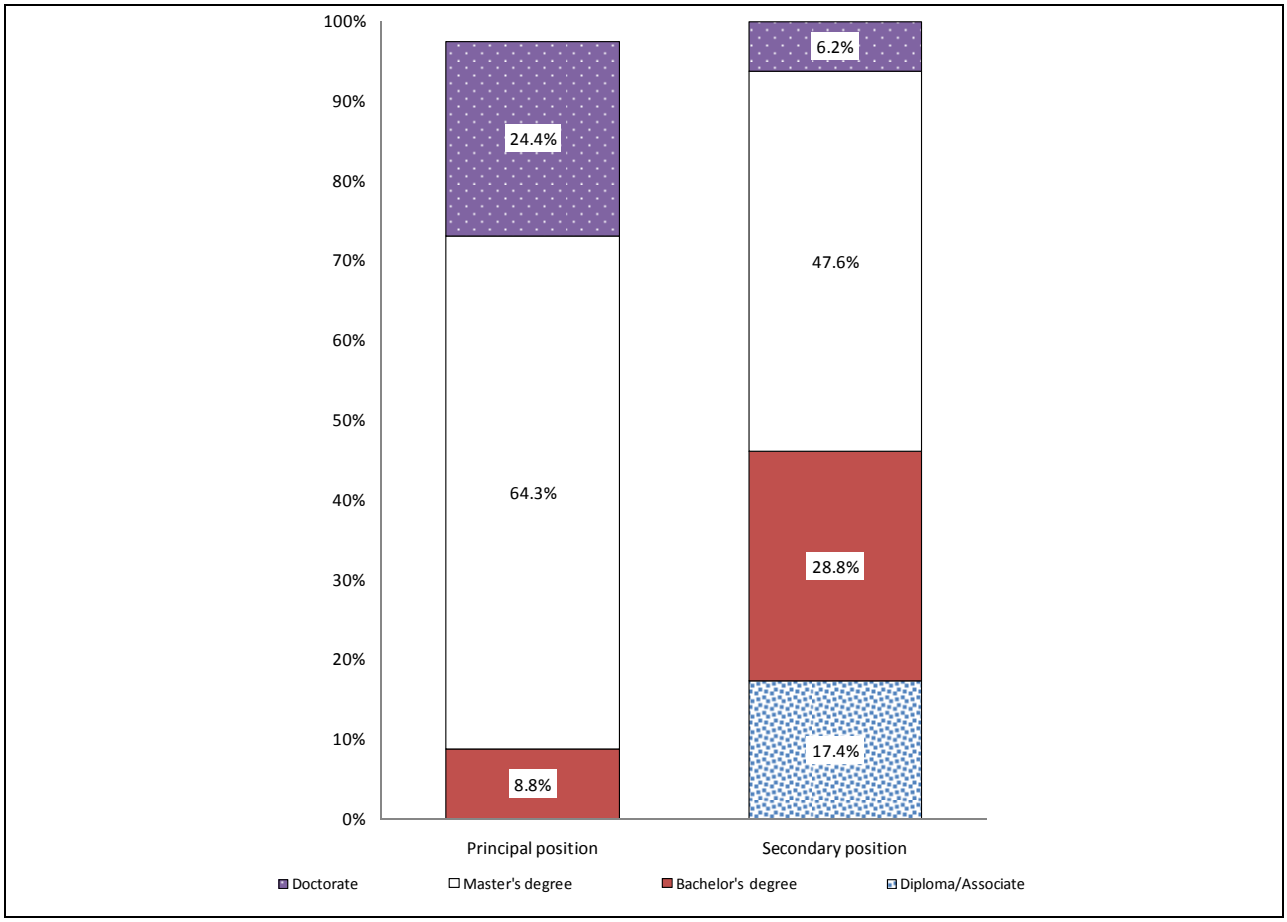


Source: 2008 National Sample Survey of Registered Nurses

4.4 Faculty and Education

Most RNs who worked as faculty in their principal nursing positions had a master's or doctorate degree (Figure 4-2). Education levels were lower among RNs who worked as faculty as their secondary nursing position.

Figure 4-2. Highest education of registered nurses who work as faculty*



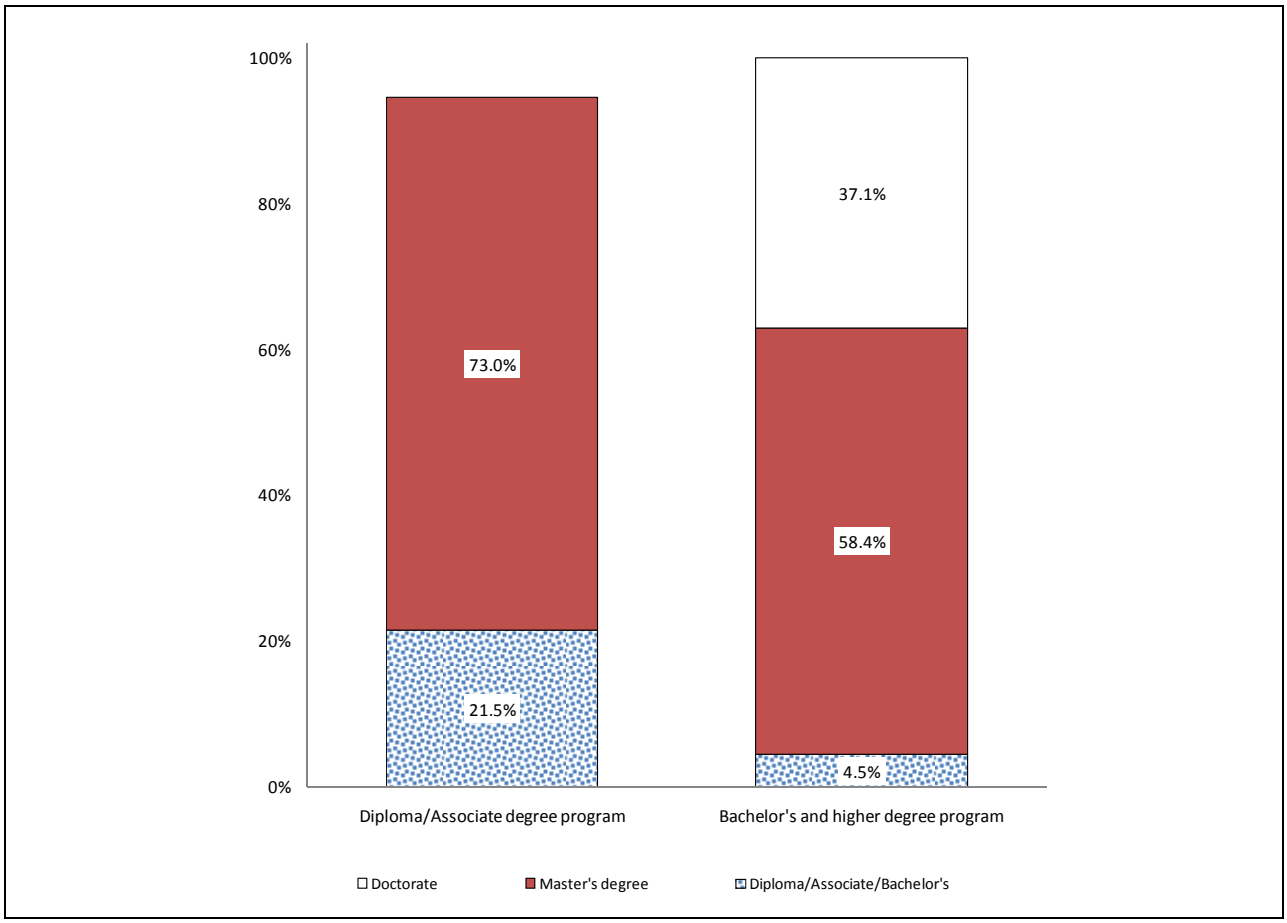
*Only registered nurses who provided education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

The education level of faculty is associated with the type of nursing program in which they work. RNs who worked in ADN and diploma programs (and also who prepare licensed practical nurses,) had lower education levels, on average, than did those who worked in programs that prepare nurses at the bachelor's and higher level (Figure 4-3). This is because most RN education programs at the bachelor's degree and higher level require full-time, tenure-track faculty to be prepared at the

doctorate level while ADN and diploma programs typically require full-time faculty to have a minimum of a master's degree.

Figure 4-3. Highest education of registered nurses who work as faculty in their principal position, by type of program in which they work*



*Only registered nurses who provided education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

4.5 Faculty and Hours of Work

Most RNs who worked as faculty in their principal position were employed for at least 9 months a year (96.1 percent), whereas only 3.9 percent were employed as faculty for 8 or fewer months per year (Table 4-3). Most faculty RNs reported that they work at least 32 hours per week in their principal faculty job. About one-quarter worked fewer than 32 hours per week, indicating the importance of part-time faculty work.

Table 4-3. Months worked per year and hours worked per week, by registered nurses who are faculty in their principal nursing position

	Number	Percent
Months per year		
1 to 8 months	1,223	3.9
9 to 10 months	18,773	60.4
11 to 12 months	11,061	35.6
Hours per week		
1-15 hours	1,812	5.8
16-23 hours	2,404	7.8
24-31 hours	3,220	10.4
32-39 hours	1,975	6.4
40-47 hours	11,473	37.0
48-55 hours	7,330	23.6
56 or more hours	2,842	9.2

Source: 2008 National Sample Survey of Registered Nurses

4.6 Faculty Earnings and Satisfaction

Nursing faculty received somewhat lower annual earnings than RNs in general. Overall earnings from a principal nursing position by RNs who work full-time averaged $66,973 in 2008 (Table 3-28), while earnings for faculty RNs were $63,985 on average (Table 4-4). This may be a reflection of the fact that two-thirds of faculty work fewer than 10 months. Faculty earnings were even lower when compared with RNs who have earned a graduate degree. RNs with master's or doctorate degrees earned an average of $87,363 per year from their principal full-time nursing position (Table 3-28). Faculty who work in programs that prepare nurses at the bachelor's and higher level earned slightly more on average than those who work in ADN programs. Faculty with a job title of instructor or lecturer earned much less than professors ($54,944 v. $69,691).

Registered nurses who work as faculty in their principal position were generally quite satisfied with their work (Figure 4-4). Nearly 90 percent of faculty reported that they are moderately or extremely satisfied with their position, as compared with 81.1 percent of all working RNs (Figure 3-18). The satisfaction of faculty is similar to that of nurses with graduate degrees, of whom 87.3 percent were moderately or extremely satisfied (Figure 3-22).

- Faculty that prepare RNs in bachelor's and higher degree programs were somewhat less satisfied than are those who prepare RNs in ADN programs.

- Faculty with instructor or lecturer job titles were less satisfied than those who were professors.

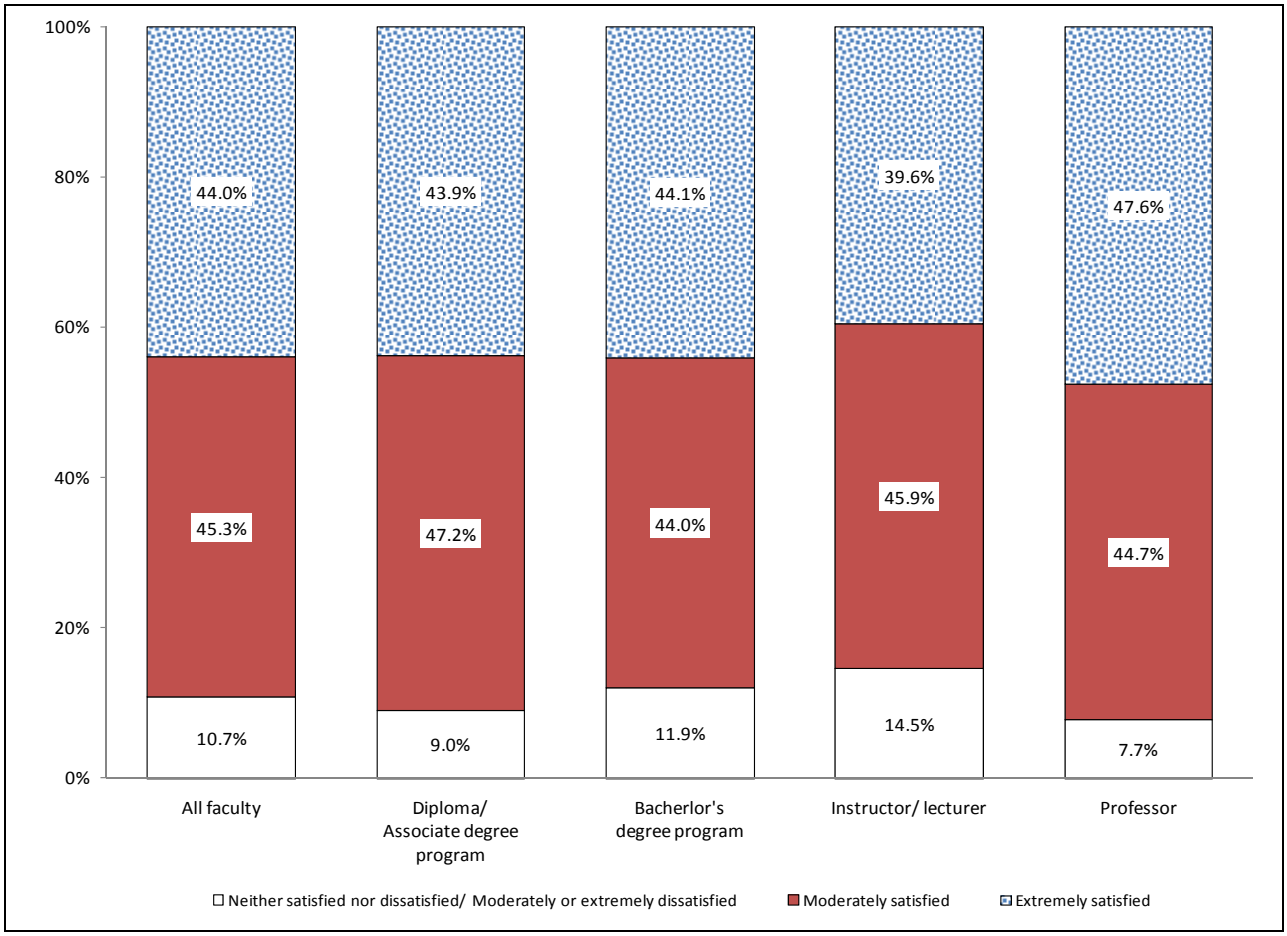
Table 4-4. Average annual earnings of registered nurses who work full-time as faculty in their principal nursing position*

	Annual earnings
All faculty	63,985
Earnings by type of program	
Faculty in Diploma/Associate degree program	62,689
Faculty in Bachelor's degree program	64,789
Earnings by faculty job title	
Instructor/Lecturer	54,944
Professor	69,691

*Only registered nurses who provided earnings information are included in the calculations used for this table.

Source: 2008 National Sample Survey of Registered Nurses

Figure 4-4. Satisfaction of registered nurses who work as faculty in their principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

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Advanced Practice Registered Nurses 5

5.1 Introduction

For more than four decades, Advanced Practice Registered Nurses (APRNs) have been an integral part of the health care system and have served in a variety of roles in acute and ambulatory care settings. APRNs are RNs who have received advanced education to develop knowledge and skills in areas not usual for RNs such as diagnosing and managing common acute and chronic diseases, ordering diagnostic tests, prescribing medications, and performing minor procedures. Commonly recognized APRN designations are nurse practitioner (NP), nurse midwife (NM), nurse anesthetist (NA), and clinical nurse specialist (CNS). While most APRNs are prepared in only one advanced practice area, some may be prepared in more than one of these fields. For this report, RNs were categorized as APRNs if they reported that they were prepared as an APRN in one or more of the recognized specialties.

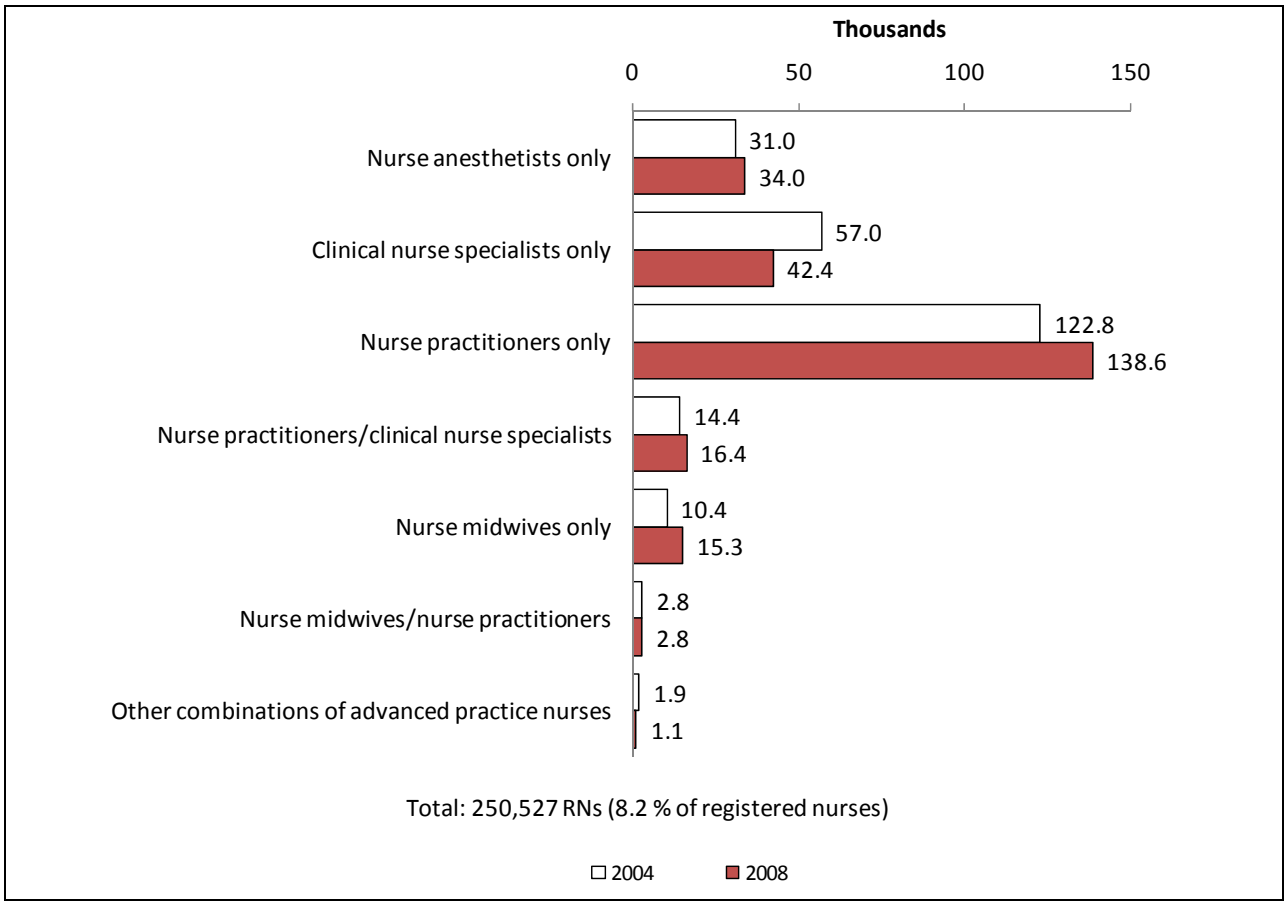
APRNs are required to complete an approved educational program before taking an exam to obtain certification from a nationally recognized professional organization. Each State establishes criteria for State licensure, certification, or other approval of APRNs, which may include requiring graduate education and/or certification from a professional organization.

In 2008, an estimated 250,527 RNs reported that they were prepared as an APRN in one or more advanced specialties or fields. Of these, 220,494 were employed in nursing (Figure 5-1 and Appendix A, Table 44). The largest group of APRNs is NPs, and their estimated numbers rose between 2004 and 2008. CNSs are the second largest group, but their numbers declined between 2004 and 2008, the only group of APRNs to experience a decline. More information about each type of APRN is provided in dedicated sections in this chapter.

5.2 Nurse Practitioners

NP preparation has its roots in public health nursing and school nursing roles in the early part of the 20th century. In the late 1950s, RNs with clinical experience began to collaborate with physicians in the delivery of primary care, particularly in rural areas and in clinics affiliated with medical centers.

Figure 5-1. Registered nurses prepared for advanced practice, 2004-2008*



*The totals in each bar may not equal the estimated numbers for RNs in each Survey year due to incomplete information provided by respondents and the effect of rounding. Only those who claimed advanced preparation as a nurse midwife, nurse anesthetist, clinical nurse specialist, and/or nurse practitioner are included in the calculations used for this figure.

Source: 2004-2008 National Sample Survey of Registered Nurses

In 1965, the first formal education program for NPs was established at the University of Colorado, with a curriculum focused on health promotion, disease prevention, and children's health. Historically, NP programs could confer a certificate or a degree; now, nearly all States require that new NPs complete a graduate degree in nursing, although most permit previously licensed or certified NPs to continue to practice without a master's degree.[1] Registered nurses with a master's degree in nursing, but who have not completed a master's in an NP program, can enroll in a graduate program to obtain a post-master's certificate allowing them to become NPs.[2] National certifying Boards require a minimum of a master's degree for new graduates of NP programs. Since

[1] Historical perspective is from Julie A. Fairman. Making Room in the Clinic: Nurse Practitioners and the Evolution of Modern Health Care. New Brunswick: Rutgers University Press, 2008.

[2] These courses typically include pathophysiology, advanced pharmacology, advanced health assessment and physical exam techniques, and course work with clinical NP patient care practice.

1999, some nurse education programs have offered the Doctor of Nursing Practice (DNP), in addition to or instead of a master's degree, although the number of NPs educated in these programs is small thus far.

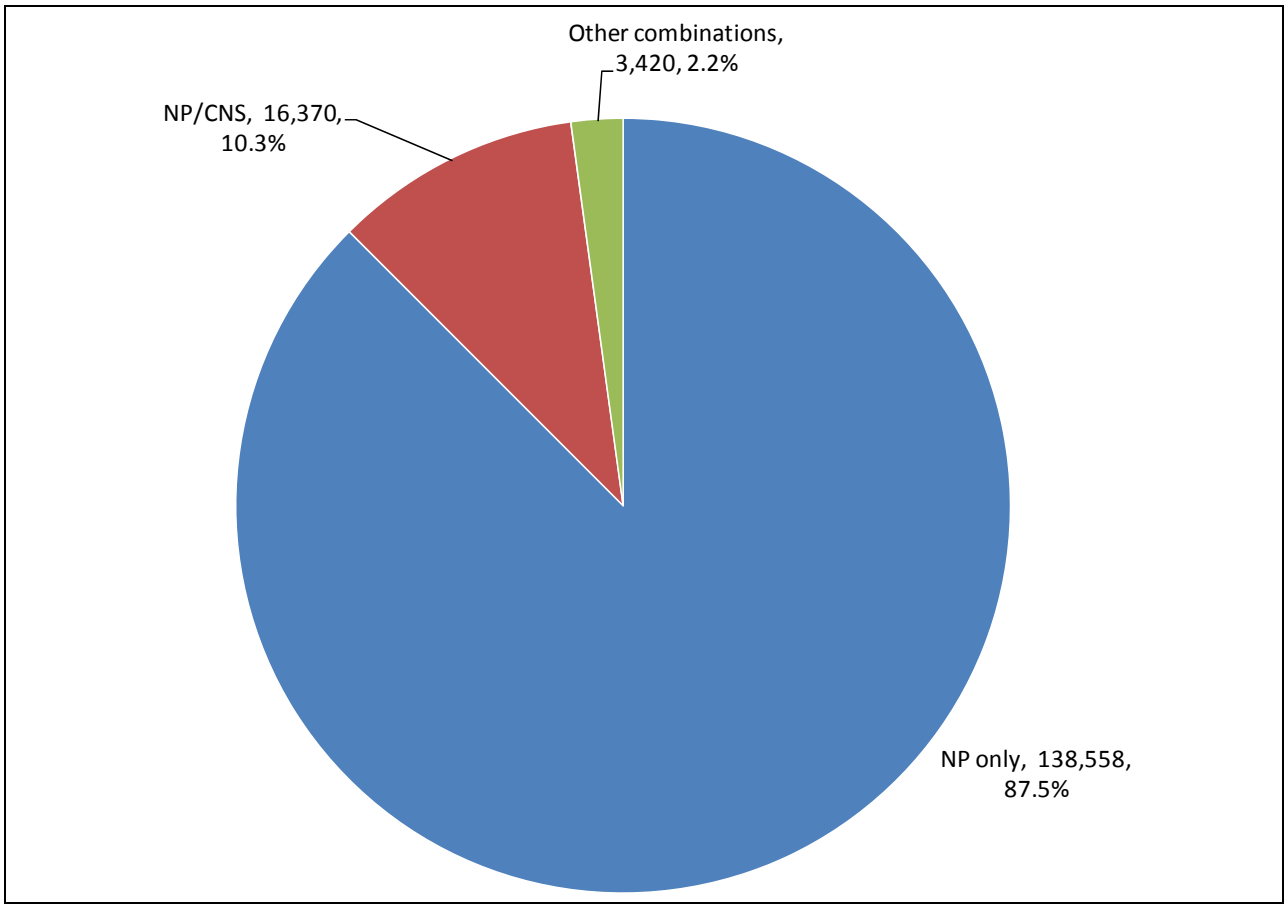
Early practice for NPs focused on work particularly with women and children in rural and underserved inner city areas where physicians were scarce. NPs are now prepared and certified to work across populations in any geographic region with focus specialty areas including family care, pediatrics, geriatrics, adult health, women's health, psychiatry, neonatology, and acute hospital care of adults and children (Appendix A, Table 46). To work with the title of an NP, nurses must be certified or recognized by the State in which they practice, which usually requires certification by a national professional organization. The State recognized Scope of Practice for NPs differs depending on State regulations. While regulation of NPs may differ by State, the education, knowledge, and practices of NPs are generally the same nationwide.

To assure that NP data were accurate, care was taken to include only NPs with preparation as nurse practitioners. In this Survey, registered nurses were counted as NPs if they responded as an NP and also provided at least one additional piece of corroborating information indicating either that (1) their primary specialty was a specialty nationally recognized for NPs, (2) they had national or State certification or recognition, (3) they had a master's or higher degree in nursing, or (4) they held a job title of nurse practitioner. This section focuses on all RNs prepared as NPs, and all data refer to this group unless otherwise specified. The analysis in this chapter includes all RNs who have been prepared as NPs, even if they are not currently licensed or certified as such or do not practice in the field. These NPs may be retired or pursuing other occupations within or outside nursing. Understanding the employment patters of RNs, including APRNs, is a central goal of the NSSRN.

5.2.1 Number of Nurse Practitioners

In 2008, an estimated 158,348 nurses had NP preparation (Figure 5-2 and Appendix A, Table 45). Of these, 16,370 were also prepared as CNSs, accounting for 10.3 percent of NPs. Another 2.2 percent of NPs in 2008 also had preparation as NMs, NAs, or in more than two APRN fields.

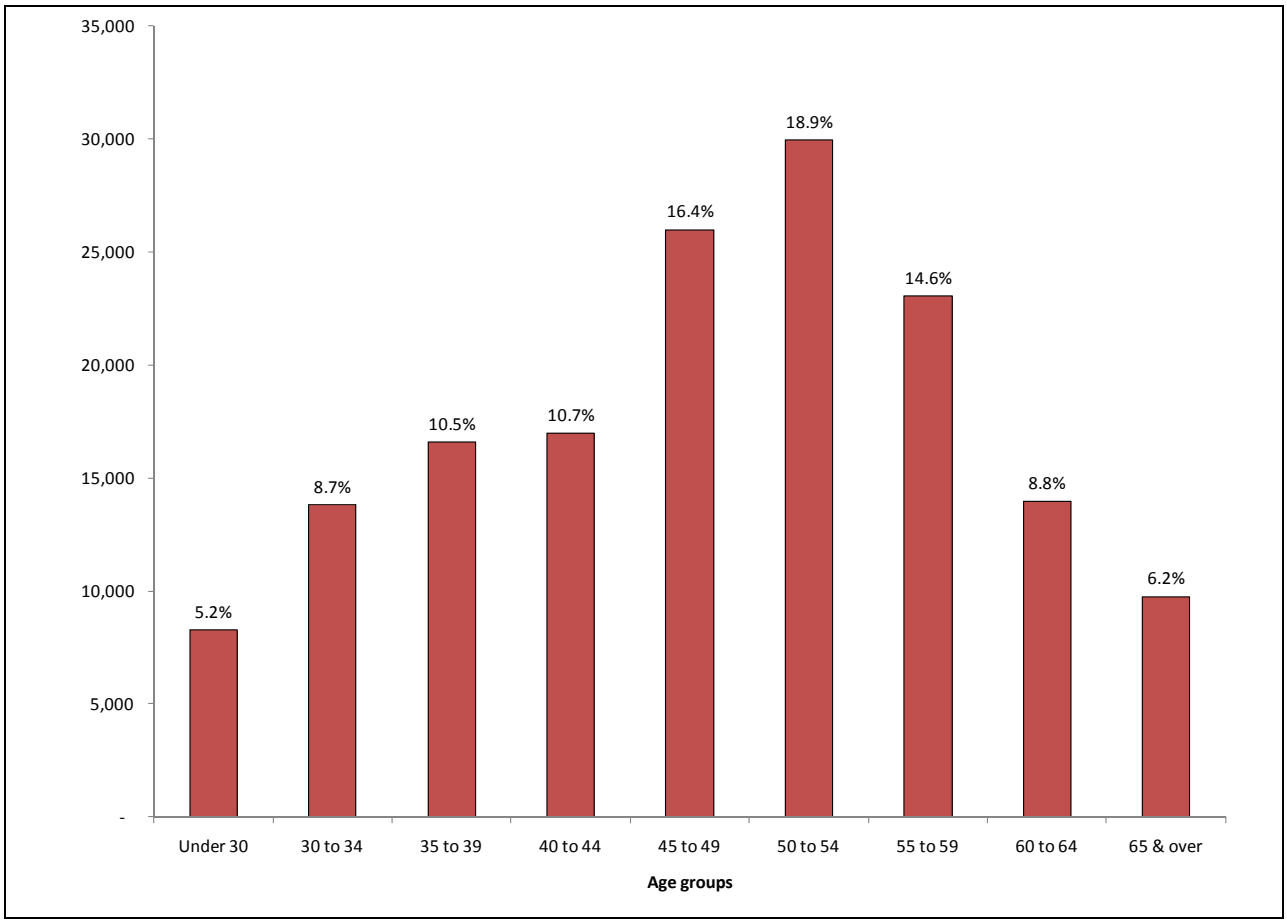
Figure 5-2. Registered nurses prepared in advanced practice nursing



Source: 2008 National Sample Survey of Registered Nurses

Almost 50 percent of NPs were age 50 or older while 35 percent of NPs were under 45 years old (Figure 5-3). NPs younger than 35 years of age comprise almost 14 percent of the population.

Figure 5-3. Age distribution of registered nurses prepared as nurse practitioners



Source: 2008 National Sample Survey of Registered Nurses

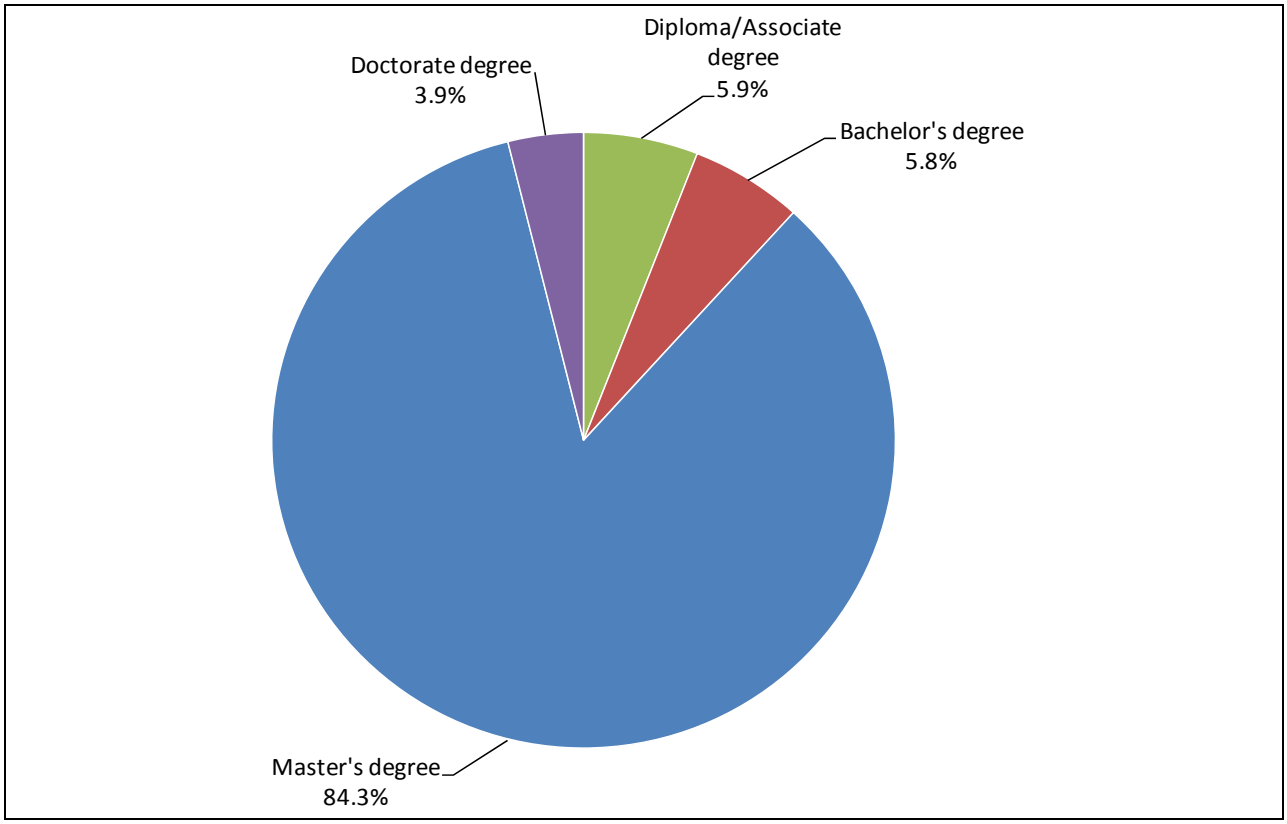
5.2.2 Nurse Practitioners and Education

More than 88 percent of NPs have a graduate degree in nursing or a nursing-related field, with 84.3 percent reporting a master's degree and 3.9 percent holding a doctorate degree (Figure 5-4). The 11 percent of NPs without graduate degrees are mostly those who received their NP education before the majority of States required graduate degrees for NP recognition. The majority (73.4 percent) of NPs reported completing an educational program 13 to 36 months long, while 16.2 percent reported a program length of 8-12 months.

More than 93 percent of NPs employed in nursing report having at least either national certification or State Board recognition. Of those with national certification, 71.6 percent said that national

certification is required for their job. Of those with State Board recognition, 82.8 percent said that State Board recognition is required (Table 5-1 and Appendix A, Table 45).

Figure 5-4. Nurse practitioner preparation, by highest nursing or nursing-related degree*



*Only those who provided nursing education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

Table 5-1. Certification and State Board recognition of nurse practitioners employed in nursing, and whether certification or recognition is required for their job

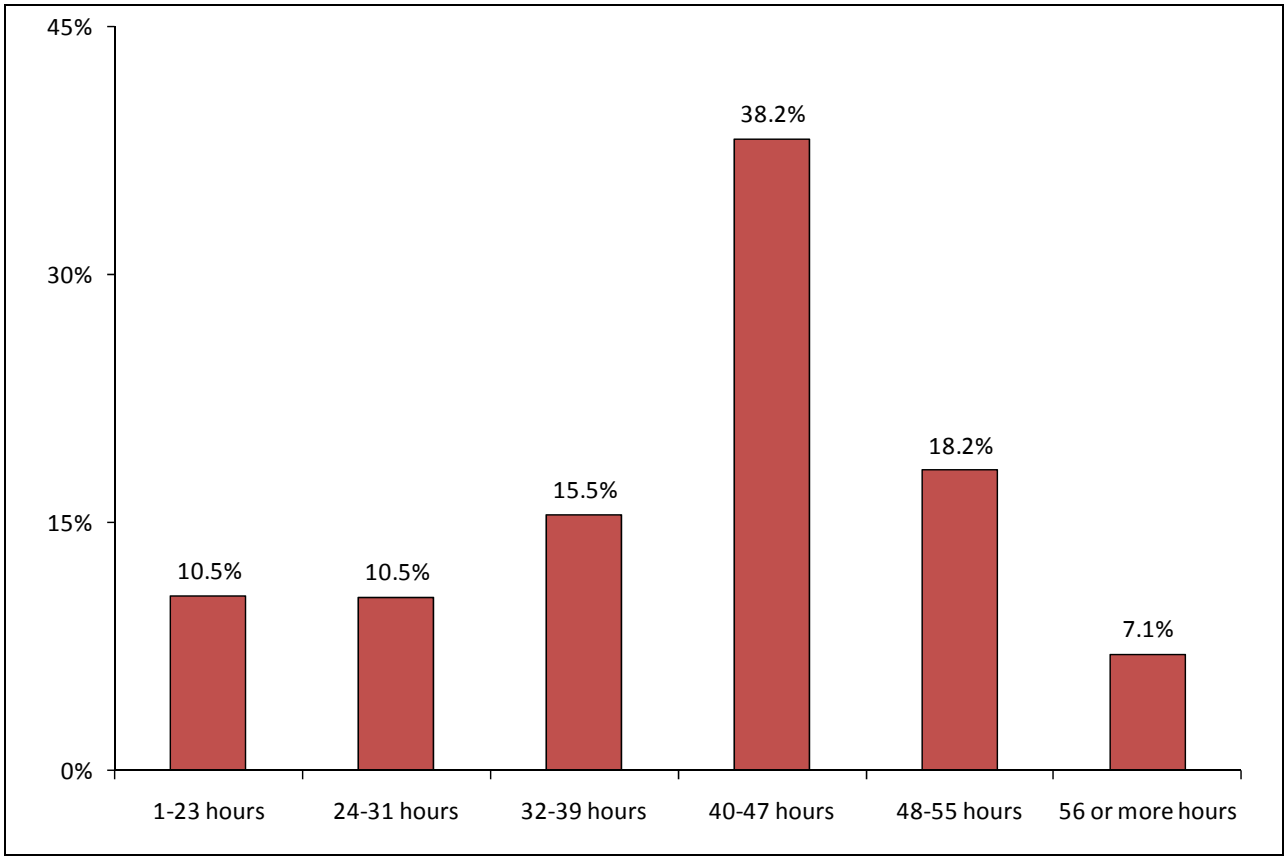
	Percent of NPs certified/ recognized	Percent of those certified or recognized for whom it is required for their job
National organization certification	83.8	71.6
State Board recognition	88.1	82.8
Either national organization certification or State Board recognition	93.2	82.2

Source: 2008 National Sample Survey of Registered Nurses

5.2.3 Nurse Practitioners and Employment

Most NPs are employed in nursing, with 141,286 employed in 2008 (89.2 percent) (Appendix A, Table 45). The vast majority worked at least 10 months per year in their principal position, with only 4.5 percent working 9 or fewer months. More than 63 percent of NPs reported that they work at least 40 hours per week in their principal nursing position; more than 25 percent work 48 hours or more per week (Figure 5-5).

Figure 5-5. Hours worked per week by employed nurse practitioners in their principal nursing position

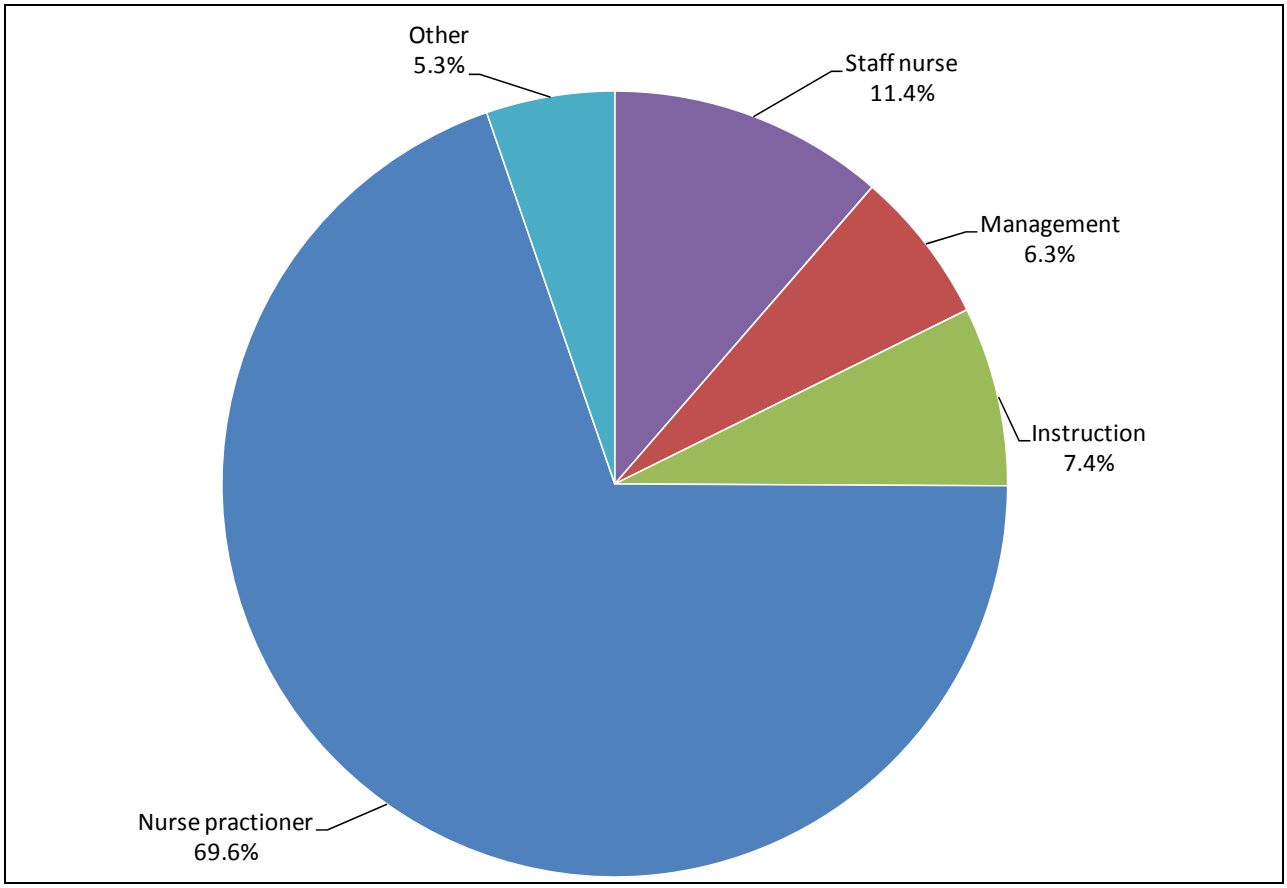


Source: 2008 National Sample Survey of Registered Nurses

An estimated 69.6 percent of NPs had a principal position job title of nurse practitioner and the vast majority hold national certification. Of the estimated 97,876 NPs who report nurse practitioner as their job title, 99.6 percent have national certification or State recognition (Appendix A, Table 45).

There were 11.4 percent of nurses prepared as NPs who reported that their job title was staff nurse or equivalent (Figure 5-6). Another 7.4 percent had a title in the area of instruction, and 6.3 percent had a management or administration title.

Figure 5-6. Job titles of nurse practitioners*



*Excludes NPs for whom job title was not known.

Source: 2008 National Sample Survey of Registered Nurses

NP education has historically focused on the provision of primary care but NPs may also work in acute care or chronic care settings. About 36 percent of NPs reported primary care as their clinical specialty in their principal position (Table 5-2). General medical-surgical and gynecology/women's health were each the primary clinical areas of 12.1 percent of NPs. Another 8.6 percent specialized in cardiac care, and 6.9 percent focused on chronic care.

Table 5-2. Primary clinical specialties of employed nurse practitioners with job title of nurse practitioner

Clinical specialty*	Percent
Critical care	5.8
Cardiac care	8.6
Chronic care	6.9
Emergency/trauma care	3.5
Gastrointestinal	3.4
General medical surgical	12.1
Gynecology (women's health)	12.1
Infectious/communicable disease	3.7
Neurological	3.2
Obstetrics/labor & delivery	8.6
Oncology	4.4
Primary care	36.1
Psychiatric/mental health	6.3
Other specialty**	16.7

*The number of clinical specialties will exceed the total number for all clinical specialties because each NP may report more than one specialty.

**Other clinical specialty includes dermatology, endocrinology, hospice, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, radiology, pulmonary/respiratory, renal/dialysis, urology, no specific area, and other specialties.

Source: 2008 National Sample Survey of Registered Nurses

More than 64 percent of NPs whose job title is nurse practitioner reported that they principally deliver ambulatory care or primary care (Table 5-3). Among the other most commonly reported job titles of NPs, between 14 and 24 percent predominately provide ambulatory or primary care as well.

Table 5-3. Employed nurse practitioners whose primary level of care is ambulatory or primary care, by job title*

	Number	Percent
Staff nurse	3,029	19.0
Management	1,254	14.6
Instruction	1,857	18.3
Nurse practitioner	61,513	64.5
Other**	1,760	24.0

*Excludes NPs for whom job title was not known.

**Other job titles include NA, CNS, NM, patient educator, patient coordinator, quality improvement/utilization review, informatics, consultant, legal nurse, researcher, surveyor/auditor/regulator, and no job title.

Source: 2008 National Sample Survey of Registered Nurses

NP preparation historically focused on ambulatory care, and thus NPs often work in primary care settings; however, NPs may also work in specialty clinics, acute care hospitals, schools, public health departments, and extended care facilities. More than 38 percent of NPs were employed in hospital

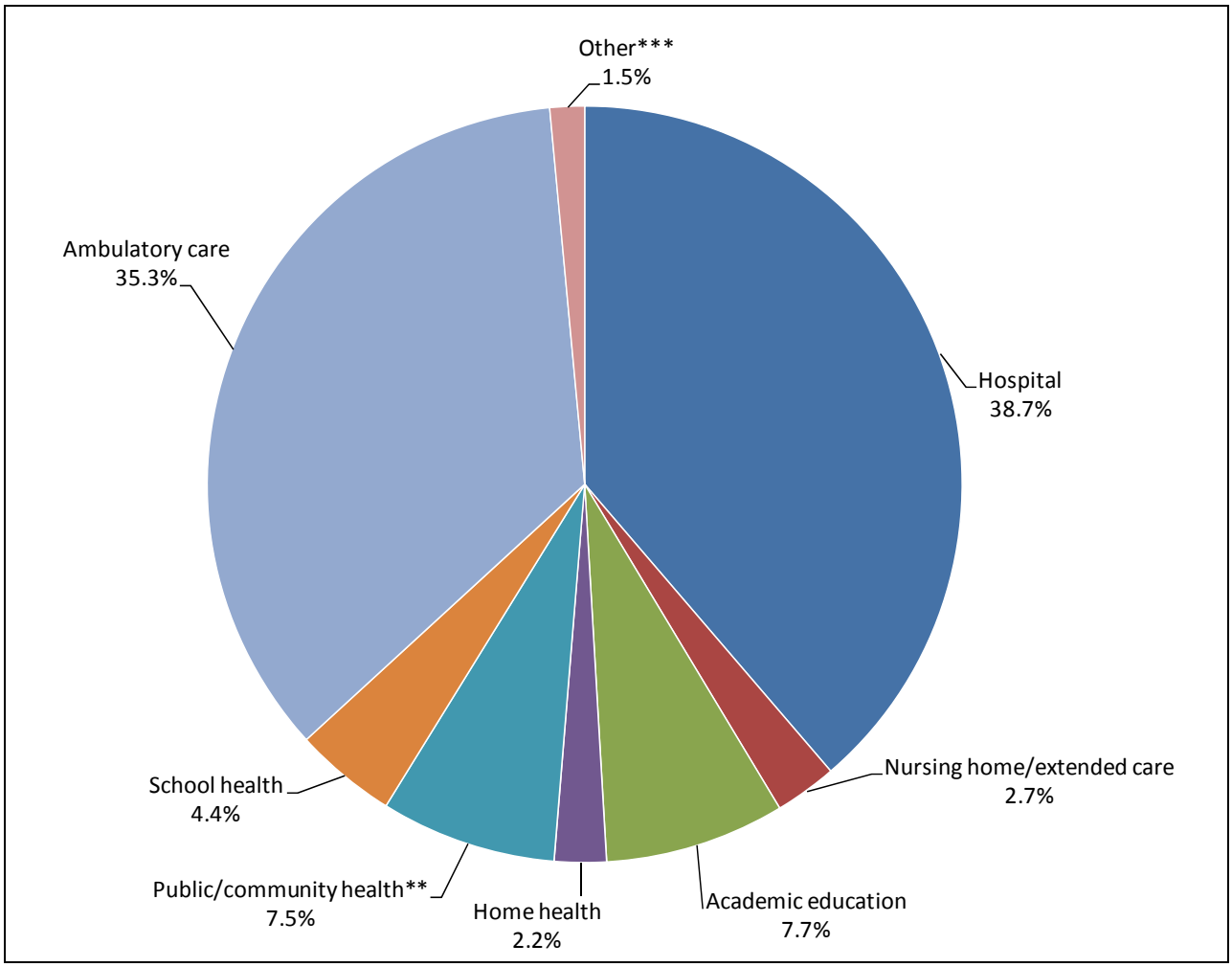
settings, which can include primary care clinics located in or owned by a hospital (Figure 5-7). Another 35.3 percent worked in ambulatory care settings outside hospitals.

NPs who were employed in ambulatory care settings reported that ambulatory care was the level of care they provide most often (Figure 5-8). However, among NPs who worked in hospital settings, only 33.7 percent listed ambulatory care as their primary level of care. Higher percentages of NPs employed in school health (59.5 percent) and public/community health (47.4 percent) reported that their main level of care was ambulatory or primary care. Only 7.7 percent of NPs work in academic education, and of these NPs, 15.1 percent reported ambulatory or primary care as their main level of care.

5.2.4 Nurse Practitioner Earnings and Job Satisfaction

Registered nurses working both full- and part-time and prepared as NPs earned an average of $73,776 per year in their principal position. Those who worked full-time earned an average of $83,192. NPs were, on average, very satisfied with their work (Figure 5-9). More than 87 percent were moderately or extremely satisfied with their principal position, and only 7.6 percent were moderately or extremely dissatisfied.

Figure 5-7. Employment settings in which nurse practitioners work*



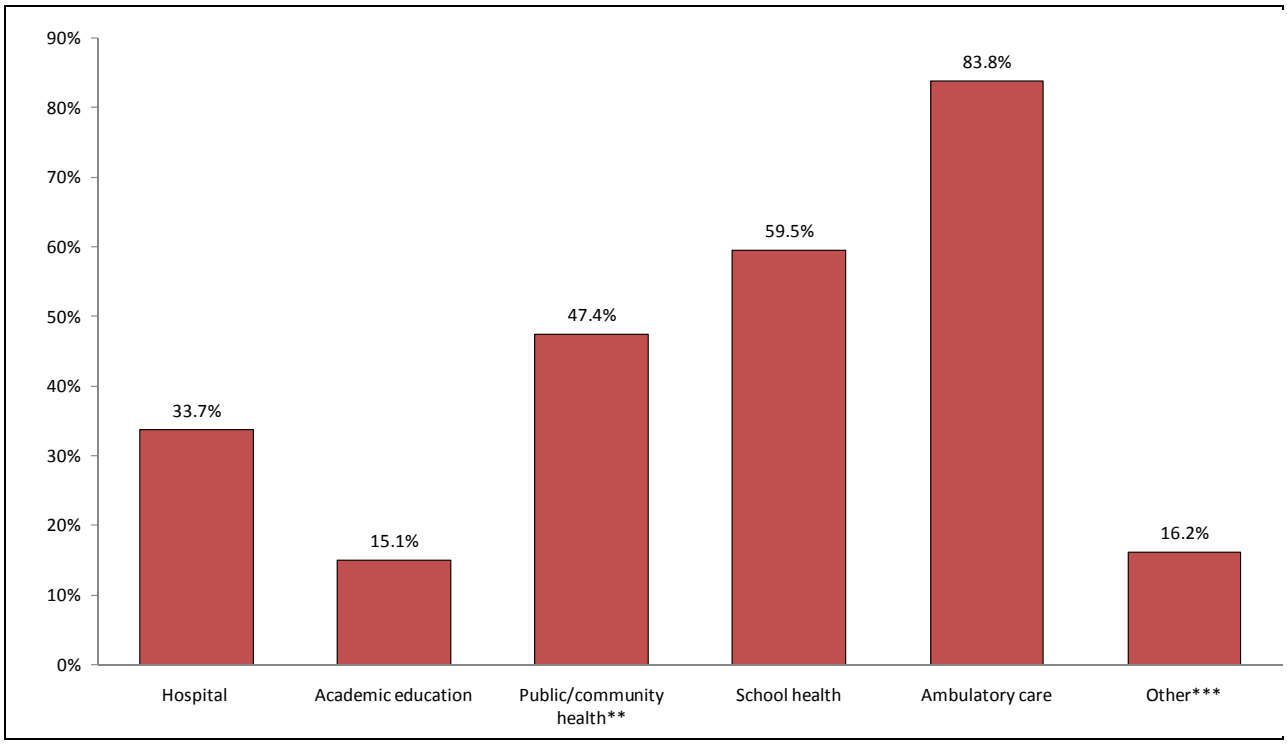
*Excludes NPs for whom employment setting was not known.

**Public/community health includes occupational health.

***Other includes insurance/benefits/utilization review.

Source: 2008 National Sample Survey of Registered Nurses

Figure 5-8. Percent of nurse practitioners whose primary level of care is ambulatory or primary care, by employment setting*



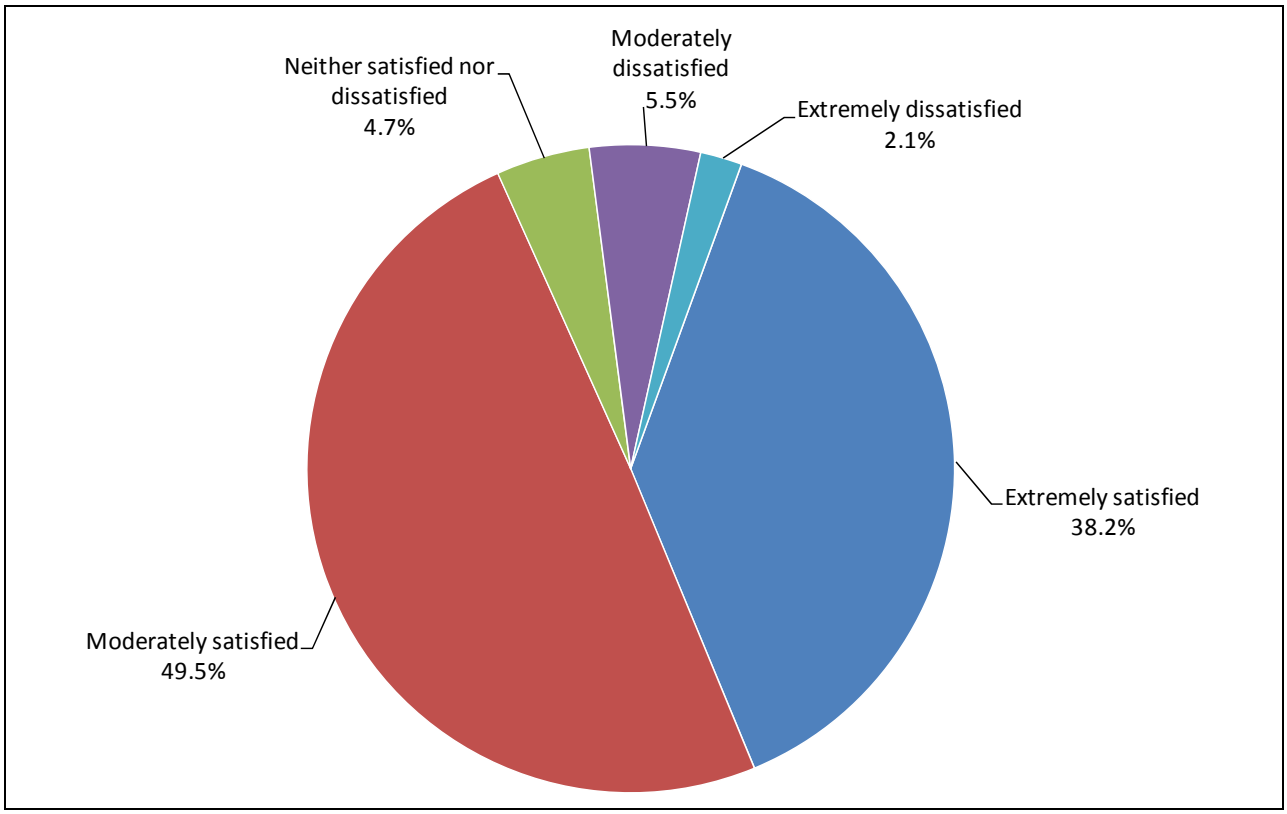
*Excludes NPs for whom level of care or employment setting was not known.

**Public/community health includes occupational health.

***Other includes insurance/benefits/utilization review.

Source: 2008 National Sample Survey of Registered Nurses

Figure 5-9. Nurse practitioner satisfaction with principal position



Source: 2008 National Sample Survey of Registered Nurses

5.3 Nurse Midwives

Midwifery has a long history. Nurse midwifery arose both in New York City and in Kentucky in the late 19th and early 20th centuries. The earliest U.S. nurse midwifery programs were designed to meet the needs of special populations in urban, rural, and impoverished populations. In 1925, nurse Mary Breckinridge established the Frontier Nursing Service in Kentucky. The educational program of the Frontier Nursing Service drew from public health nursing and British nurse midwifery traditions, focusing primarily on the care of women from preconception through postpartum care, as well as the care of infants. After the American College of Nurse Midwives formed in 1955, practice and education opportunities for nurse midwives expanded. National certification for nurse midwives (NMs) was established in 1970.[3,4,5]

3 Dye, N.S. (1983). Mary Breckinridge, the Frontier Nursing Service and the Introduction of Nurse-Midwifery in the U.S. *Bulletin of the History of Medicine, 57*(4), pp. 485-507.

4 Tom, S. A. C.N.M., M.S. (1982). The evolution of nurse-midwifery: 1900-1960. Journal of Nurse-Midwifery, (27)4, pp. 4-13.

5 Dawley, K. C.N.M., PhD. (2003). Origins of nurse-midwifery in the Unites States and its expansion in the 1940s. Journal of Midwifery & Women's Health, (48)2, pp. 86-95.

Nurse midwifery education requirements vary across States. Few nondegree programs exist in the United States and most programs, including the Frontier Nursing Service program, confer a master's or doctorate degree. To practice as a nurse midwife, NMs must be certified or recognized by the State in which they practice or by a national professional organization. Much like NPs, the Scope of Practice of NMs varies by State legislation. Many States require a graduate degree in nursing, but some still permit NMs to practice after completing a bachelor's degree and a post-licensure certification program.

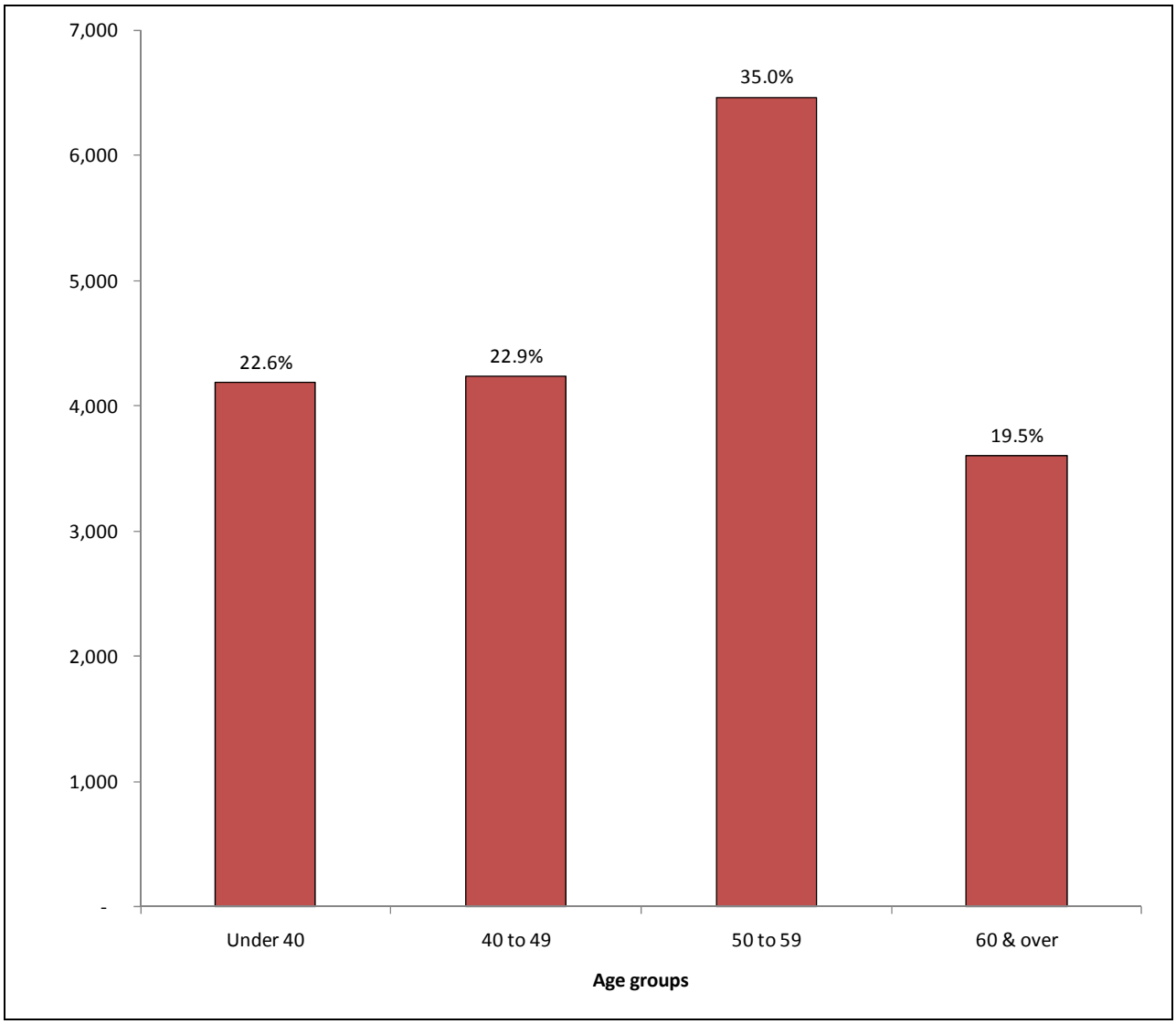
To assure that NM data were accurate, care was taken to include only NMs with preparation as nurse midwives. In this Survey, nurses who responded as having been prepared as an NM were only considered as such if they also provided at least one additional piece of corroborating information indicating either that (1) their primary APRN area of study was family care, maternal-child health, neonatal care, nurse-midwifery, obstetrics/gynecology, or women's health; (2) they reported national or State certification or recognition; (3) they had a master's or higher degree in nursing; or (4) their job title was reported as nurse midwife.

5.3.1 Number of Nurse Midwives

NMs comprised the smallest number of the four APRN groups in 2008, with an estimated 18,492 registered nurses prepared as NMs (Appendix A, Table 45). Of these, an estimated 3,164 also have been prepared in another APRN field.

NMs were older than nurses prepared as NPs. More than 54 percent were 50 years or older (Figure 5-10).

Figure 5-10. Age distribution of registered nurses prepared as nurse midwives



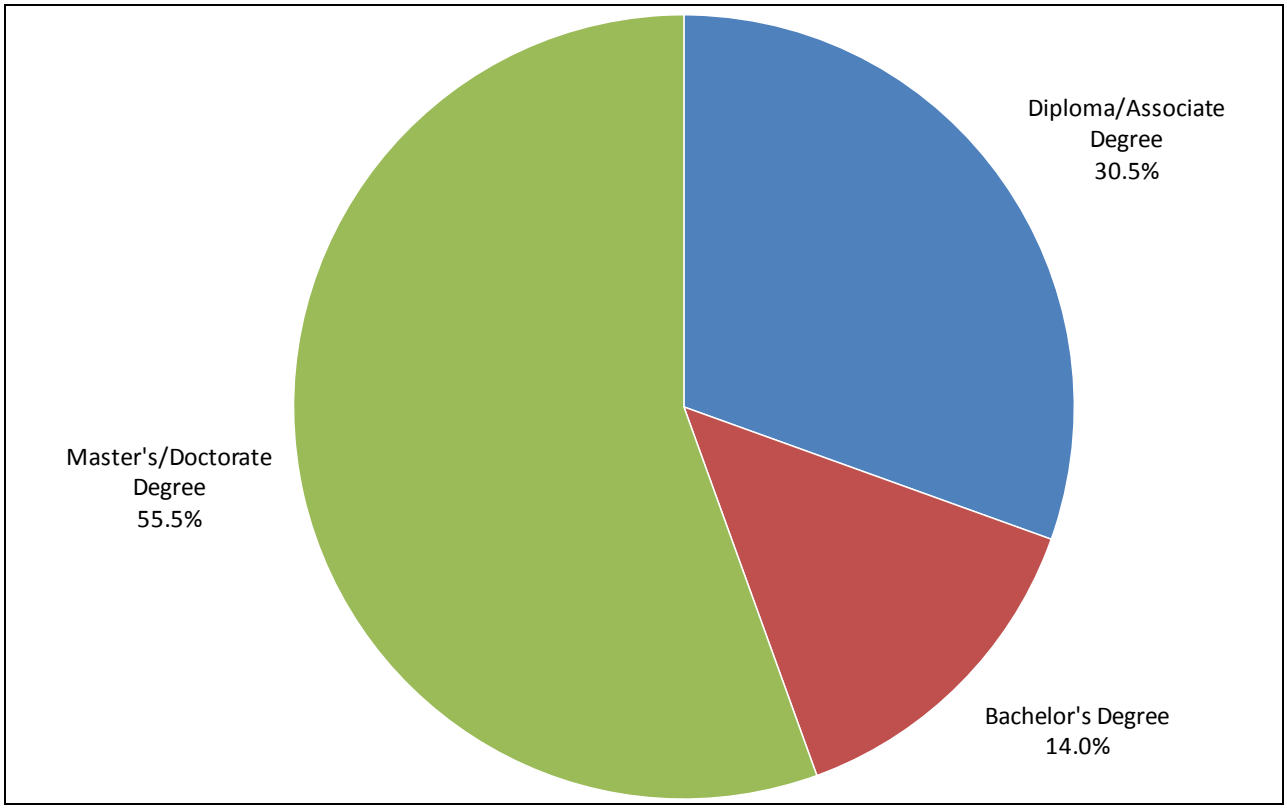
Source: 2008 National Sample Survey of Registered Nurses

5.3.2 Nurse Midwives and Education

Nurse midwives were the least likely of the APRN groups to have been educated at the graduate level, with only 55.5 percent reporting that they had a master's or doctorate degree (Figure 5-11). More than 30 percent of NMs reported a diploma or an ADN as their highest nursing education. Nurse midwives were more likely than other APRNs to have been educated in shorter programs, with 56 percent having completed programs that lasted 13 to 36 months, and 34.5 percent completing 8- to 12-month programs. This is consistent with the fact that earlier NM programs did

not require students to have a bachelor's degree nor did the early programs confer a master's degree.[6]

Figure 5-11. Nurse midwife preparation, by highest nursing or nursing-related degree*



*Only NMs who provided nursing education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

More than 91 percent of NMs employed in nursing had national certification or recognition from their State Board of Nursing. National certification is more common than State Board recognition (Table 5-4). Of those NMs who are employed in any nursing position and have national certification, 57.9 percent report that their certification is required for their job. Of those employed with State Board recognition, 71.9 percent said their recognition was required.

[6] In some states, individuals can be certified or recognized as non-nurse midwives. The requirements for this vary by State and are generally considered separate from the Nurse Midwife credential.

Table 5-4. Certification and State Board recognition of nurse midwives employed in nursing, and whether certification or recognition is required for their job

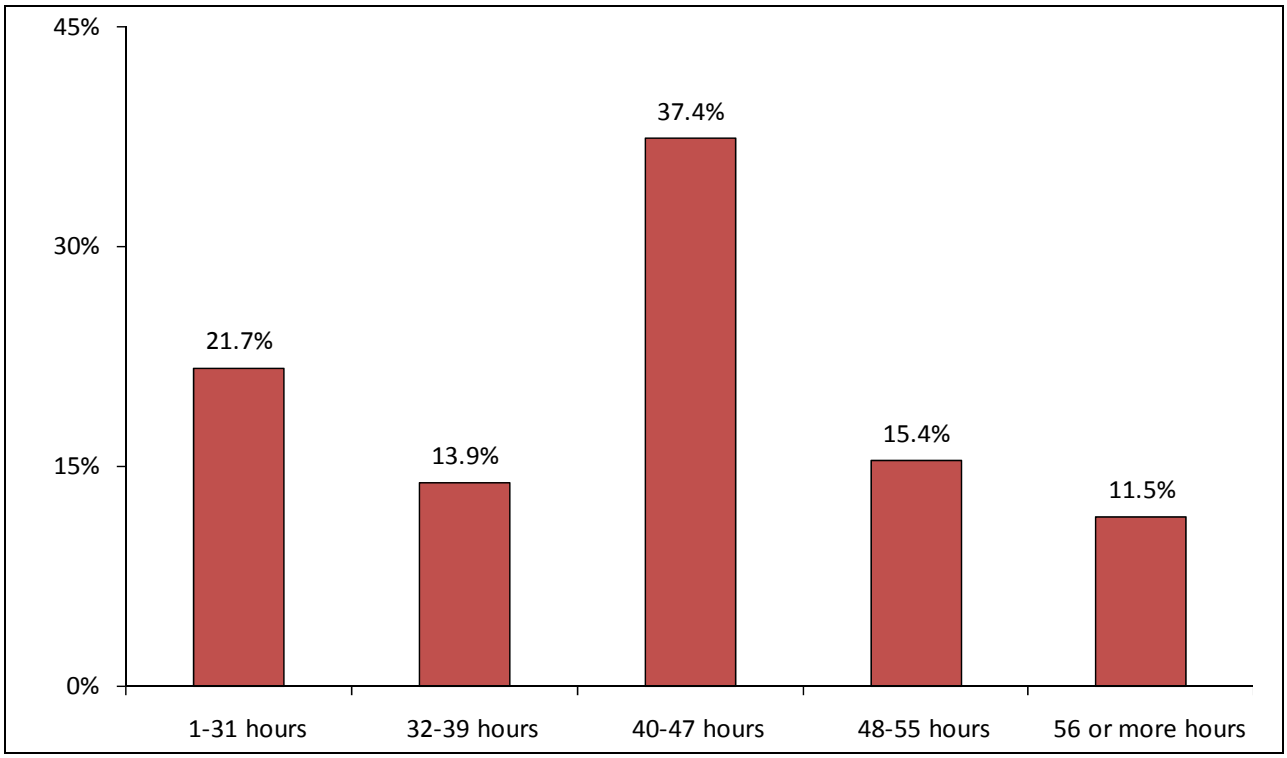
	Percent of NMs certified/ recognized	Percent of those certified or recognized for whom it is required for their job
National organization certification	89.7	57.9
State Board recognition	70.0	71.9
Either national organization certification or State Board recognition	91.5	60.4

Source: 2008 National Sample Survey of Registered Nurses

5.3.3 Nurse Midwives and Employment

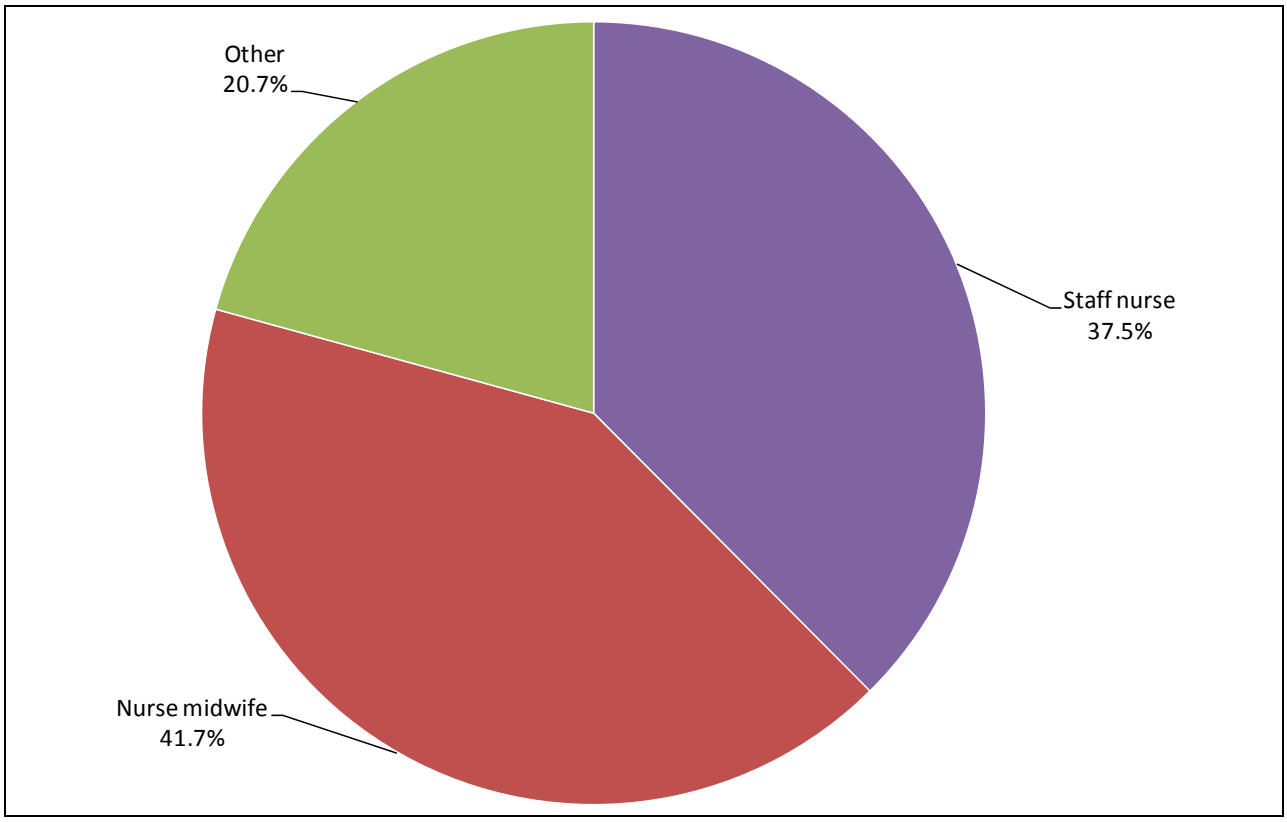
In 2008, 15,581 NMs were employed in nursing positions (84.3 percent of all NMs) (Appendix A, Table 45) and only 35.6 percent of NMs worked less than 40 hours per week. More than one quarter of NMs work more than 48 hours per week (Figure 5-12).

Figure 5-12. Hours worked per week by employed nurse midwives in their principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

Figure 5-13. Job titles of nurse midwives*



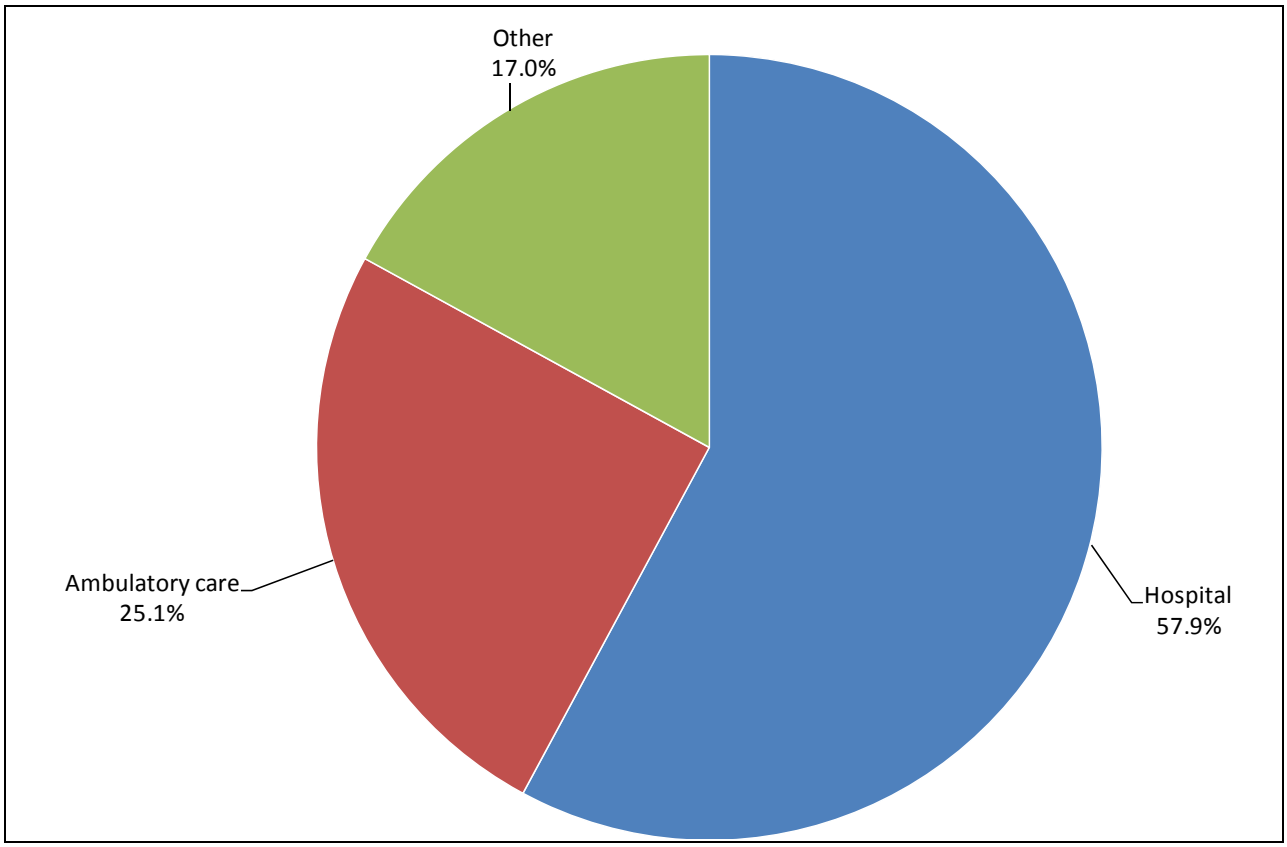
*Excludes NMs for whom job title was not known.

Source: 2008 National Sample Survey of Registered Nurses

An estimated 41.7 percent of employed NMs reported their principal position's job title as nurse midwife (Figure 5-13). All of these NMs also had State recognition or national certification in this field (Appendix A, Table 45). Many NMs have a job title of staff nurse (37.5 percent), but 20.7 percent have other titles such as patient coordinator, faculty, or instructor.

The majority of NMs (57.9 percent) worked in hospital settings in 2008, and 25.1 percent worked in ambulatory care (Figure 5-14). NMs often work in clinical specialties related to midwifery, even when their job title is not nurse midwife. Among those who worked in a hospital setting, 41.8 percent specialize in labor and delivery, 33.7 percent in obstetrics, and 13.6 percent in gynecology or women's health (Table 5-5).

Figure 5-14. Employment settings in which nurse midwives work*



*Excludes NMs for whom setting was not known.

Source: 2008 National Sample Survey of Registered Nurses

Table 5-5. Clinical specialties of registered nurses prepared as nurse midwives, for selected job titles in the hospital setting

Clinical specialty*	Percent with nurse midwife title	Percent of nurse midwives in hospital setting
Labor and delivery	56.0	41.8
Obstetrics	68.9	33.7
Gynecology/women's health	50.2	13.6

*NMs could report more than one clinical specialty.

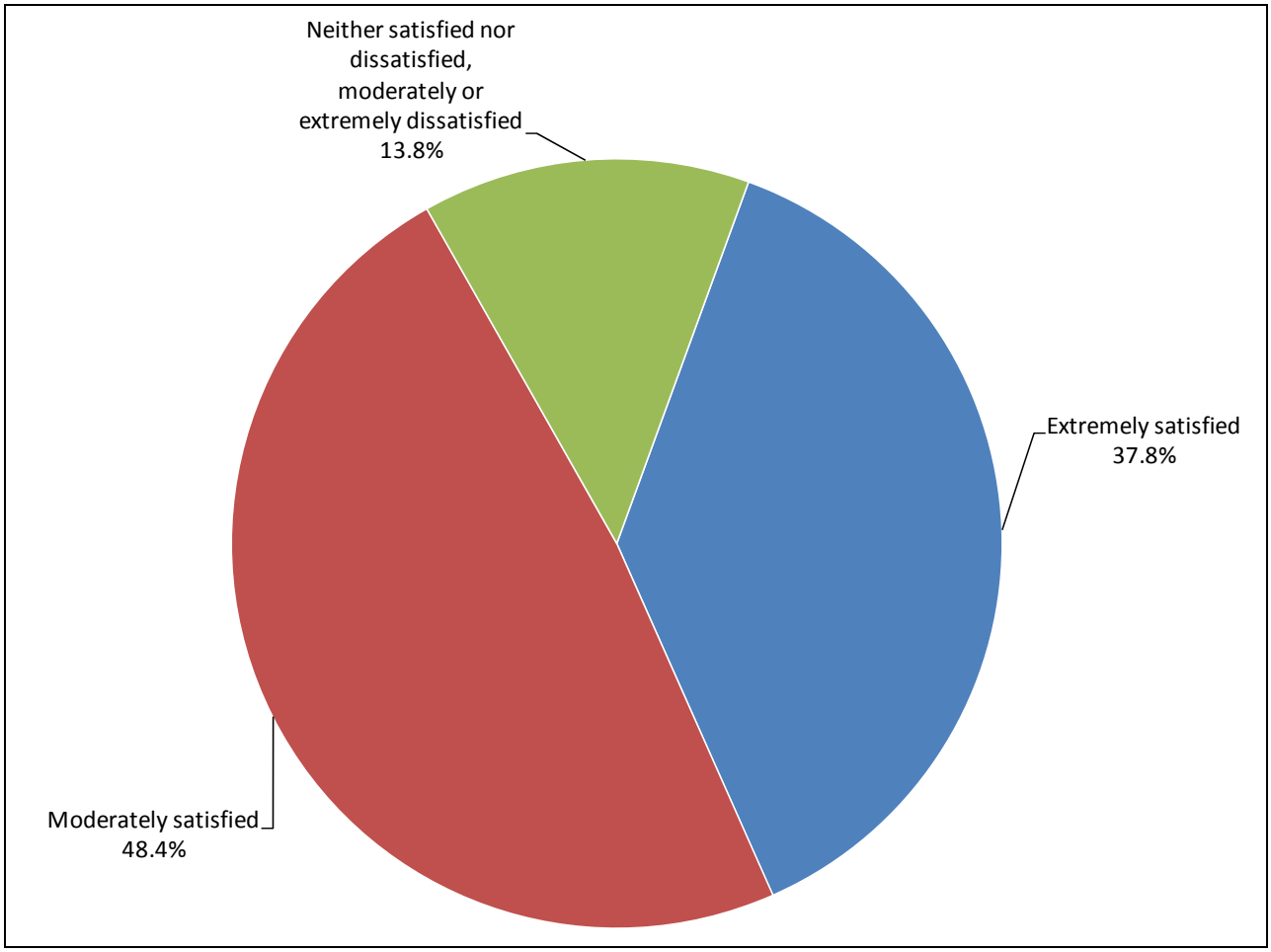
Source: 2008 National Sample Survey of Registered Nurses

5.3.4 Nurse Midwife Earnings and Job Satisfaction

Registered nurses prepared as NMs and working full- or part-time earned an average of $69,222 per year in their principal nursing position, and those who were employed full-time earned an average of

$75,340 and reported high levels of satisfaction with their principal nursing position (86.2 percent being moderately or extremely satisfied) (Figure 5-15).

Figure 5-15. Nurse midwife satisfaction with principal position



Source: 2008 National Sample Survey of Registered Nurses

5.4 Nurse Anesthetists

Registered nurses have been providing anesthesia care in the United States since the Civil War. The first school of nurse anesthesia, which was established in 1909 at Saint Vincent Hospital in Oregon, consisted of a 6-month course. Most nurse anesthesia programs that opened after that program conferred an anesthesia bachelor's degree, diploma, or certificate. In 1982, the American Association of Nurse Anesthetists recommended that NA education be a minimum of a master's degree and by 1998, all NA programs were at the master's degree level. Previously licensed NAs are allowed to

continue their practice. Nurse anesthetists take a national certification exam at the end of their NA education and are licensed in most States through State nursing boards.[7,8]

5.4.1 Number of Nurse Anesthetists

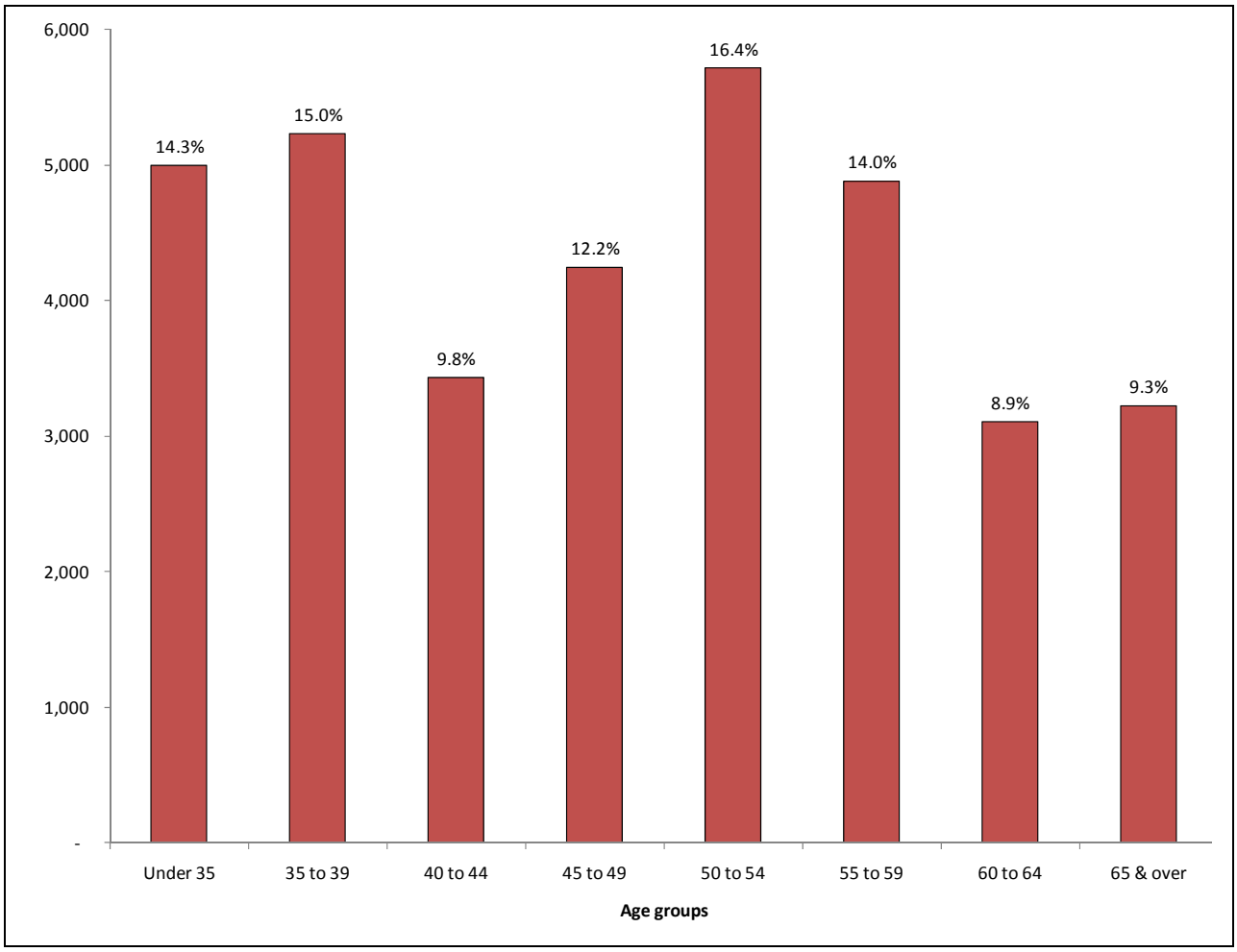
Nurse anesthetists were the third largest group of APRNs, next to NPs and CNSs, with an estimated 34,821 nurses prepared as anesthetists in 2008 (Appendix A, Table 45). There was a 7.1 percent growth in the number of NAs between 2004 and 2008, compared with a 9 percent increase between 2000 and 2004.

Nurse anesthetists have a larger proportion of younger nurses than other APRN groups. In 2008, nearly 40 percent were under 45 years old (Figure 5-16). More than 40 percent of NAs are men (Figure 7-2) (discussed in more detail in Chapter 7).

[7] Bankert, M. Watchful Care: A History of America's Nurse Anesthetists. New York: Continuum. 1989.

[8] Thatcher, V.S. History of Anesthesia with Emphasis on the Nurse Specialist. Philadelphia: JB Lippincott Company. 1953.

Figure 5-16. Age distribution of registered nurses prepared as nurse anesthetists



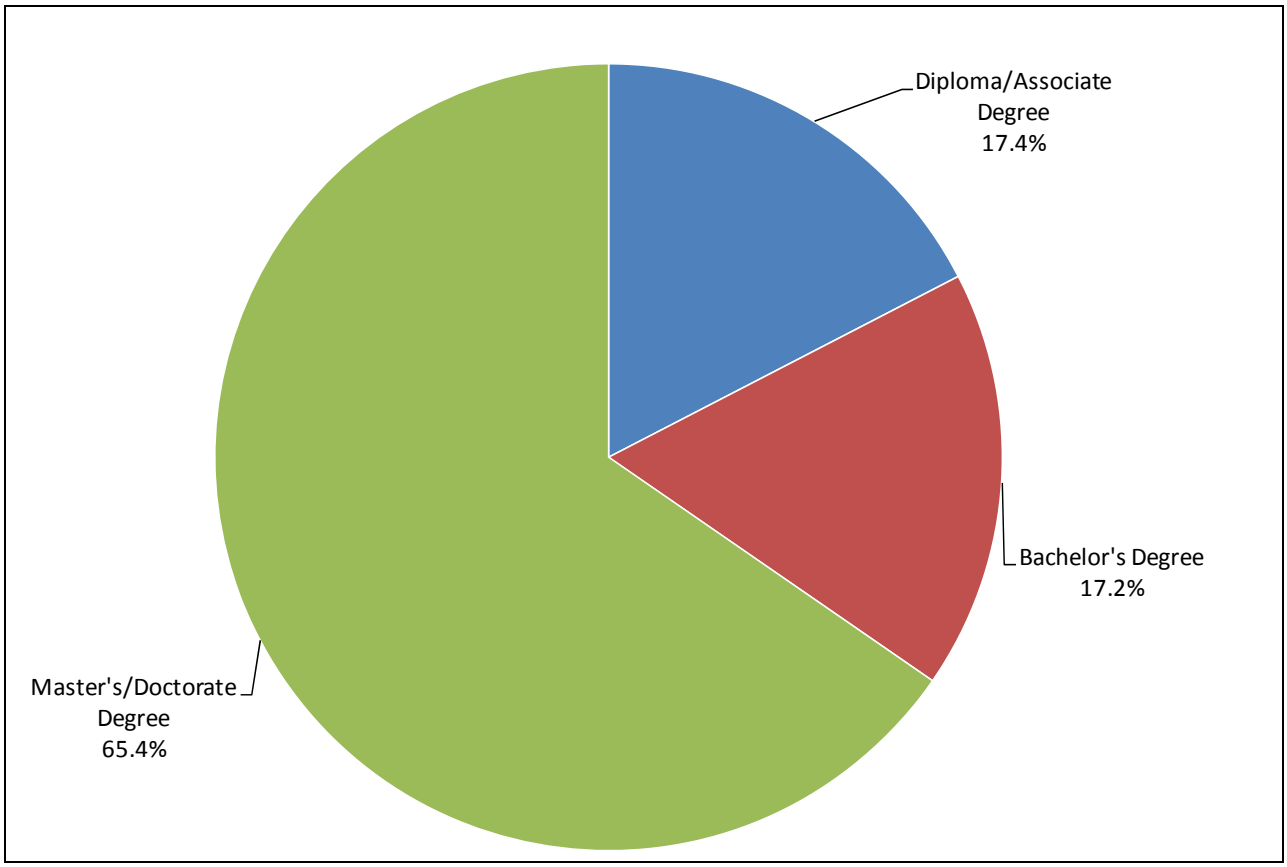
Source: 2008 National Sample Survey of Registered Nurses

5.4.2 Nurse Anesthetists and Education

Currently, a minimum of a master's degree is required prior to NA national certification. Because this requirement is relatively new and there is a long history of NA education at less than the graduate level, in 2008 only 65.4 percent of NAs held a master's or doctorate degree as their highest nursing or nursing-related degree (Figure 5-17). Nearly all NAs (96.4 percent) were educated in programs 13 to 36 months long.

Virtually all NAs had national certification (90.9 percent), and most had State recognition (82.1 percent) (Table 5-6). Nearly 90 percent of NAs report that national certification is required for their job.

Figure 5-17. Nurse anesthetist preparation, by highest nursing or nursing-related degree*



*Only NAs who provided nursing education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

Table 5-6. Certification and State Board recognition of nurse anesthetists employed in nursing, and whether certification or recognition is required for their job

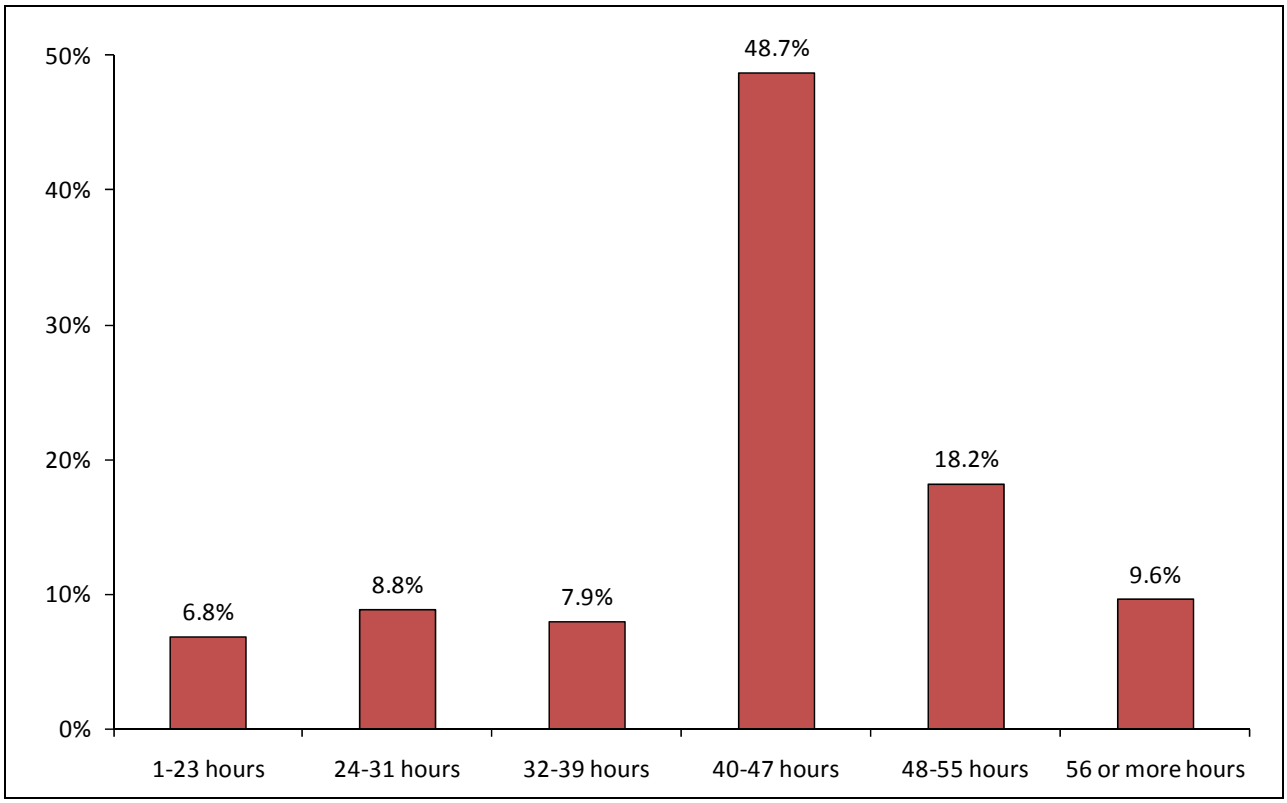
	Percent of all NAs certified/ recognized	Percent of those certified or recognized for whom it is required for their job
National organization certification	90.9	89.6
State Board recognition	82.1	89.5
Either national organization certification or State Board recognition	99.3	91.8

Source: 2008 National Sample Survey of Registered Nurses

5.4.3 Nurse Anesthetists and Employment

In 2008, 31,868 NAs were employed in nursing positions (91.5 percent of all NAs) (Appendix A, Table 45). Nurse anesthetist worked more hours per week, on average, than other APRN groups, with 76.5 percent working 40 or more hours per week (Figure 5-18). Similarly to NMs, more than one quarter of NAs work more than 48 hours per week.

Figure 5-18. Hours worked per week by employed nurse anesthetists in their principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

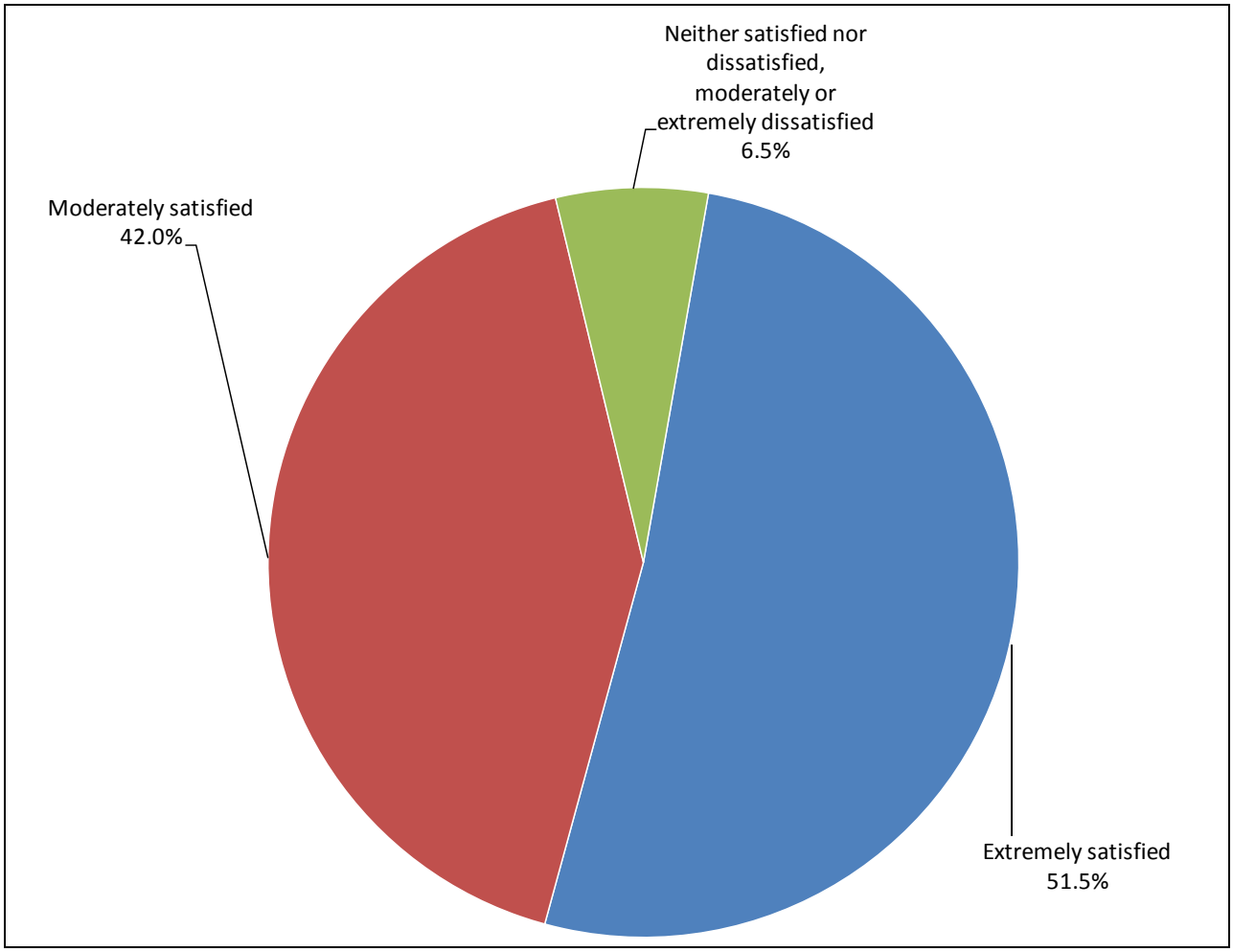
An estimated 92.3 percent of NAs reported their job title in their principal nursing position as nurse anesthetist. All of these NAs also reported that they have national certification and/or recognition by their State Board of Nursing, even if it is not required for their current position (Appendix A, Table 45).

The majority of NAs worked in hospital settings (82.2 percent) in 2008, and another 14.8 percent worked in ambulatory care.

5.4.4 Nurse Anesthetist Earnings and Job Satisfaction

Registered nurses prepared as NAs earned an average of $135,776 per year in their principal nursing position, making them the highest paid group of APRNs, and the highest paid of all RNs. They were the most satisfied of the APRN groups, with 93.5 percent being moderately or extremely satisfied with their principal position (Figure 5-19).

Figure 5-19. Nurse anesthetists satisfaction with principal position



Source: 2008 National Sample Survey of Registered Nurses

5.5 Clinical Nurse Specialists

The CNS role was conceived in 1954 and developed in acute care settings and mental health hospital settings. The first clinical specialist certification exam was launched in that year in psychiatric/mental health nursing. From the 1960s through the 1990s, clinical nurse specialist master's education programs were developed in many schools of nursing. The CNS education and role focuses on improving clinical care, primarily in hospitals and extended care facilities by having an expert nurse (the CNS) who could help coordinate care for individuals, educate nursing personnel who provided direct care, and help identify and improve aspects of the health system organization that affected patients and nursing staff. CNSs have expertise in one or more clinical areas such as oncology, pediatrics, geriatrics, psychiatric/mental health, adult health, obstetrics, acute/critical care, and community health.[9]

CNSs have been required to have a master's degree in nursing since the inception of this advanced practice field, and while national certification is available for many CNS specialties, certification is not required by State Boards of Nursing nor are most CNSs recognized in many States' licensure regulations as APRNs. In some States, the job title of clinical nurse specialist is not legally limited to nurses who have CNS preparation or certification. Thus, some RNs who reported that their job title is clinical nurse specialist do not have a graduate degree and were not counted as a prepared CNS in this Survey.

5.5.1 Number of Clinical Nurse Specialists

In 2008, there were an estimated 59,242 nurses prepared as CNSs, some of whom also were prepared in other advanced specialties (Appendix A, Table 45). CNSs are the second largest group of APRNs. There was a marked decline of 18.3 percent in the number of CNSs between 2004 and 2008. However, over the same period there was an increase of 11.4 percent in the number of registered nurses prepared as both NPs and CNSs.

CNSs were older than other APRN groups in 2008, with 63.6 percent over 50 years old and only 18.2 percent under 45 years (Figure 5-20). Few CNSs, only 10.2 percent, are under the age of 40.

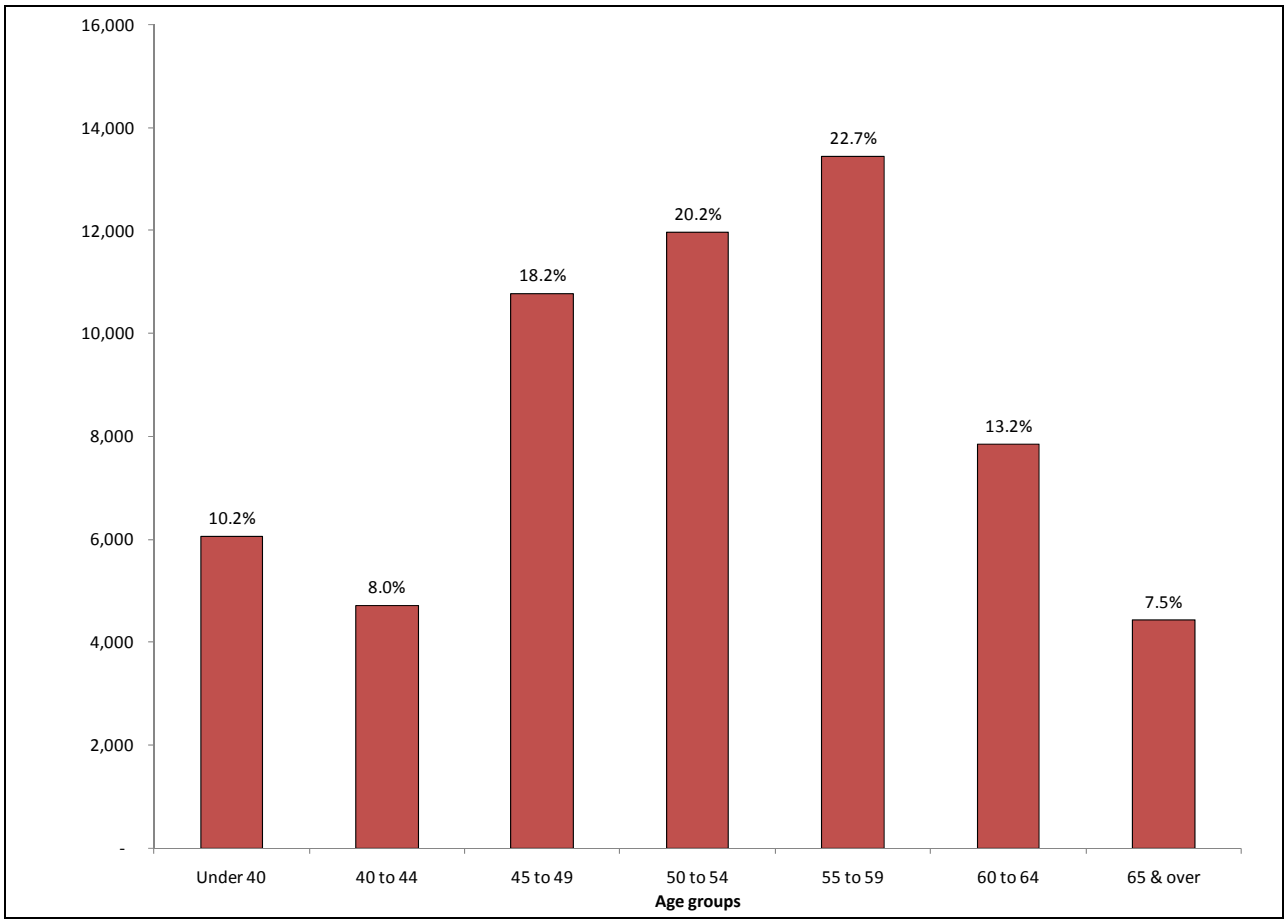
[9] Montemuro, M.A. MHSc, RN. (1987). The Evolution of the Clinical Nurse Specialist: Response to the Challenge of Professional Nursing Practice. *Clinical Nurse Specialist, (1)*3, pp. 106-110.

5.5.2 Clinical Nurse Specialists and Education

CNS education focuses on how clinical care is affected by the patient's personal and family characteristics and environment, the nursing personnel who provide care, and the health system organization. CNSs have been required to have a master's degree in nursing since the inception of this advanced practice field. The vast majority of CNSs (92.8 percent) reported a master's degree as their highest preparation (Figure 5-21). An additional 7.2 percent completed a doctorate degree for their CNS preparation. Most CNSs reported that their education program lasted 13 to 36 months (79.3 percent).

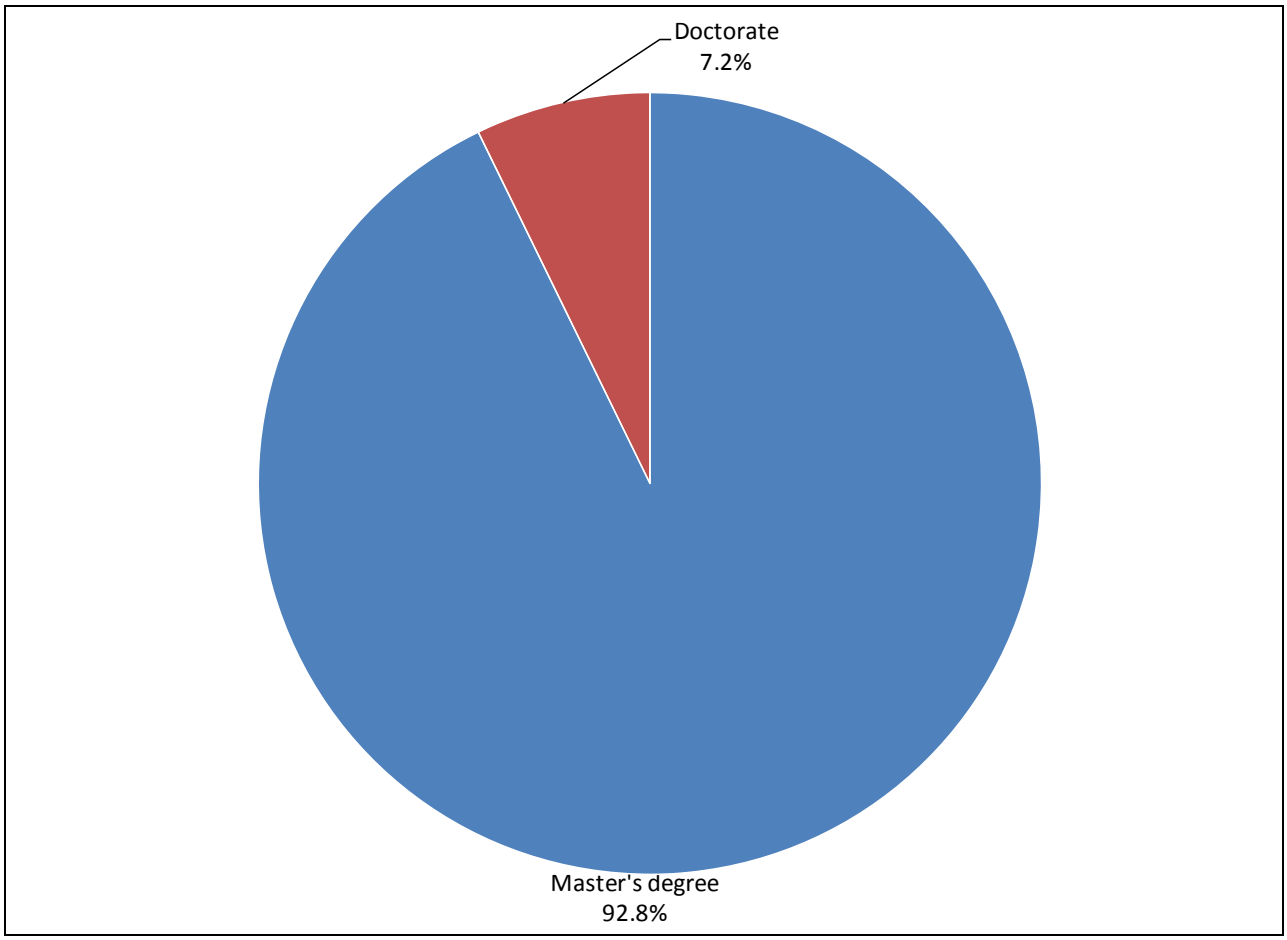
Many registered nurses prepared as CNSs do not have national certification or recognition from their State Board of Nursing; only 54.6 percent have recognition or certification from one or both. Less than 40 percent have national certification, and 41.6 percent have State Board recognition (Table 5-7). Of those with national certification, 39.5 percent said their certification was required for their job, while 47.2 percent of those with State Board recognition reported that their certification was required for their principal position.

Figure 5-20. Age distribution of registered nurses prepared as clinical nurse specialists



Source: 2008 National Sample Survey of Registered Nurses

Figure 5-21. Clinical nurse specialist preparation, by highest nursing or nursing-related degree*



*Only CNSs who provided nursing education preparation information are included in the calculations used for this figure.

Source: 2008 National Sample Survey of Registered Nurses

Table 5-7. Certification and State Board recognition of clinical nurse specialists employed in nursing, and whether certification or recognition is required for their job

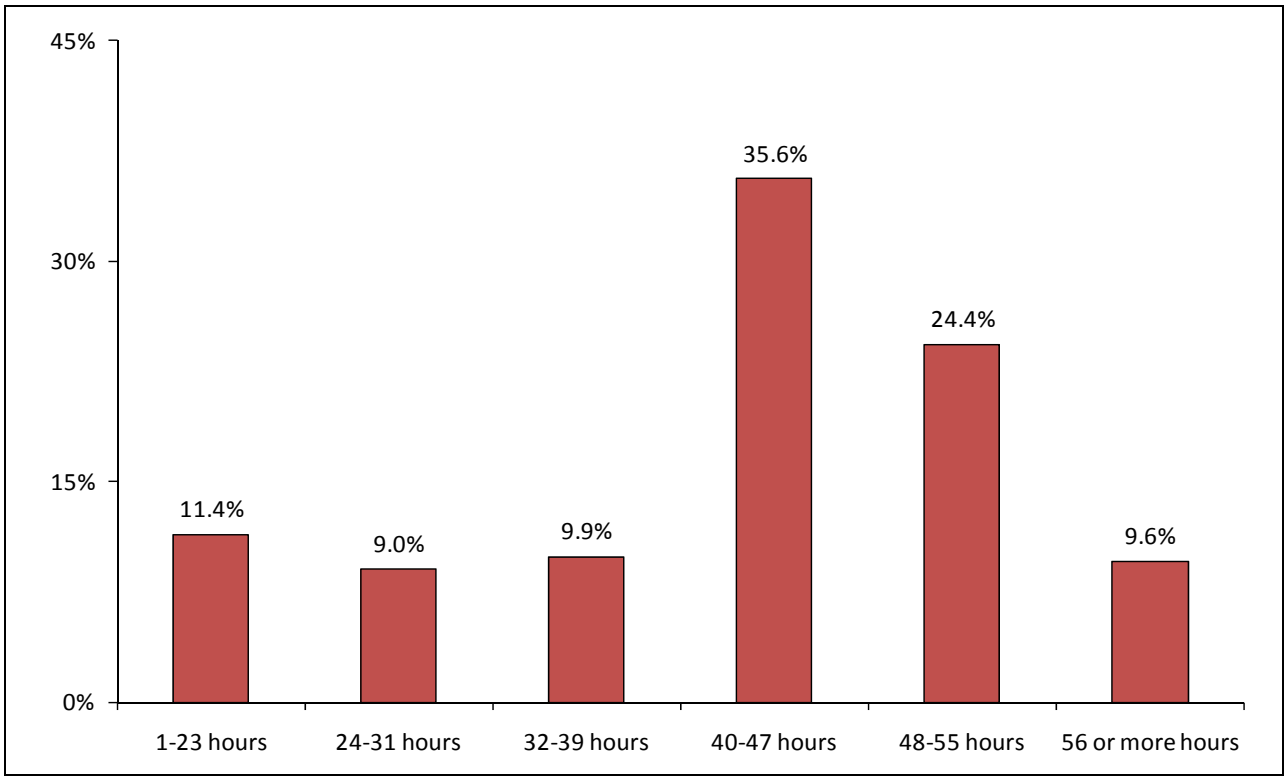
	Percent of CNSs certified/ recognized	Percent of those certified or recognized for whom it is required for their job
National organization certification	39.7	39.5
State Board recognition	41.6	47.2
Either national organization certification or State Board recognition	54.6	41.4

Source: 2008 National Sample Survey of Registered Nurses

5.5.3 Clinical Nurse Specialists and Employment

CNSs had the lowest rate of employment in nursing of all the advanced specialties, with 84 percent working in nursing in 2008 (Appendix A, Table 45). However, nearly 70 percent of CNSs employed in nursing worked at least 40 hours per week, which is a larger percentage than either NPs or NMs (Figure 5-22). Only NAs had as high a percentage working more than a 40 hour week.

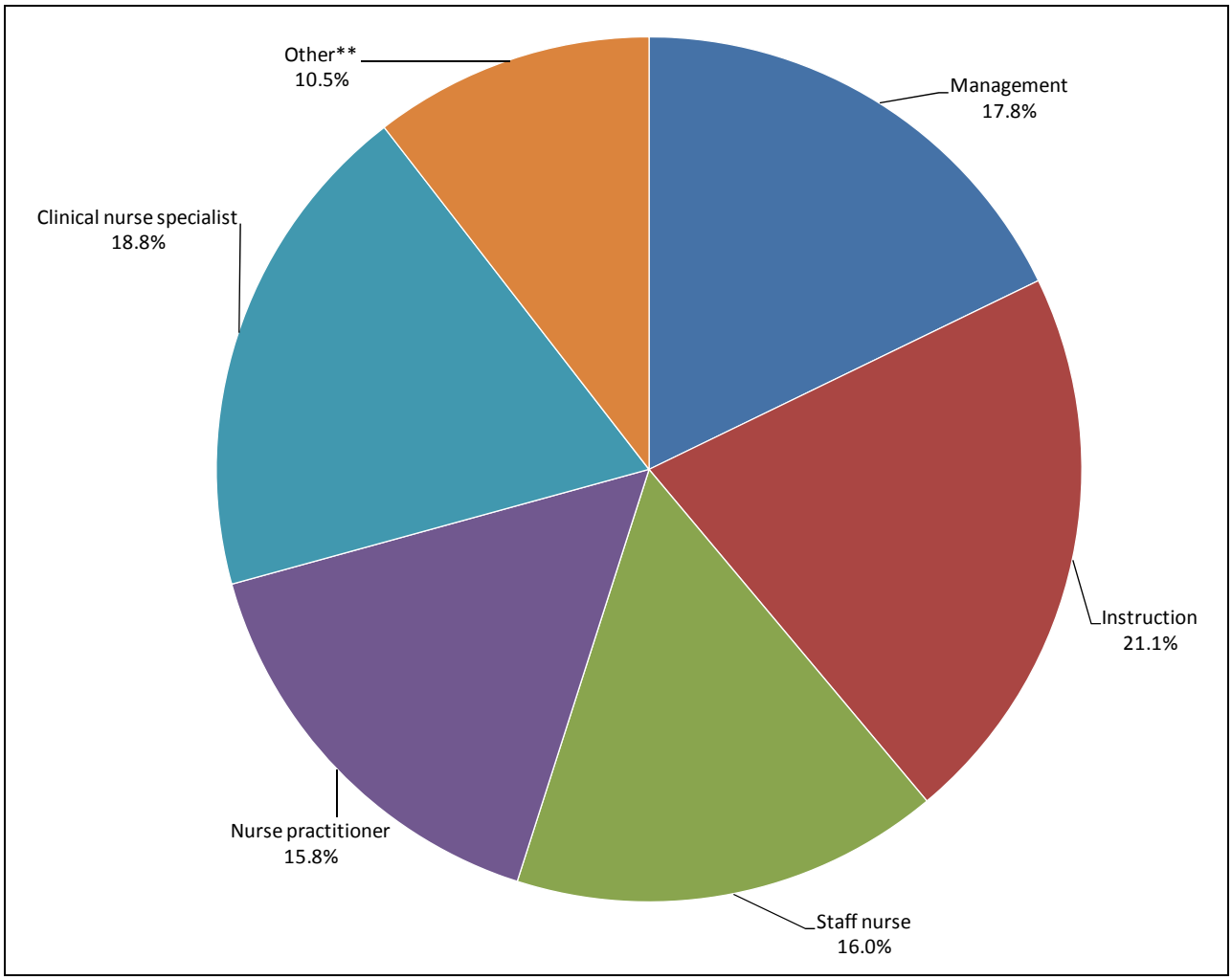
Figure 5-22. Hours worked per week by employed clinical nurse specialists in their principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

An estimated 18.8 percent of CNSs reported their job title as clinical nurse specialist (Figure 5-23). State Board recognition or national certification was held by 85.4 percent of nurses with the CNS job title (Appendix A, Table 45). Other common job titles among nurses prepared as CNSs are instruction (21.1 percent), and management or administration (17.8 percent). An additional 16 percent reported a staff nurse job title, and 10.5 percent had other titles such as public health nurse, school nurse, or patient coordinator (Figure 5-23).

Figure 5-23. Job titles of employed nurses prepared as clinical nurse specialists*



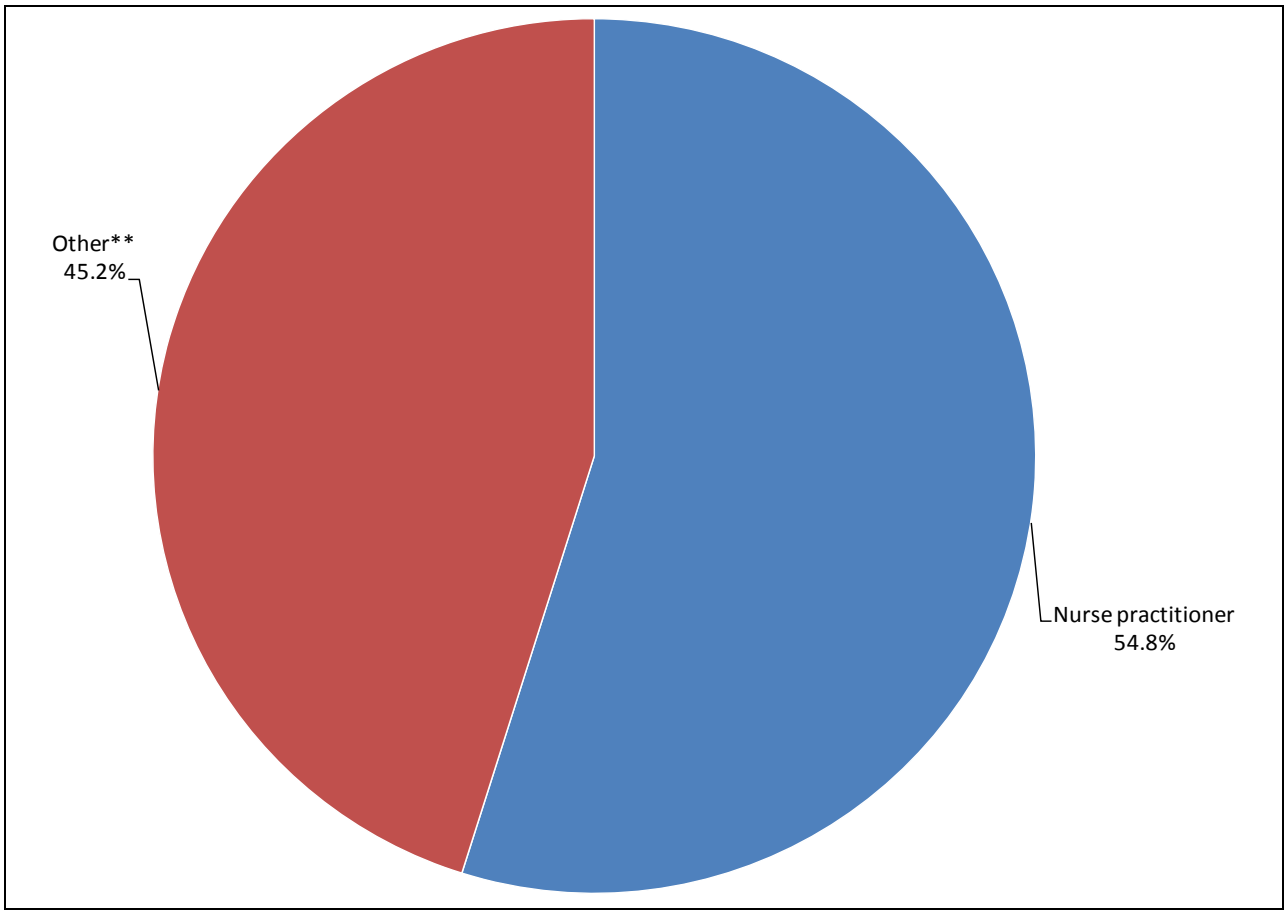
*Excludes CNSs for whom job title was not known.

**Other job titles include consultant, NA, informatics, patient educator, patient coordinator, researcher, school nurse, and public/community health.

Source: 2008 National Sample Survey of Registered Nurses

Some nurses prepared as CNSs also had preparation in other advanced specialties. Dual CNS-NP preparation was reported by 27.6 percent of CNSs, a trend that has increased since 2004. Among RNs prepared as both NPs and CNSs, the most common job title was nurse practitioner (54.8 percent) (Figure 5-24). The remainder had a variety of job titles, including clinical nurse specialist, professor or instructor, management or administration titles, or a staff nurse title.

Figure 5-24. Job titles of employed nurses dual-prepared as clinical nurse specialists and nurse practitioners*



*Excludes dual-prepared CNSs and NPs for whom job title was not known.

**Other job titles include CNS, consultant, management, instruction, staff nurse, patient coordinator, and researcher.

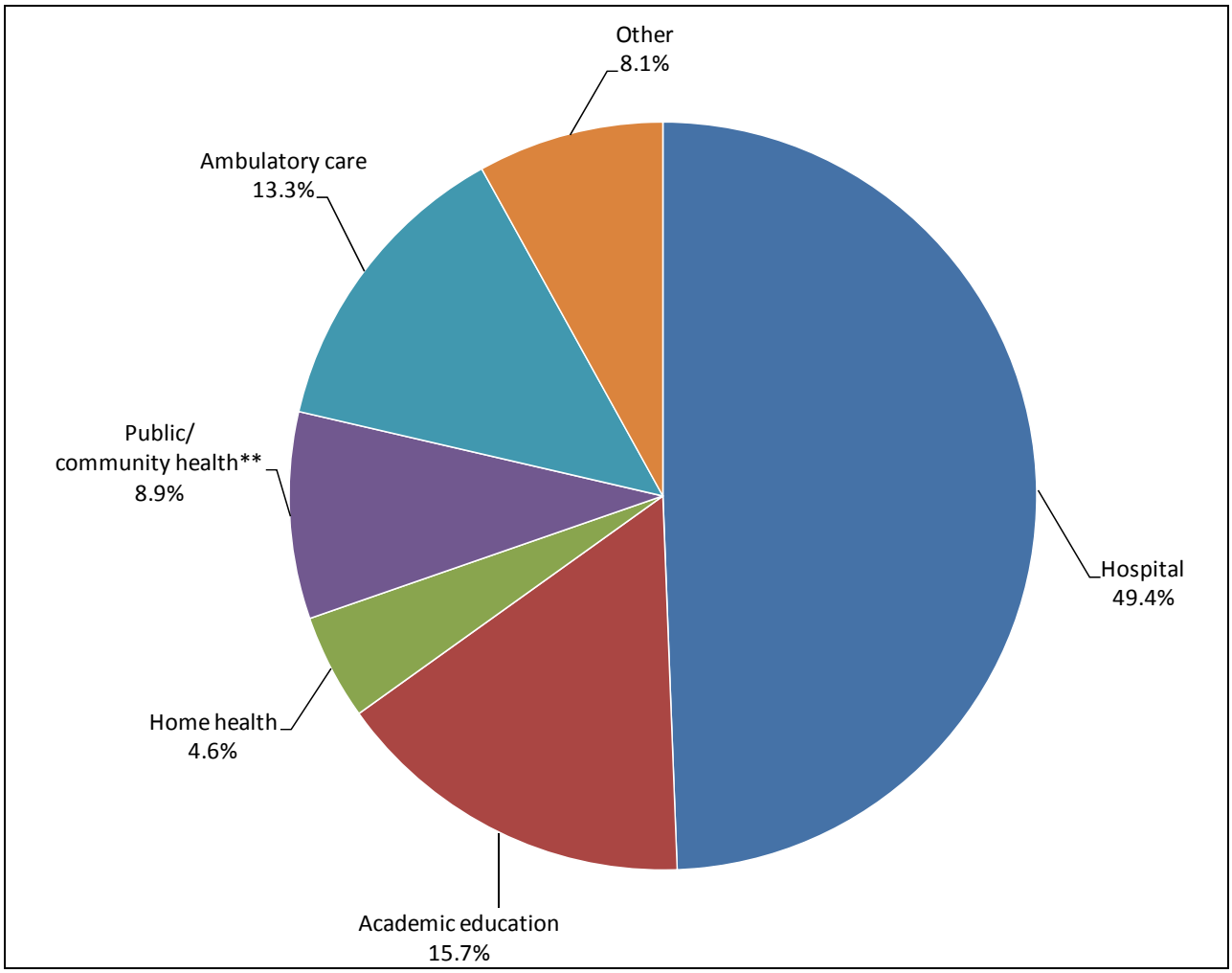
Source: 2008 National Sample Survey of Registered Nurses

Nearly half of nurses prepared as CNSs worked in hospitals in 2008 (49.4 percent, Figure 5-25). Another 15.7 percent were in academic settings, and 13.3 percent worked in ambulatory care.

5.5.4 Clinical Nurse Specialist Earnings and Job Satisfaction

Registered nurses prepared as CNSs working full- or part-time earned an average of $74,918 per year in their principal nursing position, and those who were employed full-time earned an average of $83,787. Those who were prepared in both NP and CNS specialties earned an average of $76,350 overall and $86,330 for full-time positions. CNSs were very satisfied with their principal positions (Figure 5-26), with 91 percent being moderately or extremely satisfied.

Figure 5-25. Employment settings in which clinical nurse specialists work*

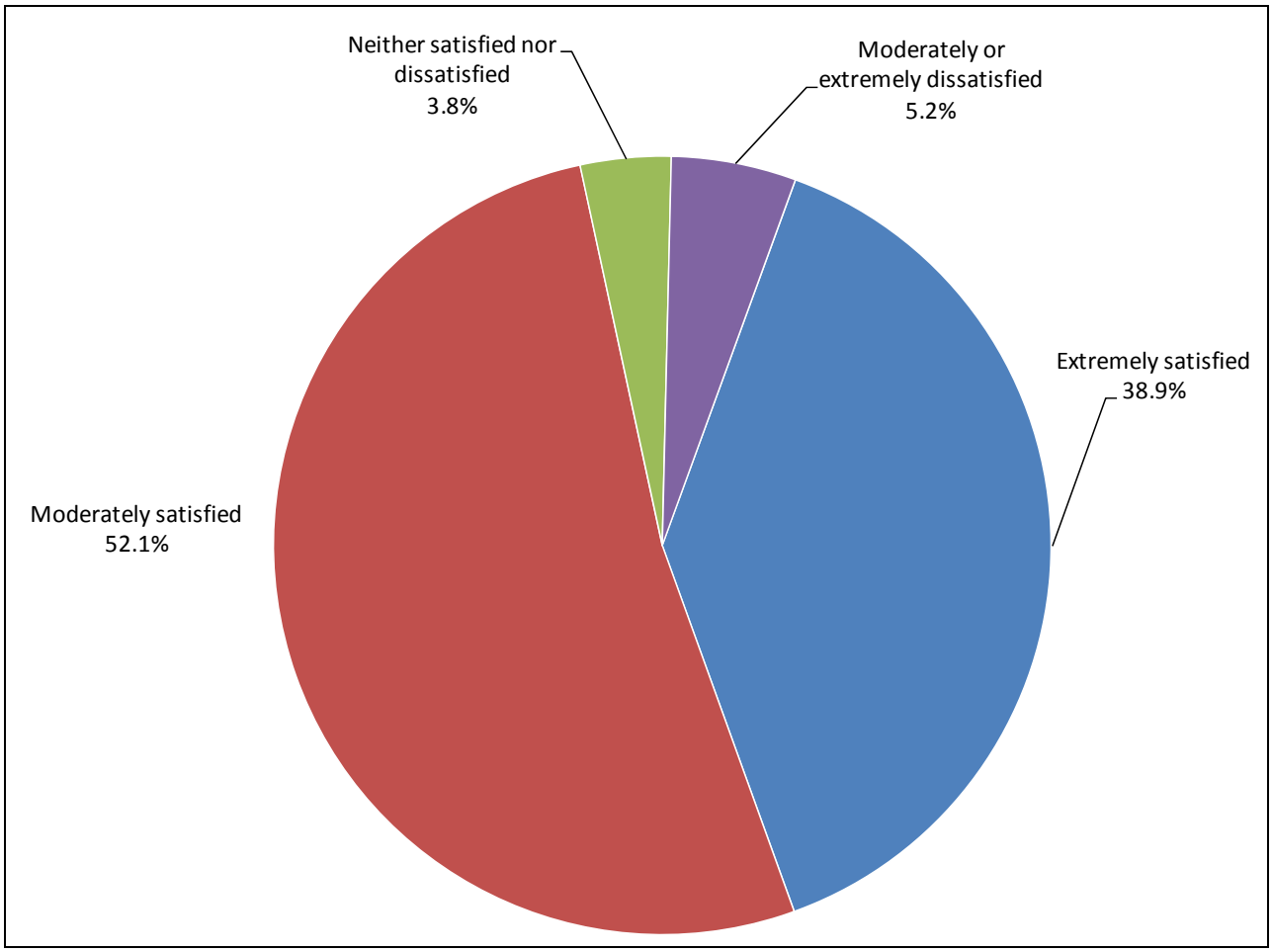


*Excludes CNSs for whom employment setting was not known.

**Public/community health includes school and occupational health.

Source: 2008 National Sample Survey of Registered Nurses

Figure 5-26. Clinical nurse specialist satisfaction with principal position



Source: 2008 National Sample Survey of Registered Nurses

Nurses Who Do Not Work in Nursing 6

6.1 Introduction

This chapter examines the characteristics of RNs who do not work in nursing and their plans regarding future nursing work. An estimated 466,564 licensed RNs (just over 15 percent of all licensed RNs) were not employed in nursing in 2008. Nurses choose to not work in nursing for a variety of reasons. Some are retired but may choose to retain a nursing license for a variety of reasons including potential future employment or because they feel personally connected to the profession and want to retain the link of licensure. Others stop working to attend to family needs, because of illness, to receive further education, or for other personal reasons. Still others are not working in nursing, either temporarily or permanently, because they are unhappy with some aspect of the profession.

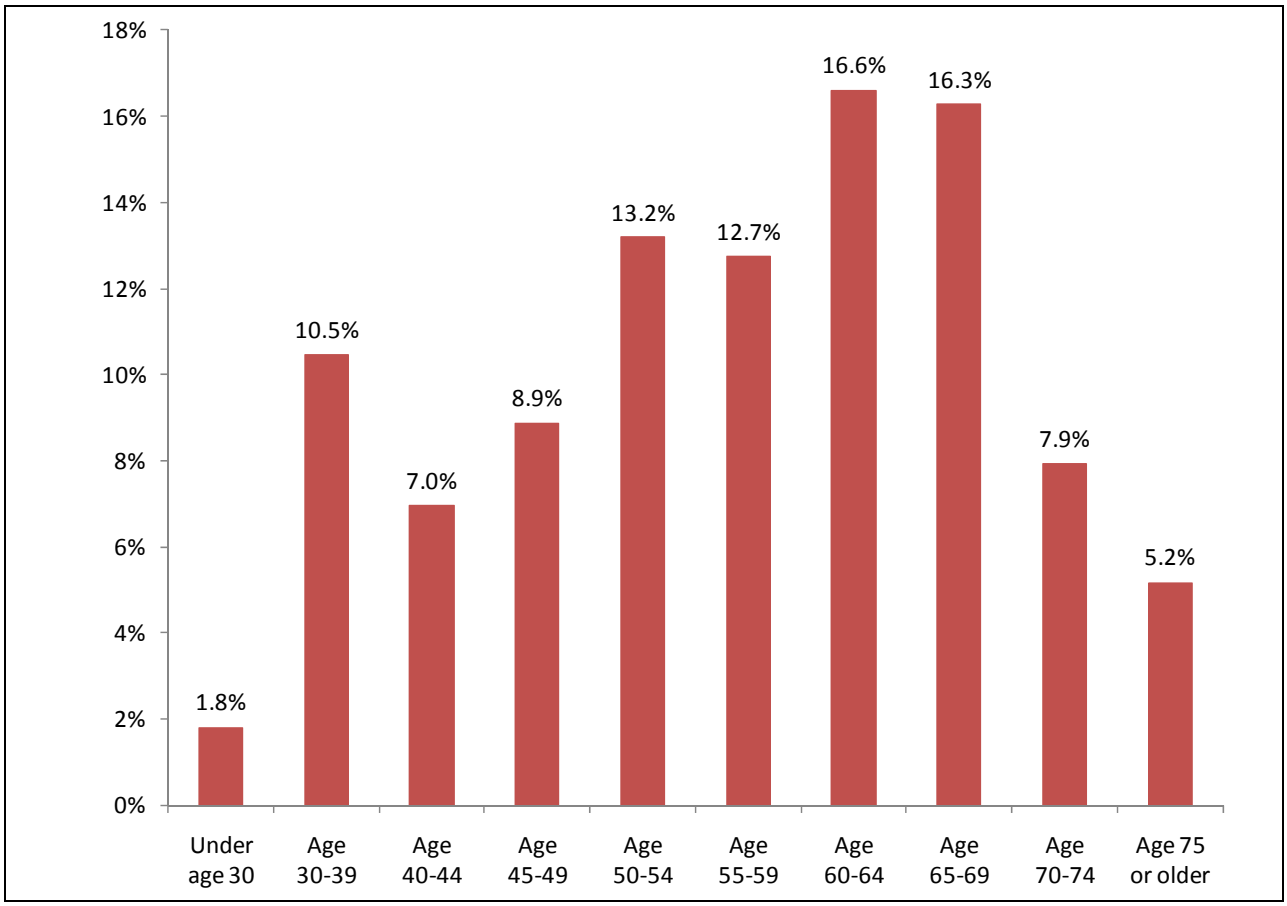
6.2 Demographics of Nurses Not Working in Nursing

6.2.1 Nurses Not Working in Nursing and Age

Nearly one-third of RNs who were not working in nursing in 2008 were 65 years of age or older; almost half were 60 years of age or older (Figure 6-1). This suggests that the majority of nurses who have retained licenses but are no longer working may have left the workforce for age-related reasons.

A disproportionate percentage of licensed RNs aged 50 to 54 have not been working in nursing for 11 to 15 years (17.6 percent of RNs out of work this long) or for 16 or more years (24.3 percent) (Appendix A, Table 48). These individuals left nursing by 1997 or earlier, when they were in their 20s and 30s. During the mid-1990s, RN employment rates were somewhat lower, and the percentage of nurses employed in hospitals declined. These data suggest that nurses who were under age 40 at that time, left the profession and never returned to nursing work.

Figure 6-1. Age distribution of nurses who are not working in nursing*



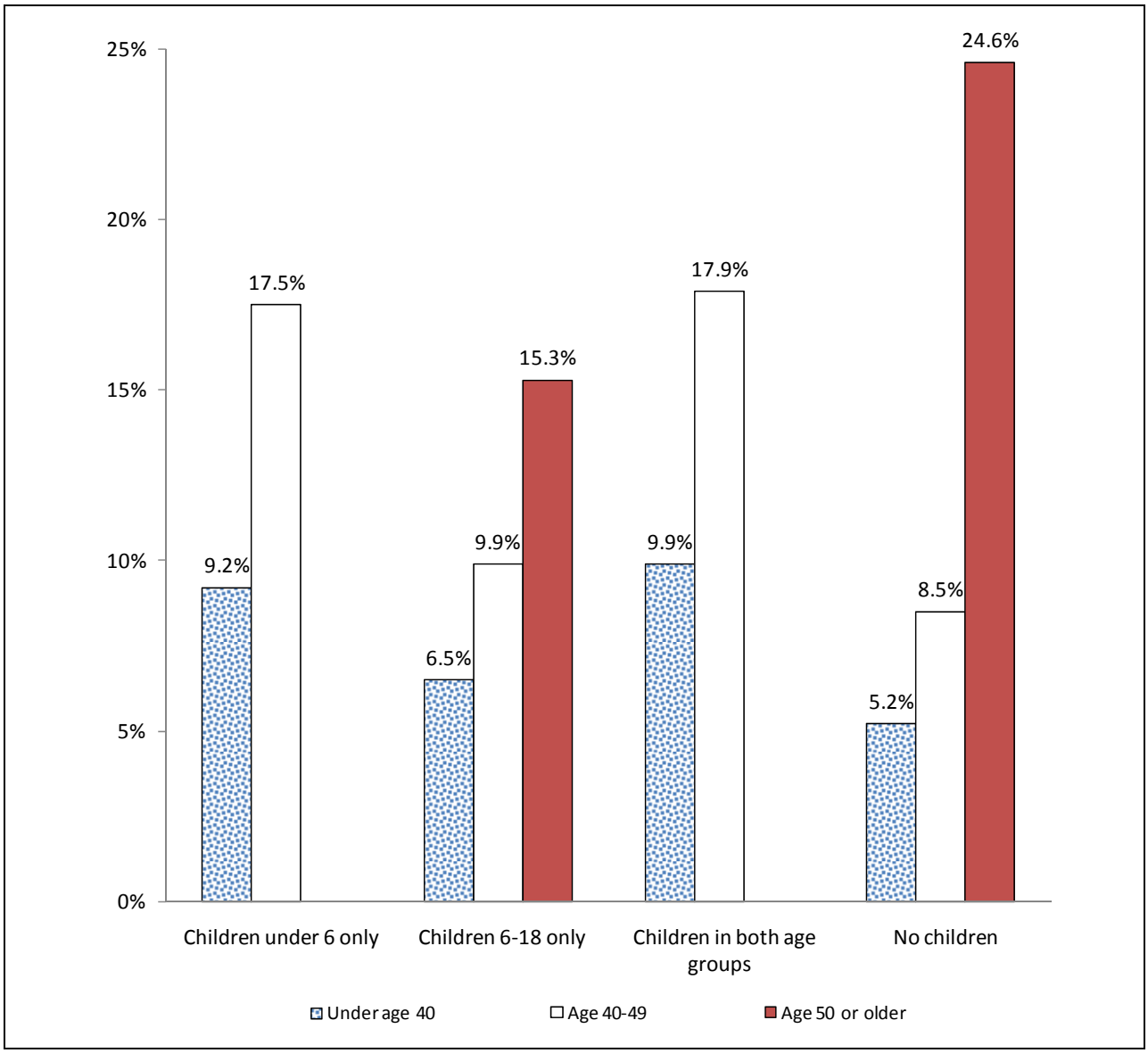
*Includes only registered nurses who are not working in nursing.

Source: 2008 National Sample Survey of Registered Nurses

6.2.2 Presence of Children

The decision to work in nursing is more closely tied to age than to whether an RN has children. The percent of RNs not working in nursing in 2008 increases with age group (Figure 6-2 and Appendix A, Table 49). Nurses whose children were all under age 6 were less likely to work in nursing than were nurses whose children were all at least 6 years old. Moreover, older mothers were less likely to work in nursing than younger mothers.

Figure 6-2. Percentage of nurses not working in nursing, by age and presence of children*



*Includes only registered nurses who are not working in nursing.

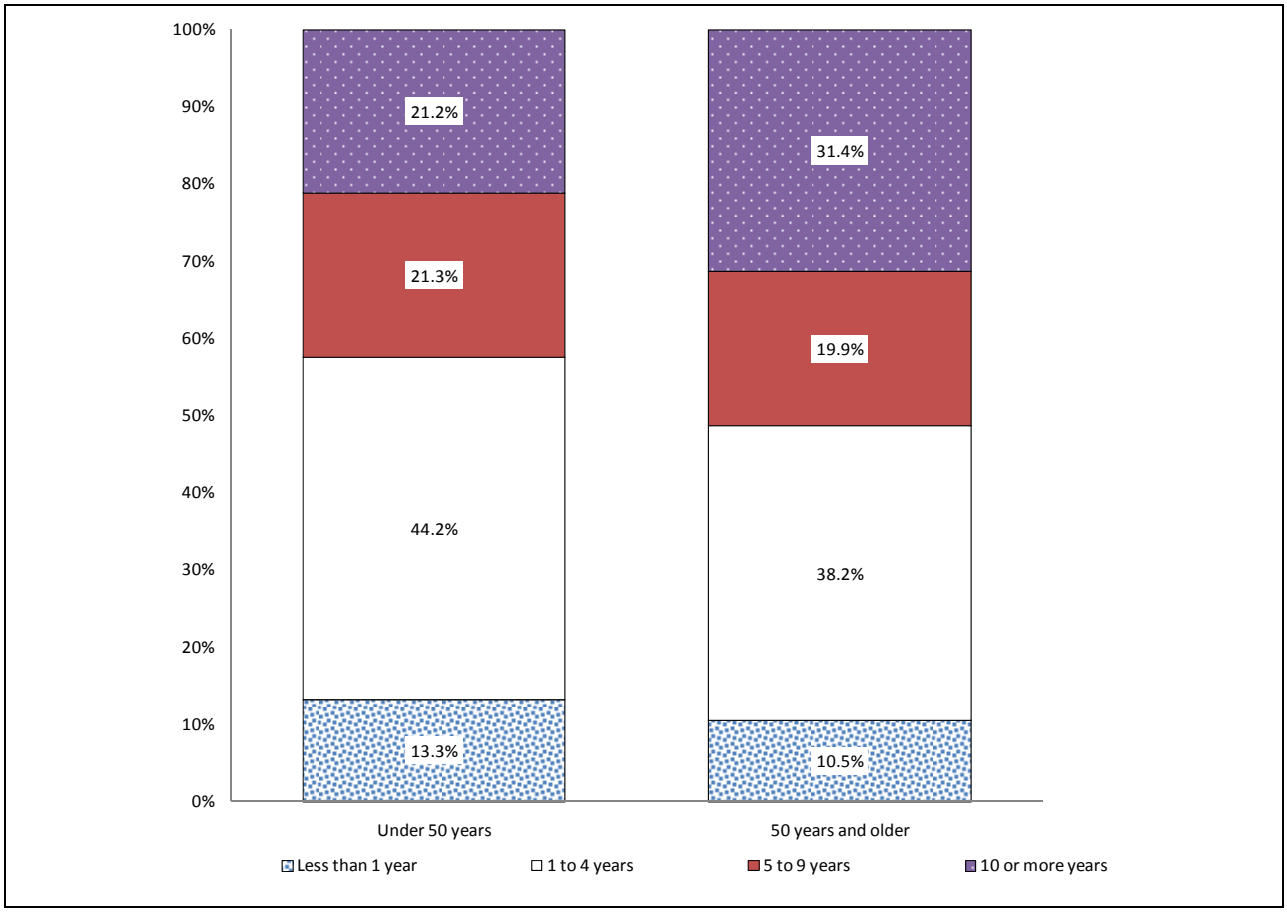
Source: 2008 National Sample Survey of Registered Nurses

6.3 Length of Time Away From Nursing Work

Many nurses who left employment in nursing did so for a short period of time (Figure 6-3 and Appendix A, Table 51). About half of RNs who were not working in nursing in 2008 had been out of nursing work for 4 or fewer years.

- Among RNs who were under 50 years old, 13.3 percent had been out of nursing for less than 1 year, and another 44.2 percent stopped working 1 to 4 years prior.
- Only 21.2 percent of RNs under 50 years old stopped working in nursing 10 or more years ago, compared with 31.4 percent of nurses 50 years and older.

Figure 6-3. Length of time since nonworking nurses last worked in nursing, by age*



*Includes only registered nurses who are not working in nursing.

Source: 2008 National Sample Survey of Registered Nurses

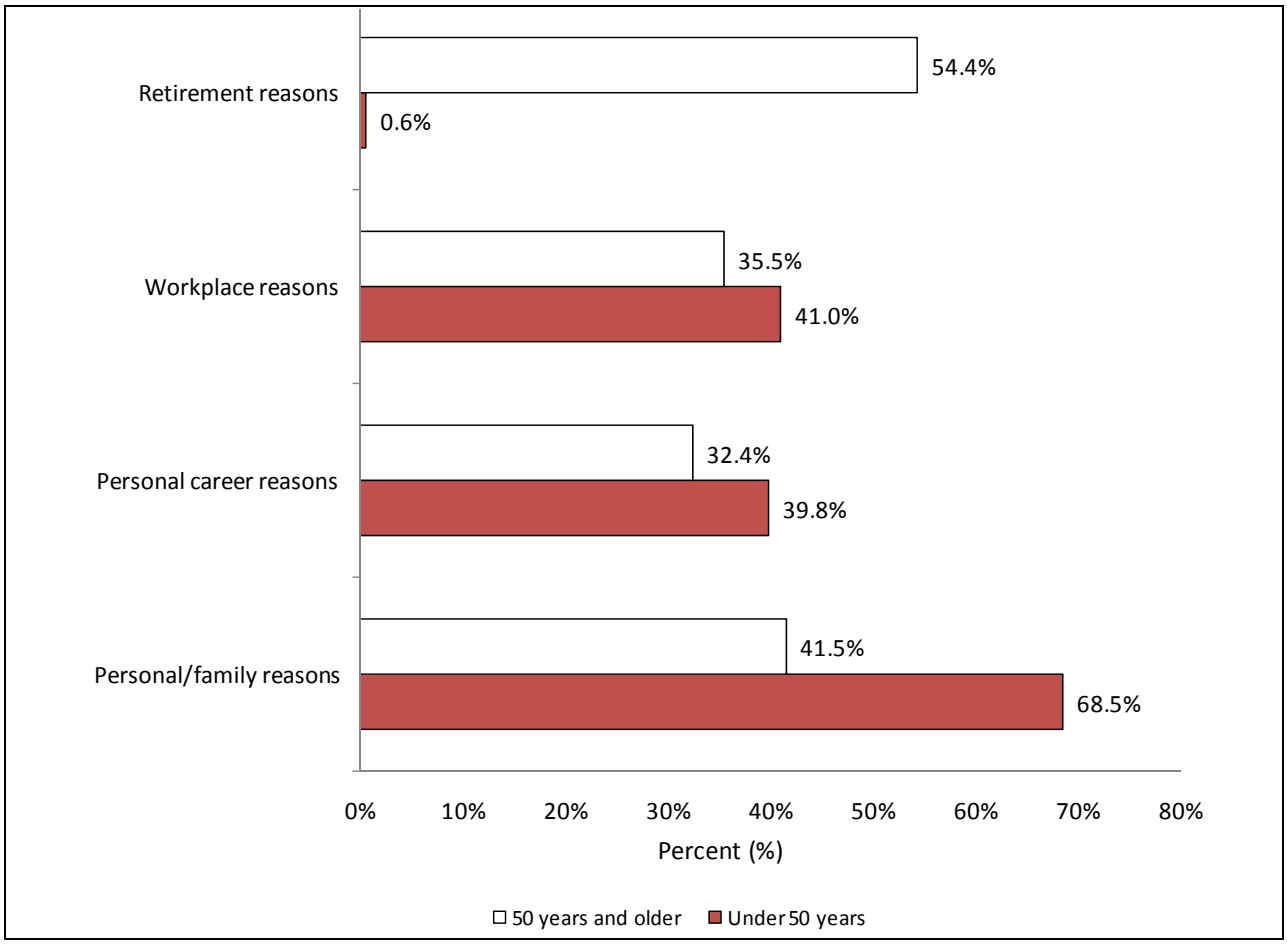
6.4 Reasons for Not Working in Nursing

Nurses were asked their reasons for not working in the nursing profession. They were able to indicate more than one reason. Significantly, reported reasons for not working in nursing were associated with RNs' age. Among nurses 50 years and older, the main reason for not working in nursing was retirement (54.4 percent), although personal and family reasons (41.5 percent),

workplace reasons (35.5 percent), and personal career factors (32.4 percent) also were important. Among nurses under 50 years old, the dominant reason for not working is associated with personal family factors (68.5 percent), such as the need to care for children (Figure 6-4). Another 39.8 percent were not working for personal career reasons.

Of concern, however, is the fact that 41 percent of RNs under 50 years and 35.5 percent of RNs 50 years of age and older reported that they were not working in nursing due to workplace problems such as burnout, stressful work environment, and poor management.

Figure 6-4. Reasons nurses are not working in nursing, by age group*



*Percents do not add to 100 because registered nurses may have provided more than one reason. Includes only registered nurses who are not working in nursing.

Source: 2008 National Sample Survey of Registered Nurses

6.5 Plans Regarding Nursing Work

Nurses who were not working in nursing in March 2008 were asked about their plans regarding nursing employment. Their answers were associated with both age and marital status (Table 6-1).

- Nurses under 50 years old who were never married were more likely than their married counterparts to have already returned to work in nursing when they completed the Survey.
- Nurses under 50 years old who were married or in a domestic partnership were more likely than their divorced or never married counterparts to have plans to return to nursing, with only 14.2 percent saying they did not plan to return to nursing work. However, a large percentage of these RNs were undecided about their future plans regarding nursing work (26.4 percent).
- Nurses 50 years and older were less likely than RNs under 50 to plan to return to nursing work. This was particularly true for nurses who were never married (54.7 percent).

Table 6-1. Intentions of nurses who are not working in nursing, overall, and by marital status*

	Under 50 years old (percent)			50 years and older (percent)		
Intentions	Married	Divorced/ widowed	Never married	Married	Divorced/ widowed	Never married
Have returned to nursing	17.2	32.4	36.3	6.1	8.0	9.4
Actively looking for work in nursing	7.5	16.5	8.1	2.9	4.4	3.9
Plan to return in the future	34.7	17.8	17.4	9.2	11.0	6.3
No future intentions to return	14.2	15.1	15.2	48.2	50.5	54.7
Undecided	26.4	18.2	23.0	33.6	26.1	25.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Includes only registered nurses who are not working in nursing.

Source: 2008 National Sample Survey of Registered Nurses

Only 5.5 percent of RNs who were not working in nursing reported that they were seeking a nursing position at the time they completed the Survey (Appendix A, Table 51). Most of the RNs who were seeking a nursing position had been out of nursing work for less than 1 year.

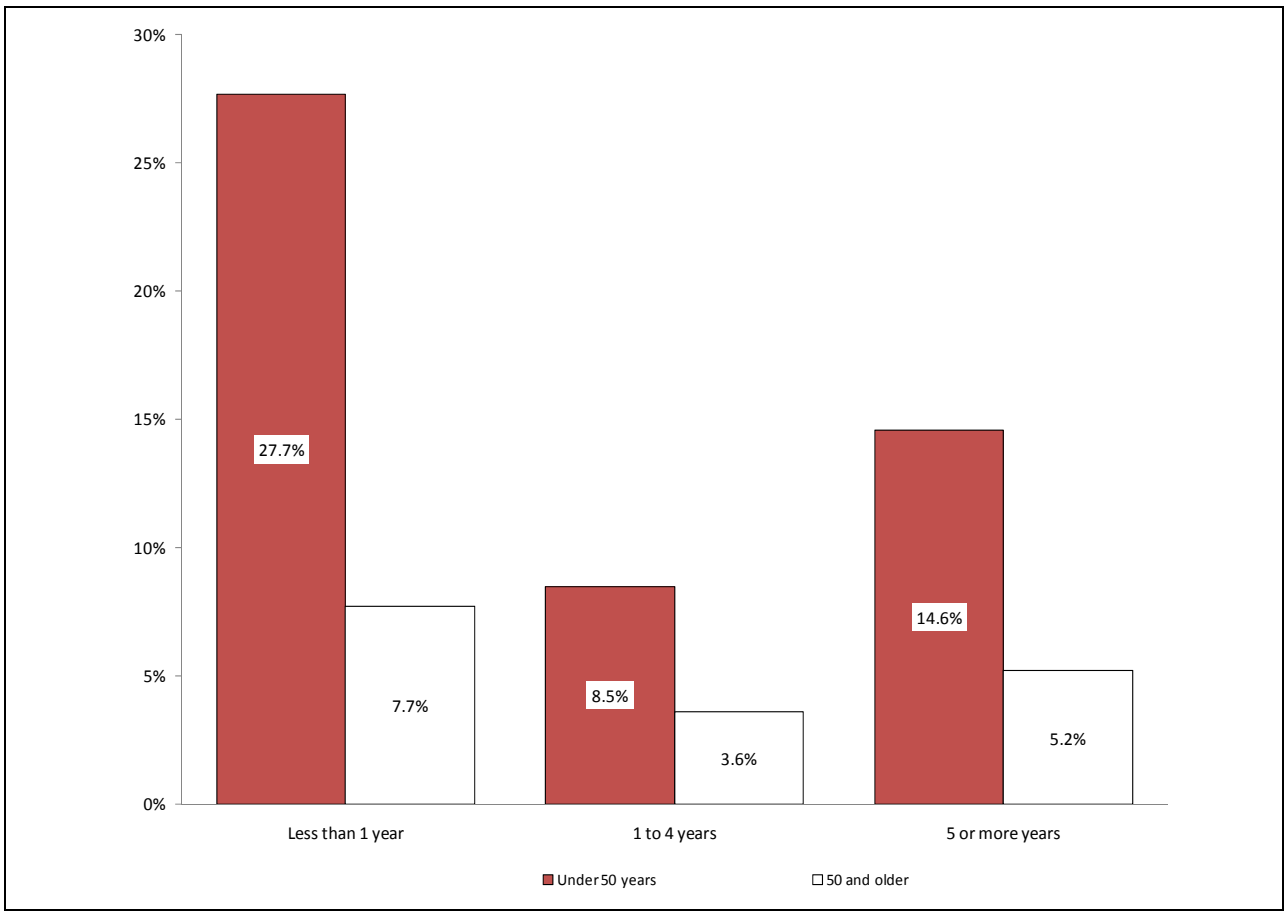
Pursuing nursing employment is closely associated with age. Among RNs who were under 50 years old, 27.7 percent who had not been working in nursing for less than 1 year were seeking nursing employment (Figure 6-5). About 8 percent of nurses under 50 years old who had not been working

for 1 to 4 years were seeking nursing employment. In comparison, among RNs 50 years and older, 7.7 percent who had not been working for less than 1 year were seeking nursing work, while less than 4 percent who had been out of the RN workforce for 1-4 years were searching for a nursing job.

Among RNs not working in nursing who were seeking nursing employment, only 25.8 percent wanted a full-time nursing position (Appendix A, Table 52). Another 39.3 percent preferred part-time work, and 34.9 percent were seeking any level of nursing employment.

Most RNs who were seeking nursing work in 2008 had been doing so for only a short time (Appendix A, Table 52). While 31.6 percent had been seeking a nursing position for 4-9 months, 37.8 percent had been looking for a nursing job for up to 1 month.

Figure 6-5. Percent of registered nurses seeking nursing employment, by number of years since last worked in nursing and age*



*Includes only registered nurses who are not working in nursing.

Source: 2008 National Sample Survey of Registered Nurses

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Demographics of the Registered Nurse Workforce 7

7.1 Introduction

This chapter examines the age, gender, race/ethnicity, language competency, and family characteristics of registered nurses, and how these factors are associated with employment. It also presents the geographic distribution of RNs. Nursing employment continues to vary significantly across the country, with a two-fold difference in the employed RN-to-population ratio among the States. Geographic variation occurs in the employment setting, educational level, racial/ethnic minority representation, and median earnings of employed RNs. While still a workforce of primarily White, non-Hispanic women, the population of RNs in the United States continues to become more diverse with an increase of men and racial/ethnic minority groups among new entrants to the workforce.

7.2 Registered Nurses and Age

In 2008, for the first time in the past three decades, the rate of aging of the nursing workforce slowed (Figure 3-3). In 1988, half of the working population of RNs was less than 38 years of age (Table 7-1 and Appendix A, Table 1). By 2004 the median age rose to 46 years. In 2008, however, the median age did not increase but remained steady at 46 years of age.

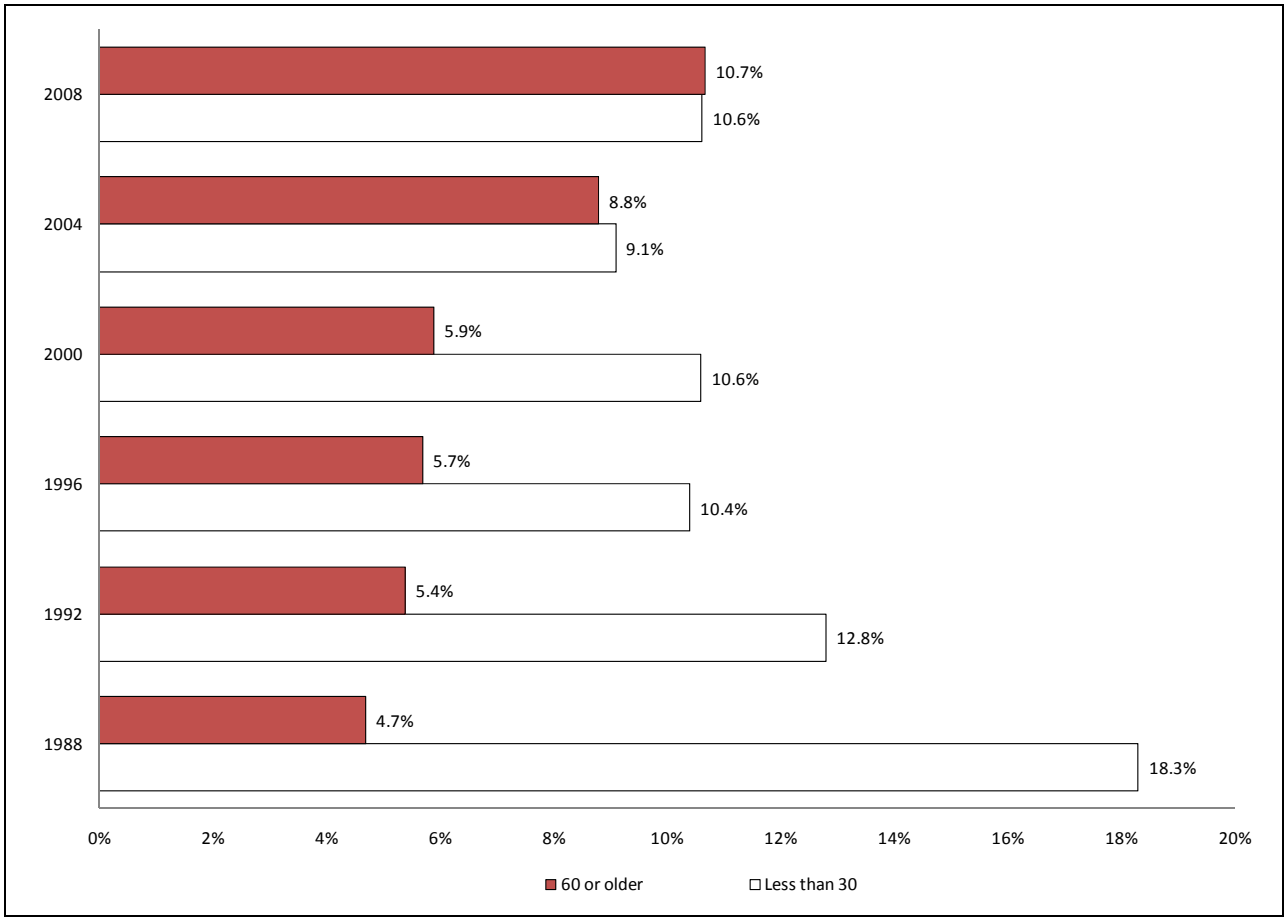
This plateau in the trend toward aging of the RN workforce was the consequence of an increase in employed RNs under 30 years of age—the first increase seen in this age group since the inaugural NSSRN in 1977—which helped to offset the steady rise in the number of employed RNs age 60 and older (Figure 7-1 and Appendix A, Table 1). The increase in the youngest cohort of RNs is the result of rapidly rising enrollments in schools of nursing, in particular in bachelor's nursing programs, whose student population is younger than that of other initial nursing education programs. This rising trend in BSN enrollment started a few years earlier, and graduates from it are now entering the workforce.

Table 7-1. Median age of registered nurses

Survey year	Median age
2008	46
2004	46
2000	44
1996	42
1992	40
1988	38

Source: 1988-2008 National Sample Survey of Registered Nurses

Figure 7-1. Percent of registered nurses working in nursing, by age cohort, 1988-2008



Source: 1988-2008 National Sample Survey of Registered Nurses

7.3 Registered Nurses and Gender

Men comprised a growing percentage of RNs in 2008. To provide a comparison over time within the 2008 Survey, male RNs who were licensed before 2000 are compared to those licensed in 2000

or later. Male RNs made up 6.2 percent of employed RNs who were licensed before 2000 and 9.6 percent of those licensed in 2000 or later (Table 7-2). Men licensed as RNs since 2000 are older than women licensed in the same period, with a median age of 35 compared to 31 for women. In contrast, male and female RNs licensed before 2000 have a similar age profile.

Table 7-2. Gender of employed registered nurses, by year of initial registered nurse license

	Licensed before 2000		Licensed in 2000 or later	
	Male	Female	Male	Female
Percent of employed nurses	6.2	93.8	9.6	90.4
Median age	49	50	35	31

Source: 2008 National Sample Survey of Registered Nurses

Male and female RNs were equally likely to have pursued a bachelor's or higher degree in nursing or nursing-related fields (Table 7-3). However, men were somewhat more likely than women to have received non-nursing higher degrees.

Table 7-3. Highest education of registered nurses working in nursing, by gender

	Percent with bachelor's and higher in nursing or nursing-related field	Percent with bachelor's and higher in nursing and any non-nursing field
Men	49.9	62.2
Women	50.3	55.1

Source: 2008 National Sample Survey of Registered Nurses

The employment profile of men who work in nursing is different from that of women. A greater proportion of male RNs work in hospitals compared to women; nearly 76 percent of men report primary employment in a hospital, compared with 61.2 percent of women (Table 7-4).

Differences in the employment of male and female RNs are even more pronounced in certain job titles. Men made up just over 7 percent of employed RNs overall in 2008, yet they constituted 41.1 percent of nurse anesthetists (Figure 7-2).

Table 7-4. Employment settings, by gender*

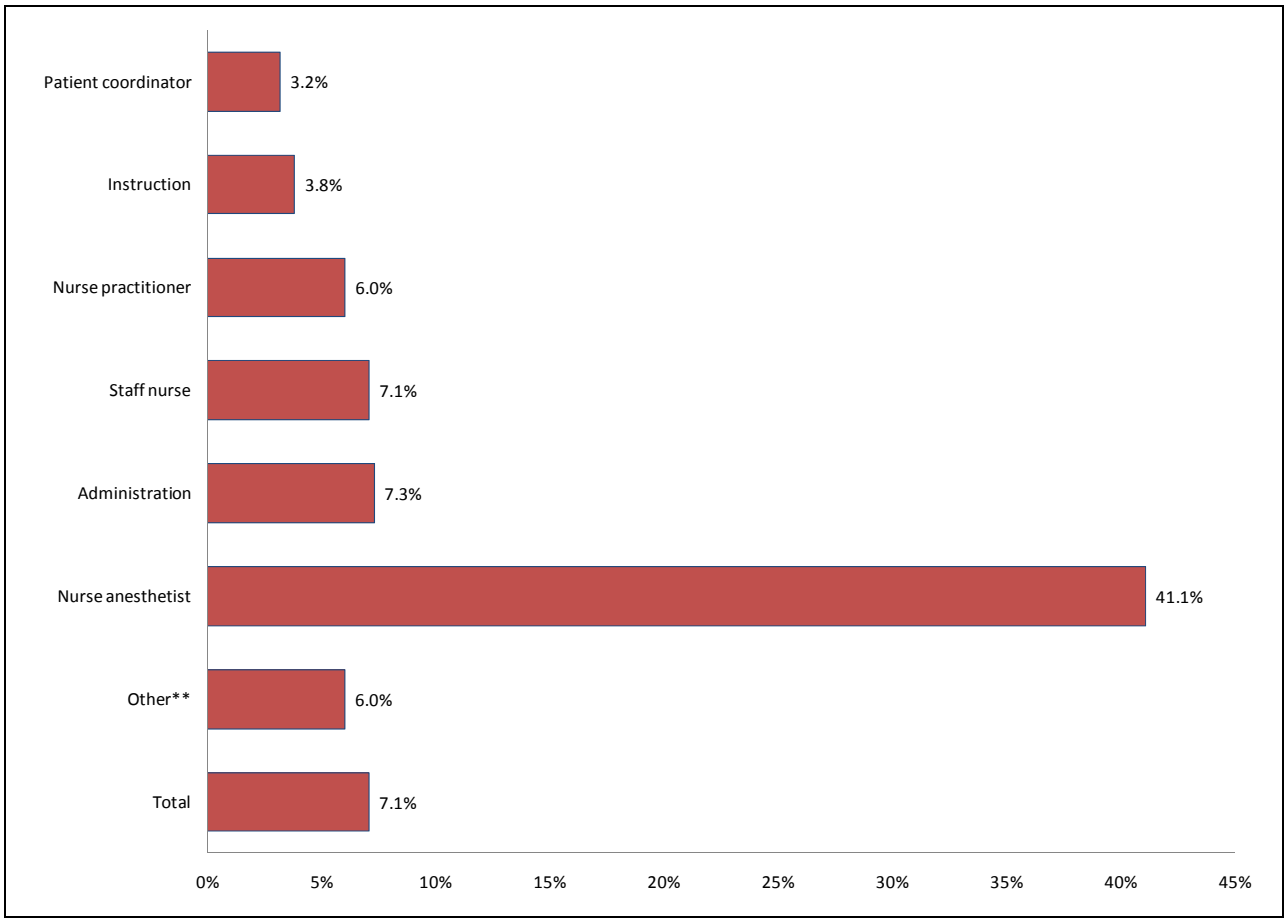
	Men (percent)	Women (percent)
Hospital	75.6	61.2
Ambulatory care	5.6	10.9
Home health	3.9	6.6
Nursing home	4.4	5.3
Academic education	2.3	3.9
Other**	8.0	12.0
Total	100.0	100.0

*Excludes registered nurses for whom employment setting was not known.

**Other includes public/community health, school health, occupational health, and insurance/benefits/utilization review.

Source: 2008 National Sample Survey of Registered Nurses

Figure 7-2. Percent of men employed in nursing, by job title*



*Excludes registered nurses for whom job title was not known.

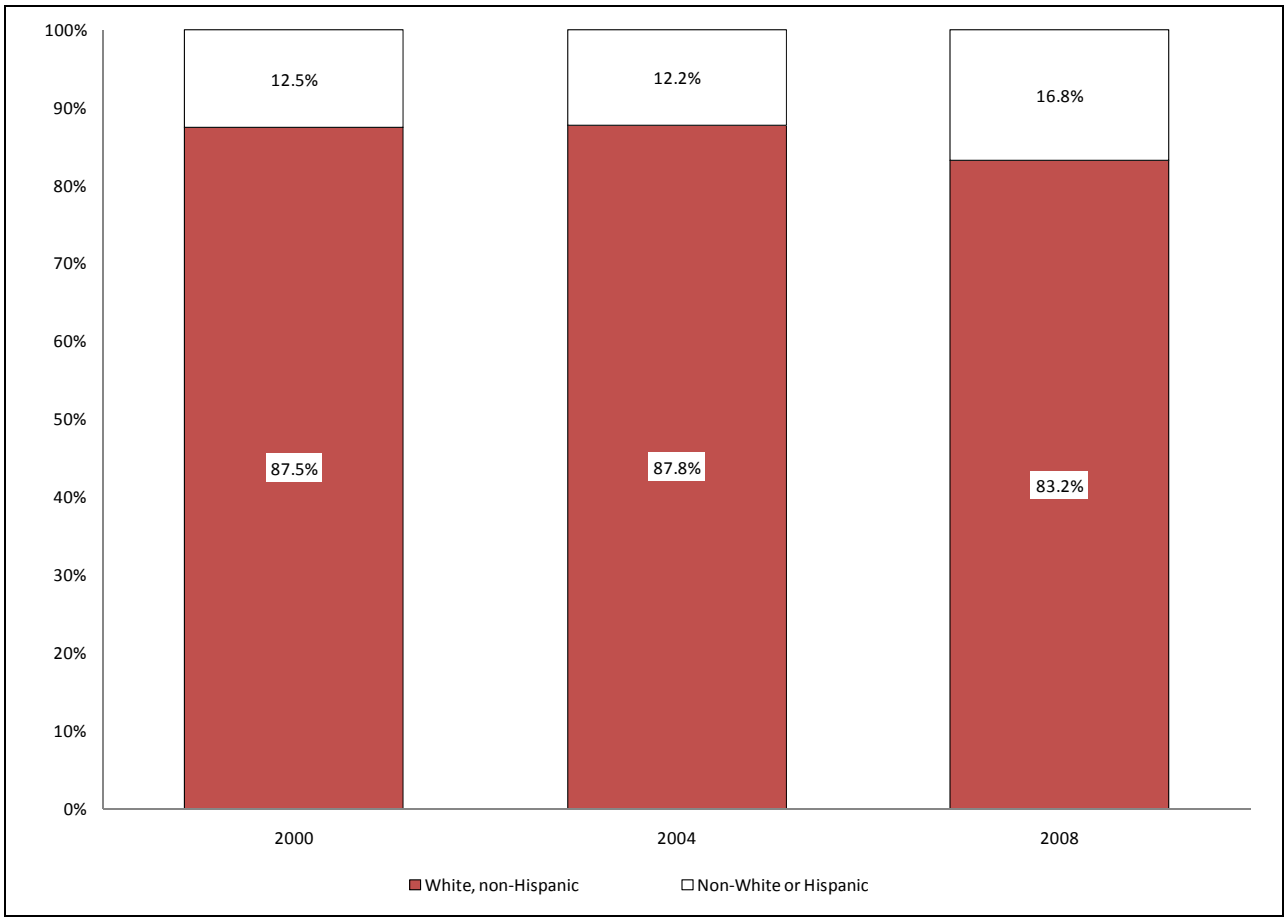
**Other includes consultant, CNS, researcher, informatics, surveyor/auditor/regulator, patient educator, and nurses who reported having no job title.

Source: 2008 National Sample Survey of Registered Nurses

7.4 Registered Nurses and Race and Ethnicity

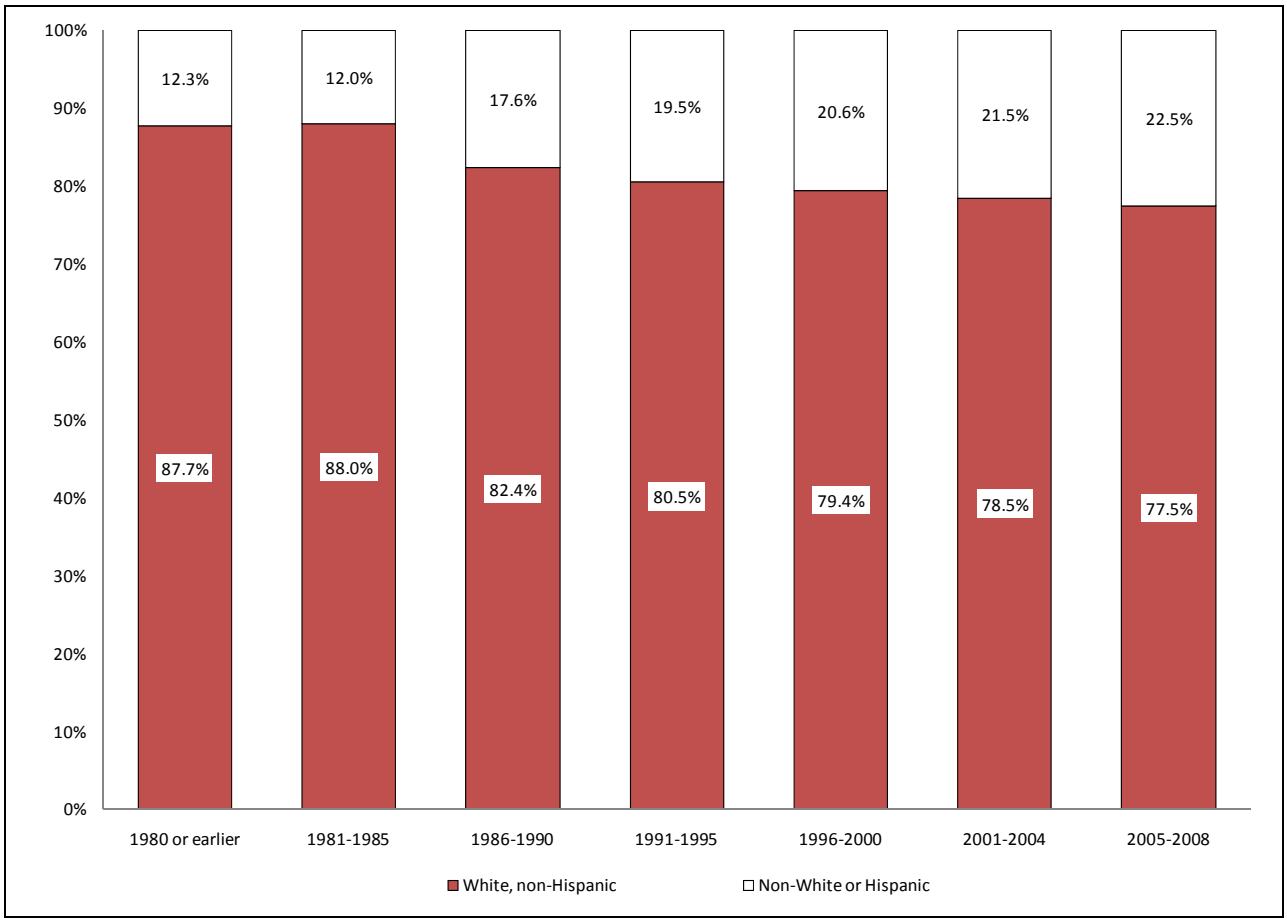
Racial/ethnic minority groups remain underrepresented in the RN population when compared with their profile in the general population, but gains have been made over time (Figure 7-3). The population of RNs from minority racial/ethnic groups has increased from 119,512 in 1980 to 333,368 in 2000; by 2008, it increased further to 513,860 (Appendix A, Table 1). Nurses from minority racial and ethnic groups still represent only 16.8 percent of all nurses. This percent may change in the future since RNs from racial and ethnic minority groups represent a larger percentage of recently graduated nurses than of nurses who graduated in earlier graduate cohorts (Figure 7-4). American Indian RNs represent a very small percent of RNs working in nursing, which limits the ability to analyze their representation across variables such as employment setting and job title.

Figure 7-3. Percent of registered nurses who are White or non-White



Source: 2000-2008 National Sample Survey of Registered Nurses

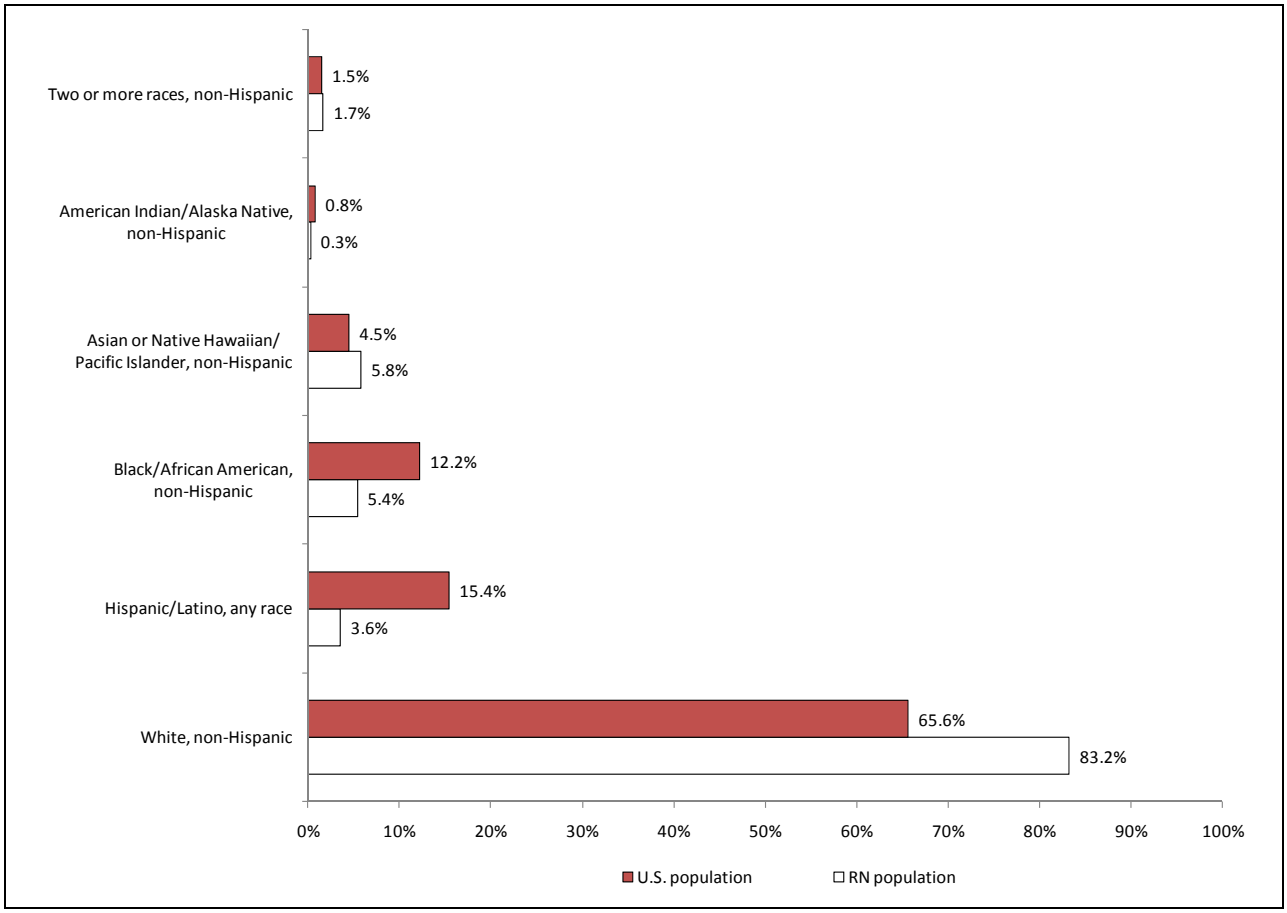
Figure 7-4. Racial/ethnic distribution, by year of graduation from initial nursing education



Source: 2008 National Sample Survey of Registered Nurses

The racial and ethnic profile of the RN population is substantially different from that of the U.S. population. As seen in Figure 7-5, 65.6 percent of the U.S. population is White, non-Hispanic, while 83.2 percent of RNs were White, non-Hispanic in 2008. Hispanics, Blacks, and American Indians/Alaska Natives are underrepresented in the RN population. Asians are slightly overrepresented among RNs, with 5.8 percent of RNs reporting a racial background of Asian, Native Hawaiian, or Pacific Islander, compared with 4.5 percent of the U.S. population. As discussed in Chapter 8, a substantial number of RNs who are educated in countries other than the United States have been recruited and received their initial nursing education in the Philippines or India. This may be a contributing factor to the comparatively high share of Asians among RNs.

Figure 7-5. Distribution of registered nurses and the U.S. population, by racial/ethnic background



Source: 2008 National Sample Survey of Registered Nurses

The age profile of the RN workforce differs by racial/ethnic group. White, non-Hispanic RNs are the oldest racial/ethnic category of RNs working in nursing yet they were the youngest group at the time of their initial licensure (Table 7-5). Nearly all other racial/ethnic groups were slightly older at the point of initial licensure but were slightly younger than White, non-Hispanic nurses in the 2008 workforce.

Table 7-5. Median current age and age at licensure of registered nurses working in nursing, by race/ethnicity

	Age at licensure	Current age
White, non-Hispanic	25	47
Pacific Islander, non-Hispanic	25	39
Hispanic/Latino, any race	28	40
Two or more races, non-Hispanic	28	45
Asian, non-Hispanic	29	41
Black/African American, non-Hispanic	29	44
American Indian/Alaska Native, non-Hispanic	31	45
Total	25	46

Source: 2008 National Sample Survey of Registered Nurses

Educational attainment varied among the racial/ethnic groups captured in the 2008 Survey. The most common type of initial RN education among all racial/ethnic groups except Asian RNs is the ADN (Table 7-6). Among Asian RNs, 69.6 percent entered the profession with a bachelor's or higher degree. This high rate of initial BSN education may be in part due to the large share of Asian RNs who were internationally educated. Among internationally educated RNs, bachelor's education for those who emigrate to the United States is more common than among RNs educated in the United States.

Table 7-6. Initial nursing education of registered nurses employed in nursing, by race/ethnicity

	Diploma (percent)	Associate degree (percent)	Bachelor's and higher (percent)
White, non-Hispanic	19.3	48.2	32.5
Black/African American, non-Hispanic	13.2	54.7	32.1
Hispanic/Latino, any race	5.5	55.1	39.4
Asian, non-Hispanic	12.6	17.8	69.6
Total	17.8	47.2	34.9

Source: 2008 National Sample Survey of Registered Nurses

White, non-Hispanic RNs were the least likely racial/ethnic group in 2008 to have attained a bachelor's degree or higher in nursing, nursing-related, or non-nursing fields (Table 7-7). Deconstructing this educational attainment profile reveals that Hispanic and Asian RNs were more likely to have pursued a bachelor's degree for initial RN education but less likely to have pursued graduate degrees than were White, non-Hispanic RNs. In contrast, Black RNs were more likely than White, non-Hispanic nurses to have achieved both bachelor's and graduate degrees.

Table 7-7. Highest education of registered nurses employed in nursing, by race/ethnicity

	Bachelor's degree (percent)	Master's or doctorate degree (percent)	Total (percent)
Nursing and nursing-related			
White, non-Hispanic	35.0	13.4	48.4
Black/African American, non-Hispanic	37.9	14.6	52.5
Hispanic/Latino, any race	41.0	10.5	51.5
Asian, non-Hispanic	67.3	8.3	75.6
Total	37.3	13.0	50.3
Nursing and non-nursing			
White, non-Hispanic	39.2	14.5	53.7
Black/African American, non-Hispanic	41.5	16.7	58.1
Hispanic/Latino, any race	45.6	11.0	56.6
Asian, non-Hispanic	70.0	10.6	80.6
Total	41.4	14.3	55.6

Source: 2008 National Sample Survey of Registered Nurses

Racial/ethnic diversity also varied among APRNs. White, non-Hispanic RNs comprised 83.3 percent of all nurses prepared in advanced practice fields, only slightly higher than the 82.2 percent of all employed RNs who were White, non-Hispanic (Table 7-8). This higher representation by White, non-Hispanic RNs is found across all APRN disciplines except NMs. Black RNs have a higher degree of representation among APRNs because of a higher relative percentage among NMs and NPs. Asian and Hispanic RNs are significantly underrepresented among APRNs.

Table 7-8. Advanced practice preparation of registered nurses, by race/ethnicity

	White, non-Hispanic (percent)	Black/African American, non-Hispanic (percent)	Hispanic/Latino, any race (percent)	Asian, non-Hispanic (percent)
Employed nurses	82.2	5.6	3.9	5.8
All advanced-practice nurses	83.3	6.3	3.5	4.2
Nurse practitioners	84.1	5.8	3.9	3.5
Clinical nurse specialists	87.9	–	–	–
Nurse midwives	57.0	21.8	–	–
Nurse anesthetists	89.7	–	–	–

–Too few cases to report estimated number (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

Among the four largest racial/ethnic groups, hospital employment was the most common place of employment (Table 7-9). A smaller percent of Asian, non-Hispanic RNs worked in home health than any other racial/ethnic group. Hispanic/Latino RNs were least represented in nursing homes.

In the aggregate, American Indian RNs in 2008 were less likely to be employed in hospitals or as staff nurses than were all other racial/ethnic groups. Generally, the racial/ethnic pattern of employment varied across all other employment settings.

Table 7-9. Employment setting of registered nurses, by race/ethnicity*

Percent of nurses	White, non-Hispanic (percent)	Black/African American, non-Hispanic (percent)	Hispanic/Latino, any race (percent)	Asian, non-Hispanic (percent)	Total (percent)
Hospital	60.9	63.4	68.8	75.4	62.2
Ambulatory care	11.3	6.7	6.9	5.3	10.5
Home health	6.8	6.4	6.8	2.7	6.4
Nursing home	5.2	6.0	3.5	6.0	5.3
Total	84.2	82.5	86.0	89.3	84.5

*Excludes registered nurses for whom employment setting was not known.

Source: 2008 National Sample Survey of Registered Nurses

More than 80 percent of RNs working in nursing were employed in three job titles. Among the four largest racial/ethnic groups, White, non-Hispanic nurses were less likely than the other three groups to be employed as staff nurses and more likely to be in patient care coordinator positions (Table 7-10). Black RNs had the highest percentage of employment among the four groups in management and administration positions at 13.8 percent, followed closely by White, non-Hispanic RNs at 12.9 percent. Management jobs were held by 10.9 percent of Hispanic/Latino RNs and 7.2 percent of Asian RNs.

Table 7-10. Job titles of registered nurses, by race/ethnicity*

Job title	White, non-Hispanic (percent)	Black/African American, non-Hispanic (percent)	Hispanic/Latino, any race (percent)	Asian, non-Hispanic (percent)	Total (percent)
Staff nurse	64.8	67.1	72.0	83.0	66.3
Management	12.9	13.8	10.9	7.2	12.5
Patient coordinator	5.6	5.2	4.1	3.5	5.4
Total	83.3	86.1	87.0	93.7	84.3

*Excludes registered nurses for whom job title was not known.

Source: 2008 National Sample Survey of Registered Nurses

7.5 Registered Nurses and Language Competency

In communities where English is not the first language of many patients, the dominant factor in cultural competency for RNs may be how well they can communicate with the population they serve. In 2008, most working RNs spoke only English fluently. Just 5.1 percent of RNs spoke Spanish, and 3.6 percent spoke Tagalog or another Filipino language. About 1.1 percent spoke French, while less than 1 percent or RNs spoke any Chinese dialect, German, American Sign Language, or other language.

7.6 Registered Nurses and Marital Status and Dependents

Nearly 74 percent of RNs were married or in a domestic partnership in 2008 (Appendix A, Table 54). Similar percentages of married and not married nurses reported having dependent adults in their households (15.2 percent v. 18.1 percent) (Table 7-11). In contrast, married nurses were twice as likely as nurses who were not married to have dependent children in the household (51.7 percent v. 25.3 percent).

Table 7-11. Marital status and presence of children or adult dependents at home

Marital status	Dependent adults in home (percent)	Children in home (percent)
Married/Domestic partnership	15.2	51.7
Not married	18.1	25.3

Source: 2008 National Sample Survey of Registered Nurses

Approximately 55 percent of RNs working in nursing reported having household dependents, either adult or children (Table 7-12 and Appendix A, Tables 54 and 55). That number decreases to 42.6 percent among RNs working outside of nursing, and decreases to 38.7 percent among those not working. This decrease was associated with lower numbers of RNs reporting dependent children in the household among those working outside of nursing and those not employed. The percentage of households with dependent adults was virtually the same across all three groups.

Table 7-12. Employment of registered nurses, by presence of children or adult dependants in the home

	Dependent adults in home (percent)	Children in home (percent)	Both adults and children (percent)
Working in nursing	10.1	38.8	5.9
Working outside of nursing	10.6	27.2	4.8
Not working	10.3	25.1	3.3

Source: 2008 National Sample Survey of Registered Nurses

7.7 Registered Nurses and Household Income

Household income for the majority of RNs employed in nursing is equal to or significantly better than the median household income in 2008.[1] Approximately 40 percent of RNs in 2008 lived in households in which total household income was at least $100,000 (Table 7-13 and Appendix A, Table 56). Among RNs employed full-time as staff nurses, 33.8 percent reported an annual household income of at least $100,000. RNs in administrative and management positions were more likely to be in high-income households, with 54.9 percent reporting household income of $100,000 or more. Total household income tended to be lower among RNs who were not employed in nursing.

Table 7-13. Annual household income of registered nurses, by employment status of the nurse

	Annual household income less than or equal to $50,000 (percent)	Annual household income $50,001-$100,000 (percent)	Annual household income greater than $100,000 (percent)
All nurses	12.5	47.5	40.1
Nurses employed in nursing	9.2	49.7	41.2
Nurses not employed in nursing	31.0	35.1	34.0
All full-time nurses	7.0	51.7	41.2
Full-time staff nurses	9.3	56.8	33.8
Full-time management/administration	2.8	42.3	54.9

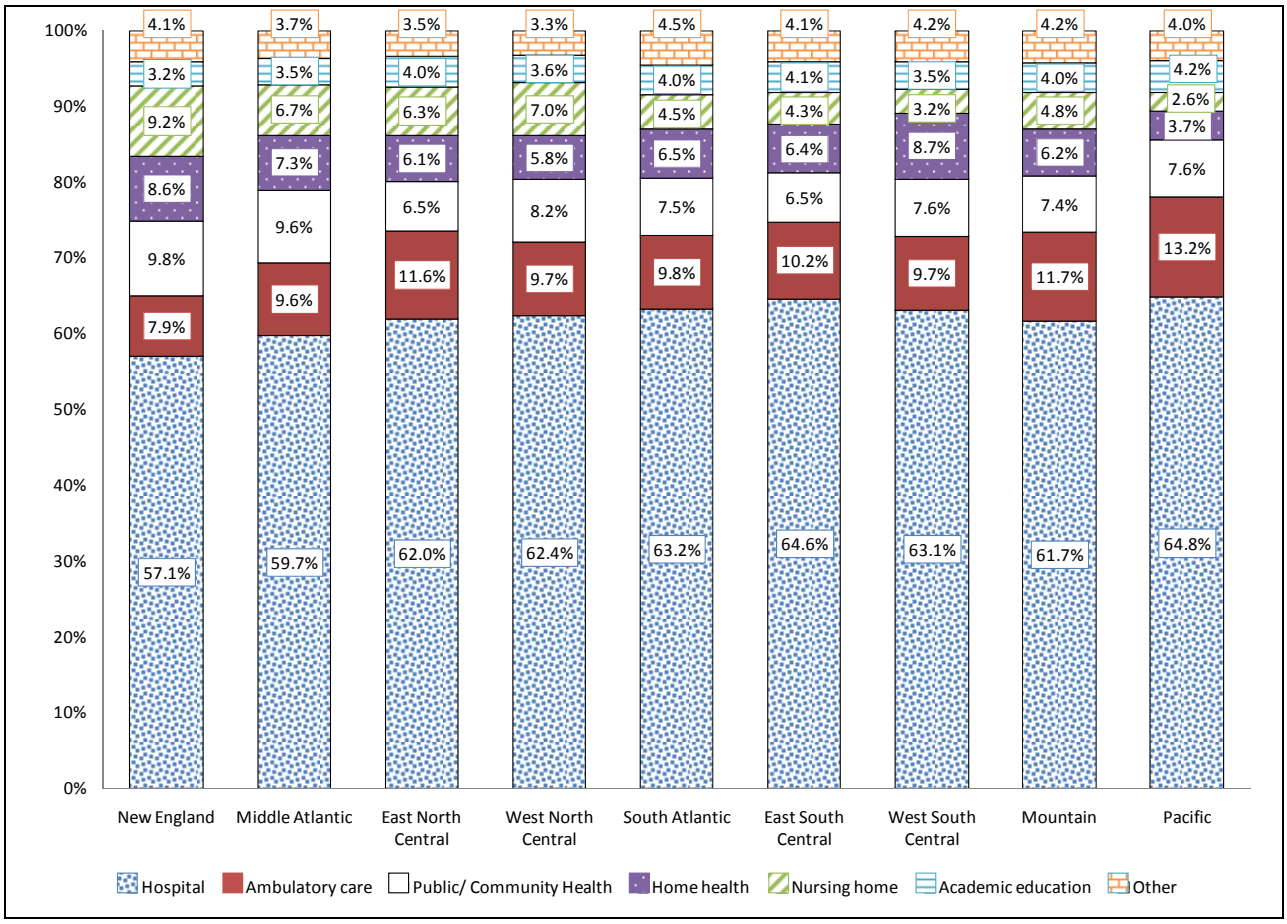
Source: 2008 National Sample Survey of Registered Nurses

[1] Median household income 2008 is $52,029. Source: U.S. Census Bureau Quick Facts, http://quickfacts.census.gov/qfd/states/00000.html

7.8 Geography, Nurse Demographics, and Employment

There was significant variation in the distribution of the RN workforce across the country in 2008, with a two-fold difference among the States in the rate of employed RNs (Appendix A, Tables 57 and 58). Employment by setting also varied geographically (Figure 7-6 and Appendix A, Table 59). A smaller percentage of RNs in the New England region were employed in hospitals (57.1 percent) and ambulatory care settings (7.9 percent), while the percentage employed in nursing homes in New England (9.2 percent) was higher than other regions. RNs in the Pacific region were more likely to be employed in ambulatory care settings (13.2 percent) than RNs in other regions.

Figure 7-6. Distribution of employment settings, by geographic region*



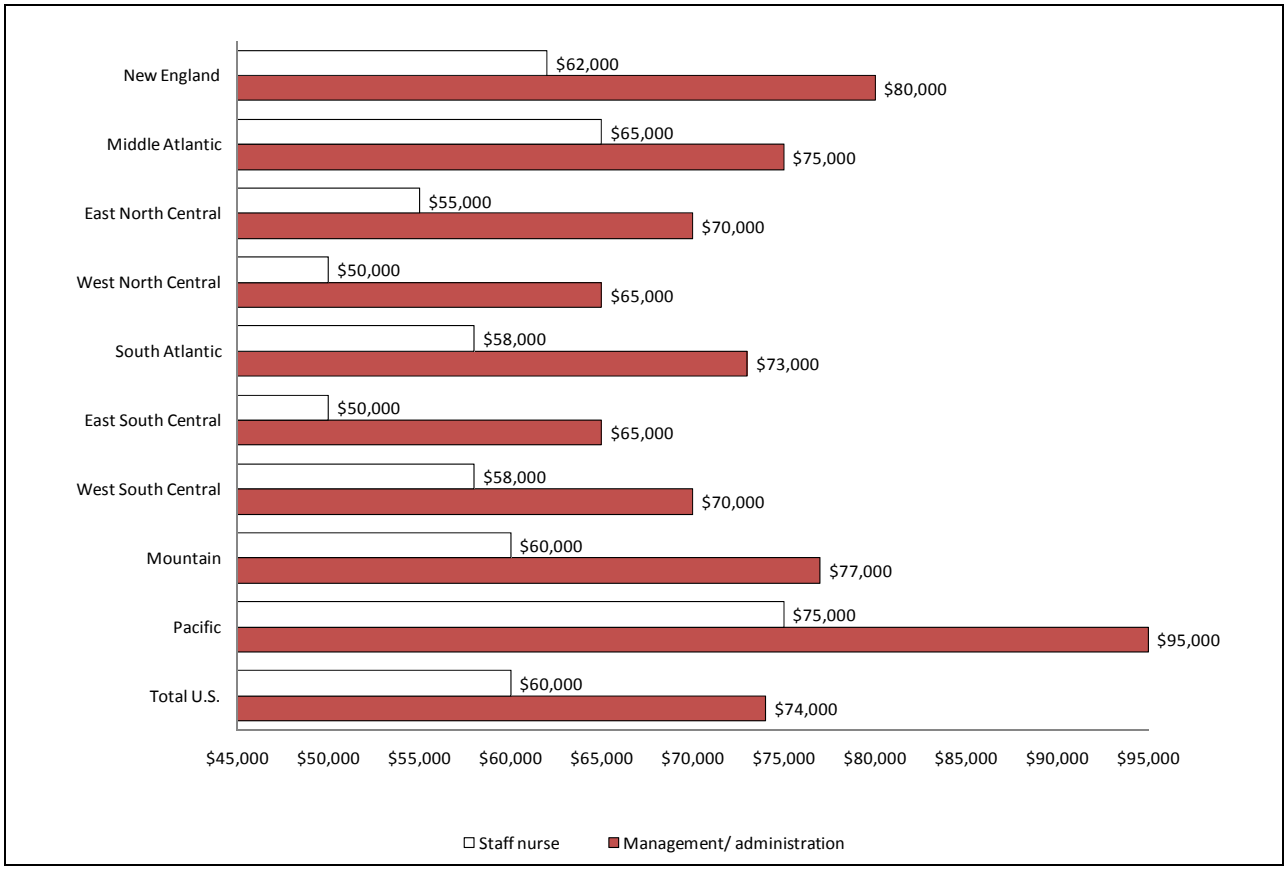
*Excludes registered nurses for whom employment setting was not known.

Source: 2008 National Sample Survey of Registered Nurses

Earnings varied by geographic region (Figure 7-7 and Appendix A, Table 60). Median earnings for staff RNs in 2008 ranged from a low of $50,000 in the West North Central and East South Central

regions to $75,000 in the Pacific region. For nurses with a primary full-time position in administration or management, the range in median earnings among regions was comparably large, from $65,000 to $95,000.

Figure 7-7. Median earnings for staff and management/administration registered nurses, by geographic region*

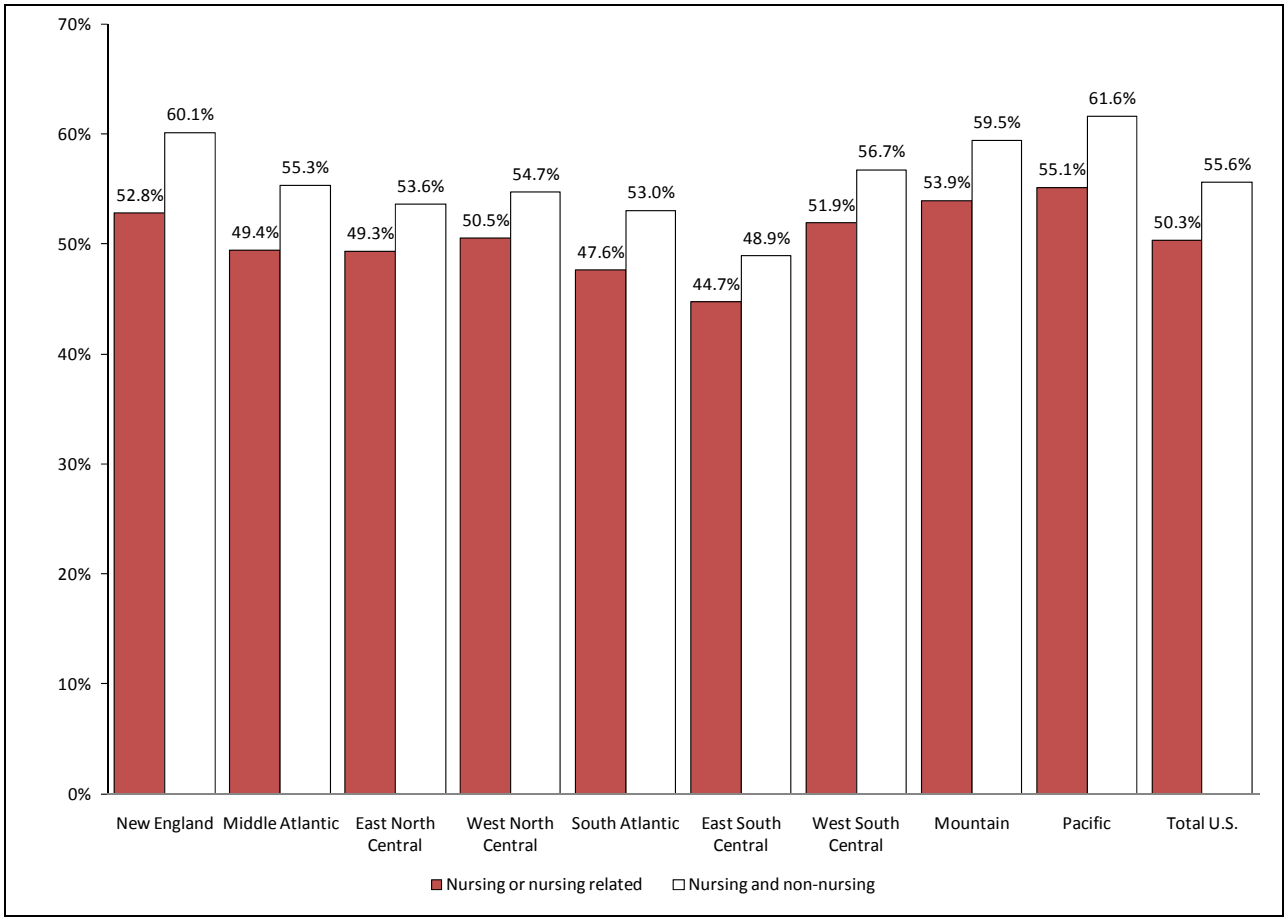


*Excludes registered nurses for whom earnings was not known.

Source: 2008 National Sample Survey of Registered Nurses

Education levels vary notably by region. The East-South Central region had the smallest percentage of RNs who had obtained at least a bachelor's degree, with only 44.7 percent at the bachelor's or higher level in nursing or a nursing-related field (Figure 7-8 and Appendix A, Table 61). The highest percentage of RNs with at least a bachelor's degree in nursing or a nursing-related field was in the Pacific and New England regions.

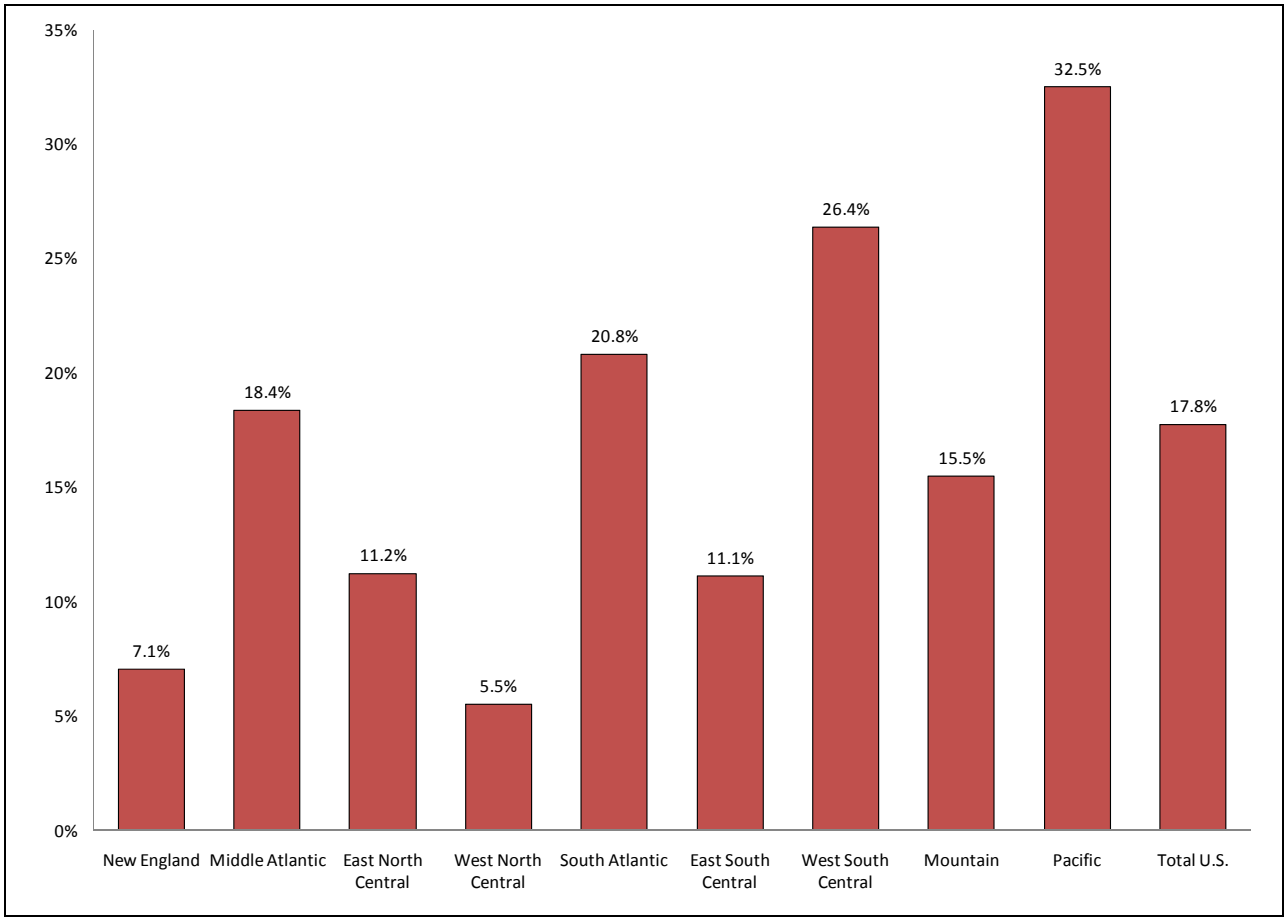
Figure 7-8. Percent of employed registered nurses with a bachelor's degree and higher, by region



Source: 2008 National Sample Survey of Registered Nurses

Median age of employed RNs varied little across regions, ranging from 44 to 48 years (Appendix A, Table 62). There were notable differences among geographic regions in the percentage of employed RNs representing racial/ethnic minority groups (Figure 7-9 and Appendix A, Table 63). The Pacific and West-South Central regions had the highest percentages of RNs who were non-White or Hispanic. In the West-North Central region, only 5.5 percent of RNs were from racial or ethnic minority groups; in the New England region, only 7.1 percent were from minority groups.

Figure 7-9. Percent of employed registered nurses in racial/ethnic minority groups, by geographic region



Source: 2008 National Sample Survey of Registered Nurses

Internationally Educated Nurses (IENs) 8

8.1 Introduction

This chapter reviews the characteristics and employment of internationally educated nurses (IENs), formerly termed foreign-trained or foreign-educated nurses. These nurses have completed primary nursing education, often in British or U.S. modeled nursing education programs, outside of the United States or in the U.S. territories. Since the early 1900s, IENs have worked in the United States RN workforce. Prior to World War II, IENs came predominantly from Canada and western European English-speaking countries. Since that time, IENs have come to the United States from the Caribbean, Asia, South America, and most recently some African nations, in addition to Canada and Europe. Internationally educated nurses include RNs who individually immigrate for personal and/or economic reasons and also may include larger populations of IENs who are recruited to fill U.S. hospital nursing shortages by employment agencies specializing in international nursing recruitment.

In 2008, IENs from the Philippines continued to be the largest group of IENs in the U.S. workforce, followed by RNs from Canada. In recent years, IENs constitute a small but an increasing percentage of the U.S. RN workforce.

8.2 IEN Licensure and National Origin

In 2008 there were an estimated 165,539 IENs living in the United States, accounting for 5.4 percent of all licensed RNs (Table 8-1 and Appendix A, Table 65). Of these, 146,097 were employed in nursing in 2008, comprising 5.6 percent of the RN workforce. Approximately one-quarter of working IENs received their first U.S. nursing license in 2004 or later. The number of IENs is slowly growing: IENs licensed between 2004-2008 represented 8.1 percent of the total of recently licensed employed RNs, compared with 5.1 percent of those licensed before 2004.

IENs from the Philippines comprised just over 50 percent of all IENs and 52 percent of those working in nursing (Figure 8-1 and Appendix A, Table 65). Nearly 12 percent of IENs came from

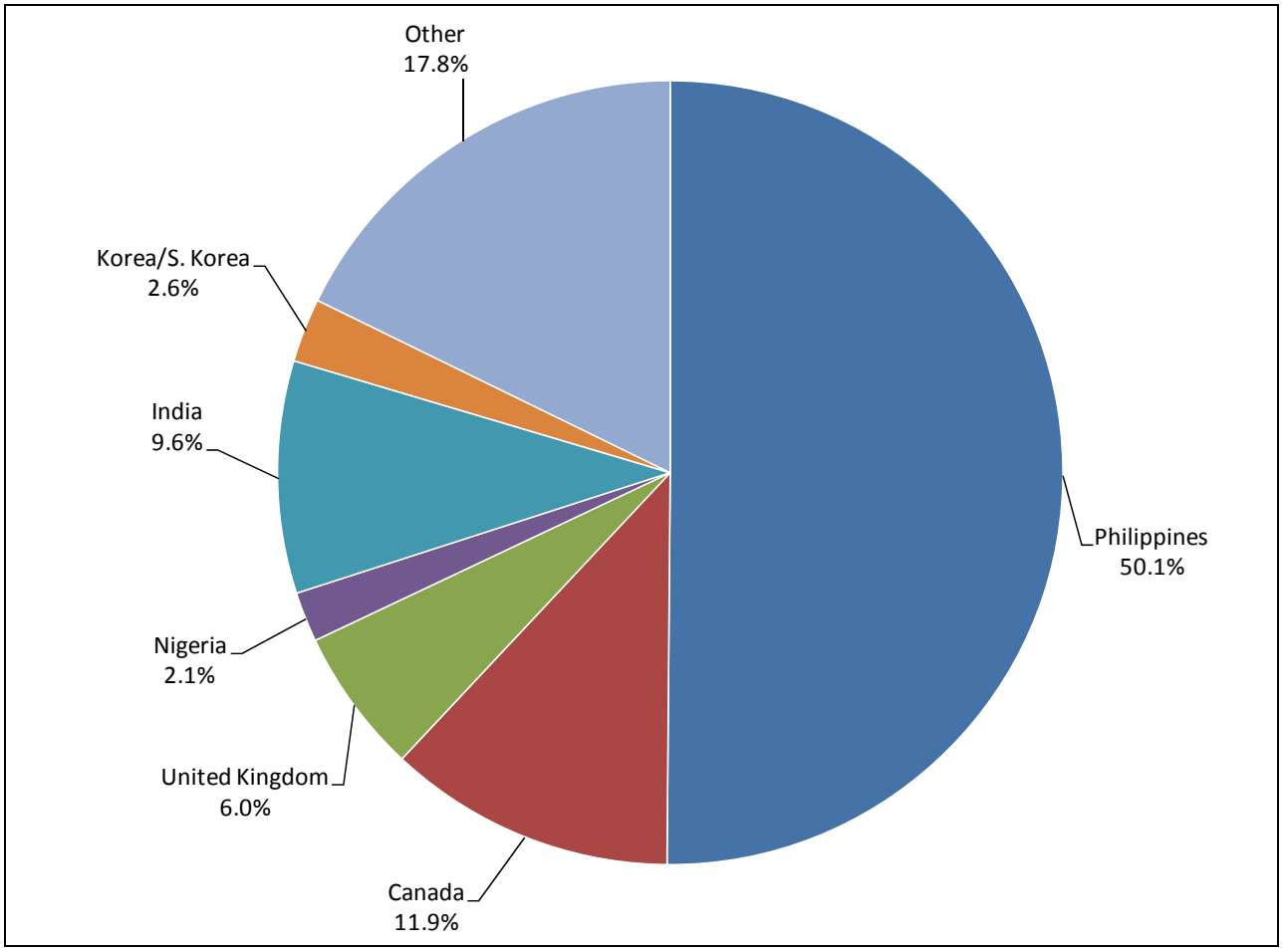
Canada, and 9.6 percent were educated in India. The United Kingdom supplied 6 percent of IENs, while Korean and Nigerian IENs comprised 2.6 and 2.1 percent, respectively.

Table 8-1. Internationally educated nurses in the United States

	Total licensed nurses	Total IENs	IEN percent of total	Total employed nurses	Employed IENs	IEN percent of employed
Licensed before 2004	2,618,494	128,028	4.9	2,169,846	111,576	5.1
Licensed 2004-2008	444,668	37,511	8.4	426,753	34,521	8.1
Total	3,063,162	165,539	5.4	2,596,599	146,097	5.6

Source: 2008 National Sample Survey of Registered Nurses

Figure 8-1. Countries of origin of internationally educated nurses in the United States



Source: 2008 National Sample Survey of Registered Nurses

The National Council of State Boards of Nursing reported an increase in the number of IEN graduates who passed the National Council Licensure Examination (NCLEX) after 2000; fewer than

5,000 IENs passed in 1998 but more than 22,000 IENs passed in 2007.[1] More than half of these nurses were from the Philippines in 2007 (13,342), and 4,053 were from India. The growth in the number of IENs taking and passing the NCLEX is another indicator of the growth in the number of IENs looking to live and work in the United States.

Most IENs did not obtain their first U.S. nursing license until 4 or more years after completing their initial RN education (Table 8-2). In fact, 33.5 percent of IENs did not obtain a U.S. license until 10 or more years after their initial RN degree was received.

Table 8-2. Years between initial nursing education and first U.S. licensure

	U.S.-educated	Internationally educated
0 years	82.6	7.2
1 year	15.8	6.2
2-3 years	1.5	17.3
4-9 years	<0.1	35.9
10 or more years	<0.1	33.5

Source: 2008 National Sample Survey of Registered Nurses

8.3 IEN Demographic Characteristics

Half of RNs working in nursing in 2008—both IENs and U.S.-educated—were 46 years of age or older (Table 8-3). The median age at licensure of U.S.-educated RNs was younger than that of IENs, 25 years of age compared to 30 for IENs. Half of IENs arrived in the United States to work at least 6 years after completing their primary nursing education in their home country.

Table 8-3. Median current age and age at licensure of registered nurses employed in nursing, by international education status

	U.S.-educated	Internationally educated
Current age	47	46
Age at licensure	25	30

Source: 2008 National Sample Survey of Registered Nurses

Men comprised comparable percentages of recently licensed IENs and U.S.-educated nurses, at about 10 percent of each group (Table 8-4). A slightly higher percentage of IENs than of U.S.-educated nurses licensed before 2004 were male.

[1] Data provided by the National Council of State Boards of Nursing, not collected through the 2008 NSSRN.

Table 8-4. Men among U.S. and internationally educated employed nurses, by year of licensure

	U.S.-educated working nurses		Internationally educated working nurses	
	Number	Percent	Number	Percent
Licensed before 2004	132,449	6.4	8,496	7.6
Licensed 2004-2008	38,296	9.8	3,500	10.1

Source: 2008 National Sample Survey of Registered Nurses

More than 68 percent of IENs working in nursing in 2008 had at least a bachelor's degree in nursing or a nursing-related field, compared with 49.2 percent of U.S.-educated nurses (Table 8-5). A variety of external factors have influenced the educational makeup of the IEN workforce. One factor in the last two decades is the requirement from the U.S. Citizenship and Immigrations Services that IENs possess a minimum of a bachelor's degree to obtain a U.S. work visa.[2] In addition, many States and U.S. graduate nursing programs require that IENS obtain a U.S. RN license to enroll in a U.S. graduate nursing education program. A third factor is that there are predominantly bachelor's education programs for nurses, as opposed to ADN programs, in some of the countries from which many IENs immigrate, such as the Philippines. These factors mean that the IEN workforce educational attainment is significantly different than education of U.S.-educated RNs, the majority of whom receive their primary education in 2-year ADN programs. Therefore, IENs appear to be better educated as a group than U.S. RNs.

Table 8-5. Registered nurses working in nursing with at least a bachelor's degree, by location of education

	U.S.-educated	Internationally educated
Nursing/nursing-related	49.2	68.6
Nursing or other field	54.7	71.3

Source: 2008 National Sample Survey of Registered Nurses

The majority of IENs resided in a small number of States (Appendix A, Table 66). Approximately one-quarter of IENs lived in California, with New York, Florida, and Texas each home to 10 to 12 percent of IENs.

[2] U.S. Citizenship and Immigration Services http://www.uscis.gov/portal/site/uscis

8.4 IEN Employment

In 2008, 88.3 percent of IENs were employed in nursing (Appendix A, Table 65), slightly more than RNs in general (84.8 percent, Chapter 3). IENs were also more likely than their U.S.-educated counterparts to work full-time (Table 8-6).

Table 8-6. Registered nurses working full-time, by location of education and year of licensure

	U.S.-educated	Internationally educated
Licensed before 2004	71.7	83.5
Licensed 2004-2008	85.3	93.7

Source: 2008 National Sample Survey of Registered Nurses

Internationally educated nurses worked slightly more hours per year and per week in their principal nursing position than did U.S.-educated RNs (Table 8-7).

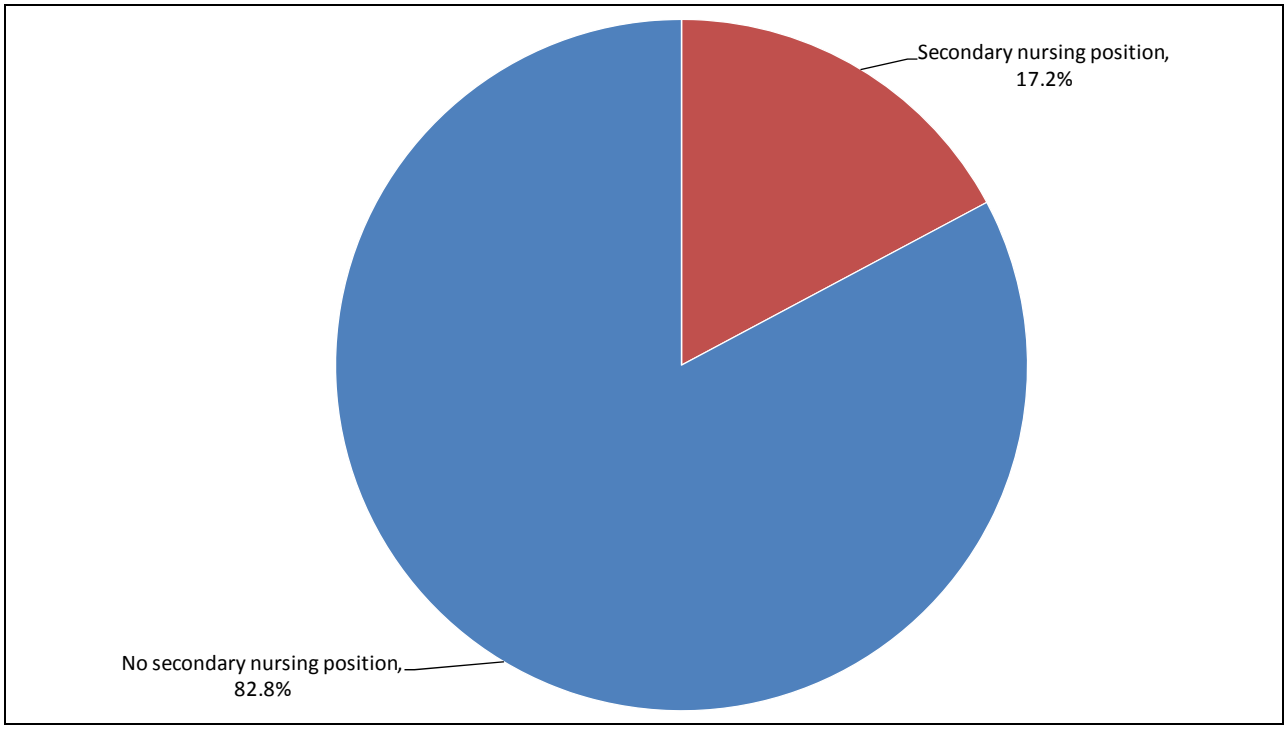
Table 8-7. Average hours worked per year and per week in principal nursing position, by full-time and part-time status and location of education

	U.S.-educated	Internationally educated
Average hours per year		
Full-time employment	2,202.7	2,232.4
Part-time employment	1,173.7	1,306.2
Average hours per week		
Full-time employment	42.9	43.7
Part-time employment	24.0	27.6

Source: 2008 National Sample Survey of Registered Nurses

A greater percent of IENs held secondary nursing positions than did RNs in general. Nationwide, 12.2 percent of RNs who were employed full-time held secondary nursing jobs (Figure 3-11), while 17.2 percent of IENs have at least one additional RN position (Figure 8-2).

Figure 8-2. Secondary nursing positions held by IENs working full-time in their principal nursing position



Source: 2008 National Sample Survey of Registered Nurses

Hospitals were the employment setting for most IENs in 2008, regardless of whether they were licensed in the United States prior to 2004 or since 2004. Approximately three-quarters of recently licensed IENs were employed in hospital settings, with 71.8 percent similarly employed among those licensed before 2004 (Table 8-8 and Appendix A, Table 67). The employment pattern was quite different among U.S.-educated nurses, where 82.9 percent of those recently licensed were hospital-employed, yet only 57.5 percent of those licensed before 2004 were employed in hospitals. This suggests that IENS have more of a tendency to stay in hospital employment than U.S.-educated nurses.

Table 8-8. Number and percent of nurses employed in a hospital setting for their principal nursing position, by location of initial education and year of licensure

	U.S.-educated		Internationally educated	
	Number	Percent	Number	Percent
Licensed before 2004	1,170,276	57.5	79,080	71.8
Licensed 2004-2008	323,349	82.9	26,240	76.5
Total	1,493,625	61.6	105,320	72.9

Source: 2008 National Sample Survey of Registered Nurses

U.S.-educated nurses were more than twice as likely to be found in ambulatory care settings compared with IENs (Table 8-9). However, a higher percentage of IENs were employed in academic education settings, compared with U.S.-educated RNs.

Table 8-9. Registered nurses employed in ambulatory care and academic education, by location of initial education

	U.S.-educated		Internationally educated	
	Number	Percent	Number	Percent
Ambulatory care	263,998	10.9	6,276	4.3
Academic education	88,656	3.7	9,490	6.6

Source: 2008 National Sample Survey of Registered Nurses

There were differences in the job titles of IENs compared with U.S.-educated RNs. More than 90 percent of all recently licensed nurses had staff nurse positions—91.2 percent of U.S.-educated RNs and 94.1 percent of IENs (Table 8-10). That percentage declines among those licensed prior to 2004 to 74 percent for IENs and 60.7 percent for U.S.-educated nurses. This may reflect the fact that IENs tend to stay in hospital employment positions.

Table 8-10. Registered nurses employed as staff nurses, by location of initial education and year of licensure

	U.S.-educated		Internationally educated	
	Number	Percent	Number	Percent
Licensed before 2004	1,241,440	60.7	81,057	74.0
Licensed 2004-2008	353,487	91.2	32,217	94.1
Total	1,594,927	65.6	113,274	78.8

Source: 2008 National Sample Survey of Registered Nurses

Nearly one-quarter of IENs intended to leave their current nursing position within the next 3 years, compared to 30.1 percent of U.S.-educated nurses (Table 8-11). However, the majority of these nurses intended to continue working in nursing.

Table 8-11. Employment intentions, by location of initial education

	U.S.-educated	Internationally educated
Plan to leave current position within 3 years	30.1	24.7
For those who plan to leave their job:		
will continue to work in nursing	72.1	72.3

Source: 2008 National Sample Survey of Registered Nurses

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Recent Registered Nurse Graduates 9

9.1 Introduction

In this report recent graduates are defined as RNs who completed initial nursing education after 2000 (from 2001 to 2008). Within this group, another cohort was identified as the most recent graduates who completed their initial nursing education after 2004 (2005–2008). The sample of most recent graduates includes few RNs who graduated and obtained their licenses in 2008 because the survey sample was selected in early 2008.

In 2008, RNs who completed initial registered nursing programs after 2000 comprised nearly 20 percent of all RNs in the United States and 22.3 percent of those employed. These nurses are indicative of expansions in RN education programs responding to a national RN shortage. When these recent graduates completed their nursing program, they were nearly 4 years older at graduation than RNs who graduated before 2001. Many more recent graduates completed postsecondary education in another field prior to starting their RN education, and a considerable number worked in a health care position before completing initial RN education. These new graduates are more diverse than previous cohorts, with men and minorities comprising a greater percentage. More than 95 percent of new nurses were employed in nursing positions, and they were most likely to be employed in a hospital and as a staff nurse, compared with other employment setting and job title options. They changed employers at a rate of 17.7 percent between 2007 and 2008, often to advance their careers. As expected, most recent graduates had lower salaries and a narrower range of job titles than did RNs who graduated between 2001 and 2004.

9.2 Demographic Characteristics of Recent Registered Nurse Graduates

The number of RNs who received their first registered nursing degree between 2001 and 2008, and live in the United States, is estimated to be 603,402, comprising nearly 20 percent of the total RN population in 2008 (Table 9-1). The earlier group of these RNs—who graduated between 2001 and 2004—represent nearly 10 percent of all RNs and more than 10 percent of RNs employed in

nursing. Nearly 12 percent of RNs employed in nursing graduated from their first RN education program between 2005 and 2008.

Table 9-1. Estimated population of registered nurses, by graduation cohort

	Total estimated population	Graduated before 2001	Graduated 2001–2004	Graduated 2005–2008
Number residing in the United States	3,063,162	2,459,780	289,760	313,622
Percent of RN population	100.0	80.3	9.5	10.2
Number employed residing in the United States	2,596,599	2,019,906	273,833	302,859
Percent of employed nurses	100.0	77.8	10.6	11.7

Source: 2008 National Sample Survey of Registered Nurses

9.3 Recent Registered Nurse Graduates and Education

Recent graduates in 2008 were more likely to have received initial RN education in a bachelor's or master's level nursing program than were RNs who graduated before 2001 (Table 9-2). About 39 percent of RNs who graduated after 2000 had a BSN as their initial nursing education, and about 1 percent entered with a master's degree. The most notable change across the graduation cohorts is that diploma nursing education was rare among recent graduates (3 percent.)

Table 9-2. Initial education of registered nurses, by graduation cohort

Initial education	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Diploma	24.6	3.5	3.1
Associate	42.7	56.4	56.7
Bachelor's and higher	32.7	40.1	40.3

Source: 2008 National Sample Survey of Registered Nurses

Very few of the RNs who graduated between 2001 and 2004 (2.8 percent), and an even smaller percentage of the most recent graduates (less than 1 percent) were internationally educated, compared to 6.3 percent of those who graduated before 2001 (Table 9-3). This is not surprising because nearly 70 percent of internationally educated nurses (IENs) did not receive their first U.S. license until at least 4 years after completing their initial RN education and 33.5 percent did not receive a U.S. license until 10 or more years after initial education (Table 8-2).[1] Thus, few IENs who

[1] Internationally educated nurses (IENs) are registered nurses with an active U.S. nursing license who completed their initial nursing education outside of the United States or in the U.S. territories.

graduated in the most recent cohort (2005–2008) were likely to have immigrated by 2008 into the United States.

Table 9-3. Location of initial education of nurses, by graduation cohort

Initial education	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
U.S.-educated	93.7	97.2	99.2
Internationally educated	6.3	2.8	0.8

Source: 2008 National Sample Survey of Registered Nurses

Even among the most recent graduates, IENs were more likely to have obtained their initial education in a bachelor's program (Table 9-4). Among IENs who graduated since 2001, and were licensed in the United States, more than 74 percent had received a bachelor's degree.

Table 9-4. Initial nursing education, by graduation cohort and location of education

	U.S.-educated (percent)		Internationally educated (percent)	
Initial Education	Graduated before 2001	Graduated 2001–2008	Graduated before 2001	Graduated 2001–2008
Diploma/Associate	69.0	60.5	41.8	25.8
Bachelor's and higher	31.0	39.5	58.2	74.2

Source: 2008 National Sample Survey of Registered Nurses

The average age at graduation from initial RN education has been increasing over time (Figure 2-2). RNs who graduated before 2001 completed their nursing programs at an average age of 26.7 years, while those who graduated after 2000 were on average a little over 30 years old at graduation (Table 9-5 and Appendix A, Table 2). More than half of RNs who completed their initial education prior to 2001 did so when they were under 25 years old; only 34.9 percent of 2001–2004 graduates and 32 percent of 2005–2008 graduates were younger than 25 years old at graduation.

Table 9-5. Average age at graduation and age distribution at graduation, by graduation cohort

Age at graduation	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Average age	26.7	30.1	30.8
<25 years	56.7	34.9	32.0
25–29 years	17.1	24.7	23.5
30–39 years	18.4	24.9	27.0
40–49 years	7.0	12.0	13.2
50 or more years	0.8	3.6	4.3

Source: 2008 National Sample Survey of Registered Nurses

In addition to being older, recently graduated RNs are more likely to have received a postsecondary education degree prior to entering nursing (Table 9-6).

Table 9-6. Registered nurses with postsecondary education degrees before starting initial nursing education program

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
No degree before RN degree	81.5	68.3	62.9
Had degree before RN degree	18.5	31.7	37.1

Source: 2008 National Sample Survey of Registered Nurses

The most common fields of study for RNs who completed their initial RN education between 2005 and 2008 and who held a postsecondary degree prior to their RN education were health-related fields (32.5 percent); liberal arts, social sciences, or humanities (28.2 percent); biological or physical science (17.3 percent); and business or management (11.3 percent) (Table 9-7 and Appendix A, Table 4). More than half of recent graduates with a postsecondary degree had received a bachelor's degree in another field. The most recent entrants to the registered nursing profession were more likely than previous entrants to be entering nursing after study in another field or as a "second career."

Table 9-7. Fields of study for registered nurses who had postsecondary degrees before initial nursing education, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Health-related field	44.0	38.6	32.5
Biology/physical science	11.9	18.2	17.3
Business/management	8.6	8.8	11.3
Education	7.5	3.9	4.0
Liberal arts/social sciences/humanities	24.0	25.4	28.2
Other nonhealth field*	4.0	5.2	6.7

*Other includes law, computer science, and social work.

Source: 2008 National Sample Survey of Registered Nurses

Recent RN graduates are more likely to have worked in a health-related occupation prior to their initial RN education (Table 9-8). Among RNs who graduated prior to 2001, 65.5 percent had worked in a health occupation; this rate is more than 73 percent among recent graduates. Recent graduates are somewhat less likely than those who graduated before 2001 to have worked as nursing

aides/assistants and more likely to have worked as clerks in health care settings or in allied health fields. More than 20 percent of RNs, regardless of graduation cohort, were LPN/LVNs prior to initial education.

Table 9-8. Employment in a health occupation by registered nurses before initial nursing education, by graduation cohort*

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Percent with health-related employment before nursing education	65.5	75.9	73.1
Jobs of those with prior health employment			
Nursing aide/assistant	70.0	64.5	62.2
Home health aide/assistant	8.0	11.2	10.8
LPN/LVN	21.1	21.6	21.6
Emergency medical technician/paramedic	4.4	8.9	8.2
Medical assistant	5.2	8.4	9.0
Dental assistant	2.3	2.8	2.0
Allied health/technician	7.4	10.0	10.6
Manager in health setting	2.0	3.2	4.2
Clerk in health setting	10.9	13.7	16.7
Military medical corps	2.3	2.1	1.5
Other type of health-related position**	2.6	5.1	4.4

*Entries for prior health employment add to more than 100 because an individual registered nurse may have held more than one type of prior health employment.

**Other includes medical doctor, midwife, student nurse externship, mental health/psychiatric, and health education.

Source: 2008 National Sample Survey of Registered Nurses

Recently graduated RNs relied upon different sources of support for their initial education than did RNs who graduated prior to 2001 (Table 9-9). A greater percentage of recent graduates relied on earnings from health care jobs. This is not surprising since recent graduates also were more likely than those who graduated before 2001 to have worked in a health occupation prior to their initial RN education. Recent graduates were also more likely than earlier graduates to have received nursing education financing from federally assisted loans, other types of loans, State and local government scholarships, nongovernment scholarships, personal savings, and employer tuition reimbursement. They were less likely to have received support from "other family resources," which may indicate that these graduates, who were older at graduation than were previous cohorts, received little nursing education financial support from parents or other relatives.

Table 9-9. Sources of financing for initial nursing education, by graduation cohort*

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Earnings from health care job	29.8	34.8	32.1
Earnings from other job	22.5	23.3	24.9
Earnings from other household members	23.9	24.4	27.4
Personal savings	18.3	20.0	25.5
Other family resources	45.9	29.3	29.7
Employer tuition reimbursement	8.4	16.8	17.5
Federal traineeship/scholarship	14.2	22.1	23.6
Federally assisted loan	24.6	45.7	50.5
Other type of loan	9.1	14.4	21.0
State/local government scholarship/grant	14.5	20.8	25.5
Nongovernment scholarship	13.1	17.4	17.6
Other resources	4.8	4.5	5.9

*Entries for sources of financing add to more than 100 because more than one source of financing may have been used by an individual registered nurse.

Source: 2008 National Sample Survey of Registered Nurses

More than 10 percent of RNs who completed their initial nursing education between 2001 and 2004 later completed additional degrees. Bachelor's degrees were completed by 9.6 percent of graduates from diploma or ADN programs; master's degrees or doctorates were completed by more than 10 percent of BSN graduates and almost 2 percent of diploma or ADN graduates (Table 9-10).

Table 9-10. Highest level of nursing or nursing-related education for recent registered nurse graduates, by initial nursing education (2001–2004)

Highest education	Diploma/associate degree (percent)	Bachelor's degree (percent)	Total (percent)
Diploma/Associate	88.7		53.2
Bachelor's	9.6	89.5	40.6
Master's or doctorate	1.7	10.5	6.4
Percent who have received additional degrees	12.4	11.1	

Source: 2008 National Sample Survey of Registered Nurses

The most recent RN graduates work in the State in which they were educated.

- Among RNs who graduated in the past 5 years, 80.8 percent worked in the State where they were educated.
- Among RNs who graduated 6 to 10 years ago, 75.8 percent worked in the State where they were educated.

- For RNs who graduated 26 or more years ago, only 58.9 percent still worked in the State where they were educated.

9.4 Recent Registered Nurse Graduates and Diversity

Recently graduated RNs are substantially more ethnically and racially diverse and have more male graduates than nurses who graduated prior to 2001. Nearly 10 percent of graduates between 2005 and 2008 were men, compared with only 5.9 percent of graduates prior to 2001 (Table 9-11).

Table 9-11. Gender of registered nurses, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Male	5.9	9.1	9.8
Female	94.1	90.9	90.2

Source: 2008 National Sample Survey of Registered Nurses

The RN population is becoming more ethnically diverse (Table 9-12). Among recent RN graduates in 2008, the percentage of RNs from racial/ethnic minority groups was higher, compared with previous cohorts (22 percent v. 15.5 percent). The largest ethnic groups after White, non-Hispanic were Blacks (4.9 percent prior to 2001; 7.3 percent from 2001 to 2008) and Hispanics (2.8 percent prior to 2001; 6.7 percent from 2001 to 2008). The percentage of graduates who were non-Hispanic Asian has dropped slightly with more recent cohorts accounting for 5 percent of recent graduates (2001–2008) and 5.7 percent prior to 2001.

Table 9-12. Racial/ethnic composition of registered nurse population, by graduation cohort

Race	Graduated before 2001 (percent)	Graduated 2001–2008 (percent)
White, non-Hispanic	84.5	78.0
Black/African American, non-Hispanic	4.9	7.3
Asian, non-Hispanic	5.7	5.0
Hispanic/Latino, any race	2.8	6.7
Other or two or more races, non-Hispanic*	2.1	3.0

*Other races include American Indian and Pacific Islander.

Source: 2008 National Sample Survey of Registered Nurses

9.5 Family Situation of Recent Nurse Graduates

In 2008, 71.8 percent of 2001–2004 graduates and 62.1 percent of 2005–2008 graduates were married or in a domestic partnership (Table 9-13).

More than half of recent RN graduates had children living at home, with 61.4 percent of 2001–2004 graduates and 48.1 percent of 2005–2008 graduates reporting the presence of children. Both groups of recent graduates were more likely than pre-2001 graduates to have children under 6 years old at home. More than 50 percent of graduates prior to 2001 and the most recent graduates had no children at home.

Table 9-13. Marital status and presence of children, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Married/Domestic partnership	75.5	71.8	62.1
Widowed/Divorced/Separated	18.3	12.3	9.6
Never married	6.2	15.9	28.3
No children	60.6	38.6	51.9
Children under 6 years old	6.4	27.0	16.6
Children 6 years old and older	27.5	23.1	23.2
Children in both age groups	5.6	11.3	8.4

Source: 2008 National Sample Survey of Registered Nurses

9.6 Recent Registered Nurse Graduates and Employment

The vast majority of recent RN graduates were employed in nursing positions in 2008 (Table 9-14). Among the most recent group, 83.8 percent worked full-time. In contrast, nurses who graduated from 2001 to 2004 were somewhat more likely to work part-time in their principal nursing positions. They were also more likely to have children living at home. Recent graduates who have children living at home were less likely to work full-time (Table 9-15).

Table 9-14. Employment of registered nurses, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Employed full-time in nursing	59.2	75.4	83.8
Employed part-time in nursing	22.9	19.1	12.8
Not employed in nursing	17.9	5.5	3.4
Total employed in nursing, 2008	82.1	94.5	96.6

Source: 2008 National Sample Survey of Registered Nurses

Table 9-15. Employment of new registered nurse graduates, by presence of children

Graduates 2001–2008	No children at home (percent)	Children at home (percent)
Employed full-time in nursing	85.7	74.8
Employed part-time in nursing	10.0	20.7
Not employed in nursing	4.3	4.5

Source: 2008 National Sample Survey of Registered Nurses

The majority of recently graduated RNs reported their principal employment setting as a hospital. Hospitals employed 83.3 percent of RNs graduating from 2005 to 2008, and more than 75 percent of RNs graduating from 2001 to 2004 (Table 9-16). Only 56.7 percent of RNs who graduated prior to 2001 worked in hospitals in 2008. In contrast, the percentage of recently graduated RNs working in hospitals in the 2004 NSSRN was somewhat lower—78.8 percent of RNs who had graduated in the 4 years prior to 2004 worked in hospitals, and 69.2 percent of those who graduated 5 to 8 years prior to 2004 worked in hospitals at the time of that Survey.

Table 9-16. Employment setting of principal nursing position, by graduation cohort, 2008 and 2004

	2008 NSSRN			2004 NSSRN	
	Graduated before 2001	Graduated 2001-2004	Graduated 2005-2008	Graduated 1997-2000	Graduated 2001-2004
Hospital settings, without hospital-based extended care	56.7	75.3	83.3	69.2	78.8
Nonhospital extended care	5.6	4.0	4.1	6.4	5.7
Academic education	4.4	2.4	1.1	1.7	1.4
Home health/public/community health	11.4	7.1	5.4	8.7	4.8
Ambulatory care	11.8	8.1	4.5	8.4	6.1
Other*	10.1	3.1	1.6	5.6	3.2

*Other includes school health, occupational health, hospital-based extended care, insurance, benefits, and utilization review.

Source: 2004 and 2008 National Sample Survey of Registered Nurses

The most common job title held by all working RNs in 2008 was staff nurse or an equivalent title. Recent RN graduates were even more likely to have this title than were RNs who graduated prior to 2001 (Table 9-17). Over time, RNs are more likely to have job titles other than staff nurse. For example, only 1.4 percent of 2005–2008 graduates have a middle or senior management job title in 2008, while 3.8 percent of 2001–2004 graduates have this title.

Table 9-17. Job titles of registered nurses, by graduation cohort

Job Title	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
First-line management	4.6	3.5	1.3
Middle or senior management	10.1	3.8	1.4
Instruction	4.4	1.7	0.5
Staff nurse	60.5	80.7	92.2
Nurse practitioner	4.5	2.7	0.4
Patient coordinator	6.2	3.4	1.9
Other job titles*	9.7	4.3	2.2

*Other includes registered nurses who reported no job title.

Source: 2008 National Sample Survey of Registered Nurses

The number of hours worked weekly and annually by full-time RNs in 2008 was similar across the graduation cohorts. However, among RNs who work part-time, the most recent cohorts worked more hours than did RNs who graduated before 2001 (Table 9-18). RNs graduating in 2005–2008 who worked part-time averaged 27.1 hours per week and 1,318 hours per year in their principal nursing positions. Part-time RNs who graduated from 2001 to 2004 averaged 24.9 hours per week and 1,232 hours per year, while part-time RNs who graduated before 2001 worked an average of 23.8 hours per week and 1,162 hours per year.

Table 9-18. Average hours worked per year and per week by registered nurses, by full-time/part-time status and graduation cohort

	Graduated before 2001	Graduated 2001–2004	Graduated 2005–2008
Employed full-time			
Hours per year	2,220	2,178	2,141
Hours per week	43.3	42.2	41.4
Employed part-time			
Hours per year	1,162	1,232	1,318
Hours per week	23.8	24.9	27.1

Source: 2008 National Sample Survey of Registered Nurses

While all groups of graduates reported high levels of satisfaction with their nursing position, recent RN graduates were less satisfied with their principal nursing positions than were RNs who graduated before 2001. Among RNs who graduated from 2005 to 2008, 78.2 percent were moderately or extremely satisfied, compared with 82.1 percent of RNs who graduated before 2001 (Table 9-19). The satisfaction of RNs who graduated from 2001 to 2004 was similar to that of the 2005 to 2008 graduates.

Table 9-19. Satisfaction with principal nursing position, by graduation cohort

Satisfaction of employed nurses	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Extremely satisfied	31.7	22.0	20.3
Moderately satisfied	50.5	54.7	57.8
Neither satisfied or dissatisfied	7.2	10.5	9.7
Moderately dissatisfied	8.2	10.6	9.7
Extremely dissatisfied	2.5	2.3	2.4

Source: 2008 National Sample Survey of Registered Nurses

9.7 Recent Registered Nurse Graduates and Job Changes

Many factors can lead to job changes, such as job dissatisfaction, relocation, career advancement, and other reasons. In 2008, nearly 40 percent of recent graduates planned to leave their current jobs within 3 years, compared with 27.1 percent of pre-2001 graduates (Table 9-20). Nonetheless, the vast majority of recently graduated RNs intended to remain in the nursing profession, with only 3.3 percent of those who intended to leave their current job stating that they did not plan to stay in nursing.

Table 9-20. Intentions regarding nursing employment, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2008 (percent)
Plans regarding current position		
No plans to leave job	57.8	42.8
Undecided about plans	15.1	17.8
Have left job or plan to leave in 12 months	14.5	23.2
Plan to leave in 1 to 3 years	12.6	16.2
Total that plans to leave job within 3 years	27.1	39.3
For those who plan to leave their job		
Plan to remain in nursing work	77.9	96.7
Plan to leave nursing	22.1	3.3

Source: 2008 National Sample Survey of Registered Nurses

Recent graduates change jobs somewhat more frequently than RNs who graduated prior to 2001. Of all RNs employed in March 2008, 14.9 percent of graduates from 2001 to 2004 had changed employers for their principal nursing position in the previous year and 7.5 percent had changed positions but were with the same employer (Table 9-21). Among the 2005 to 2008 graduates, 14.8 percent had changed employers, and 7.1 percent had changed positions with the same employer.

Table 9-21. Job changes between March 2007 and March 2008, for registered nurses employed in 2008, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Not employed in 2007	2.9	2.5	28.0
Same position, same employer	82.5	75.0	50.0
Different position, same employer	5.3	7.5	7.1
Different employer	9.4	14.9	14.8

Source: 2008 National Sample Survey of Registered Nurses

In 2008, reasons given for job changes varied, but among all RNs the most common reasons were related to working conditions such as the adequacy of staffing, physical demands of the job, stress, or the work environment (Table 9-22). Recent graduates were more likely than were pre-2001 graduates to report that they changed jobs for career reasons, such as for career advancement, or because they were interested in another job. RNs who graduated between 2001 and 2008 also were more likely than the older graduates to report that personal or family reasons drove their job change.

Table 9-22. Reasons for job changes, by graduation cohort*

Reasons for change	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)	Overall graduated 2001–2008 (percent)
Career	32.9	41.0	46.8	43.9
Personal/family	30.0	38.4	28.7	33.5
Workplace	71.4	71.1	71.2	71.2

*Percents may not add to 100 because registered nurses may have provided more than one reason for job change.

Source: 2008 National Sample Survey of Registered Nurses

Among RNs who changed employers, 45.4 percent of recent graduates changed employment settings, as compared with 56.4 percent of job changers who graduated prior to 2001. Recent graduates were more likely to change their 2007 employment setting if they were employed in nursing homes or extended care (25.8 percent), or public or community health (23.2 percent) (Table 9-23). Only 11.1 percent of recent graduates employed in hospitals in 2007 changed to a nonhospital employment setting if they changed employers by 2008.

Table 9-23. Employment setting changes for registered nurses who graduated 2001–2008

Setting in 2007	Percent who left setting between 2007 and 2008 (percent)
Hospital	11.1
Nursing home/extended care	25.8
Home health	21.2
Public/community health*	23.2
Ambulatory care	20.8
Other settings**	18.9

*Public/community health includes school health and occupational health.

**Other settings includes academic education and insurance/benefits/utilization review.

Source: 2008 National Sample Survey of Registered Nurses

9.8 Recent Registered Nurse Graduates and Secondary Nursing Jobs

Secondary jobs in nursing were held by 13.3 percent of nurses who graduated from 2001 to 2004 and 11.1 percent of nurses who graduated from 2005 to 2008 (Table 9-24). The most common settings for second jobs among 2005–2008 graduates were hospitals (54.8 percent), nursing homes and extended care (13.8 percent), and home health (13.7 percent). Graduates in the 2001–2004 cohort reported hospitals (48.3 percent), ambulatory care (14.1 percent), and academic education settings (11.5 percent) as the most common locations for their secondary jobs.

Table 9-24. Secondary nursing positions, by graduation cohort

	Graduated before 2001 (percent)	Graduated 2001-2004 (percent)	Graduated 2005-2008 (percent)
Has a secondary nursing job?			
Yes	12.8	13.3	11.1
No	87.2	86.7	88.9
Setting of secondary job(s)*			
Hospital	41.1	48.3	54.8
Nursing home/extended care	9.0	8.6	13.8
Academic education program	11.5	11.5	–
Home health setting	11.4	9.1	13.7
Public/community health	7.0	7.0	8.5
Ambulatory care	14.0	14.1	9.3
Other employment settings	10.3	10.9	4.2

*Secondary employment settings add to more than 100 because registered nurses could report more than one secondary setting.

–Too few cases to report estimated number (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

9.9 Recent Registered Nurse Graduates and Earnings

Average earnings from all nursing positions for the most recent cohort of nurses were $52,994; the average earnings from just those with full-time principal nursing positions were $53,924 (Table 9-25). The total nursing earnings of 2005–2008 graduates were lower than that of both RNs who graduated from 2001 to 2004 ($57,489) and RNs who graduated before 2001 ($62,903). Registered nurses from all three cohorts had similar earnings from part-time principal positions. However, recent graduates in principal positions that were part-time worked more hours per week on average than those who graduated before 2001; thus, their effective hourly rate was lower than that of the older nurses whose principal position was part-time.

Table 9-25. Average earnings from principal nursing position, and from all nursing positions, by graduation cohort

	Graduated before 2001	Graduated 2001–2004	Graduated 2005–2008
Earnings from all nursing positions	62,903	57,489	52,994
Earnings from principal nursing position			
Full-time positions	70,299	60,491	53,924
Part-time positions	36,975	36,686	35,236

Source: 2008 National Sample Survey of Registered Nurses

Registered Nurses Nearing Retirement 10

10.1 Introduction

This chapter describes the demographic, education, and employment characteristics of RNs 50 years of age and older. Historically, NSSRN data have shown a decline in work participation around this age. However, retirement literature fails to provide guidance on when RNs actually retire from the nursing workforce and when they allow their nursing license to lapse. In this chapter, "older RNs" are defined as the RN population that is 50 years of age or older, while "younger RNs" refers to RNs younger than 50 years of age in 2008.[1]

10.2 Demographics Characteristics of Registered Nurses Nearing Retirement

Older RNs comprised 44.7 percent of the total RN population in 2008, compared with 41.1 percent in 2004 and 33.4 percent in 2000. The percentage of RNs who were 60 years and older increased from 13.6 percent in 2004 to 15.5 percent in 2008 (Figure 3-3 and Appendix A, Table 1).

Older RNs in 2008 were more likely to be female (94.7 percent) and White, non-Hispanic (87.2 percent) than younger nurses (Table 10-1).

Older nurses were also more likely than younger nurses to have received their initial nursing education through a diploma program and less likely to have received their initial education through a bachelor's program (Table 10-1). A greater percentage of older RNs have attained master's or doctorate degrees (16.8 percent) than have younger nurses (10.3 percent).

[1] The NSSRN data reflect only those RNs with active licenses and do not reflect RNs whose licenses have lapsed and have not been renewed.

Table 10-1. Demographic and educational characteristics of registered nurses, by age

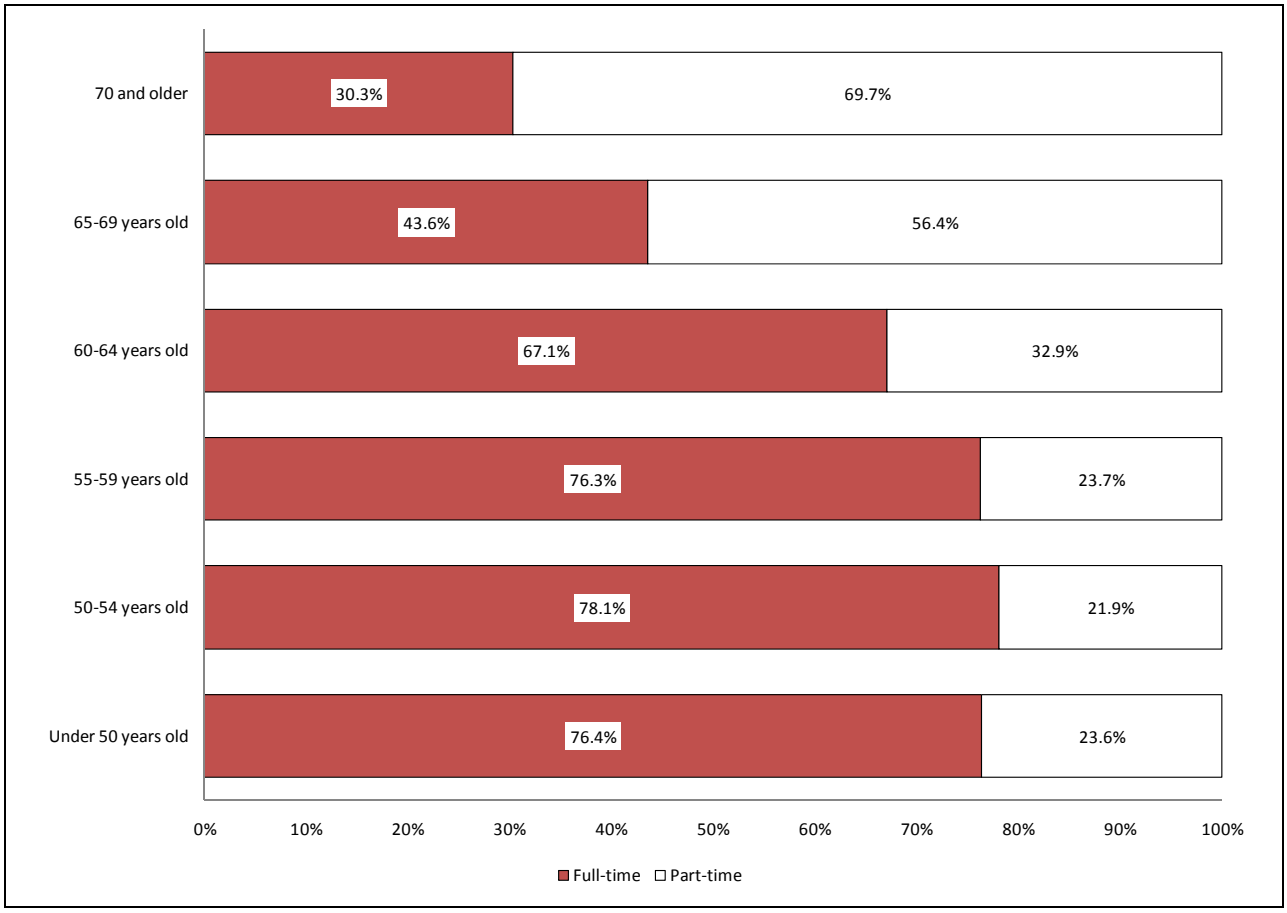
	Under 50 years old (percent)	50 years or older (percent)	Total (percent)
Estimated total population	1,694,088	1,369,074	3,063,162
Race/Ethnicity			
White, non-Hispanic	80.0	87.2	83.2
Non-White or Hispanic	20.0	12.8	16.8
Gender			
Male	7.7	5.3	6.6
Female	92.3	94.7	93.4
Initial nursing education			
Diploma	9.0	34.5	20.4
Associate	48.5	41.6	45.4
Bachelor's and higher	42.5	23.9	34.2
Highest nursing or nursing-related education			
Diploma	6.6	23.0	13.9
Associate	40.0	31.2	36.1
Bachelor's	43.1	28.9	36.8
Master's or doctorate	10.3	16.8	13.2

Source: 2008 National Sample Survey of Registered Nurses

10.3 Employment Characteristics of Older Registered Nurses

A somewhat smaller share of older RNs worked in nursing in 2008, compared with younger RNs: 76.6 percent v. 91.4 percent. Moreover, the percentage of older RNs working in nursing declines steadily as they age; from 87.4 percent for those 50-54 years of age to 33.3 percent for those aged 75 and older (Figure 3-4). Registered nurses are more likely to work in nursing part-time rather than full-time as they age, particularly after age 65, yet more than 30 percent of RNs age 70 or older still work in nursing (Figure 10-1). This trend toward part-time work is particularly notable among nurses as they pass 65 years of age.

Figure 10-1. Percent of employed registered nurses working full-time and part-time, by age group



Source: 2008 National Sample Survey of Registered Nurses

10.3.1 Employment Positions and Settings

Older RNs in 2008 were less likely to work in hospital settings as they age (Table 10-2). The decline continues steadily with increasing age from nearly 55.9 percent for RNs aged 50-54 to 35.5 percent for RNs aged 65 and older. While a smaller percentage of older nurses than younger nurses worked in hospital positions, higher percentages were employed in nursing homes/extended care, academic education programs, and home health settings.

Table 10-2. Employment settings of registered nurses in their principal nursing position, by age group

	Age of nurses				
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65 or more years old (percent)
Hospital	69.5	55.9	53.0	46.5	35.5
Nursing home/extended care	4.2	5.9	6.5	7.6	10.7
Academic education program	2.6	4.5	5.1	6.6	10.5
Home health setting	5.5	7.2	7.7	7.8	10.5
Public/community health	2.8	4.4	4.7	7.3	6.2
School health service	2.4	4.7	4.3	4.9	5.4
Occupational health	0.5	0.8	0.9	1.4	3.1
Ambulatory care	9.6	11.5	12.6	12.1	11.3
Insurance/benefits/utilization review	1.6	2.6	2.2	2.4	2.6
Other	1.4	2.5	3.0	3.4	4.2

Source: 2008 National Sample Survey of Registered Nurses

As with all other age groups, staff nurse is the job title for the majority of older RNs; however, a much lower proportion of older RNs were staff nurses compared with younger nurses.

Table 10-3. Job titles of registered nurses in their principal nursing position, by age group

	Age of nurses				
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65 or more years old (percent)
Staff nurse	72.1	60.0	57.9	58.0	56.4
First-line management	3.8	5.2	4.4	3.8	3.9
Middle or senior management	6.9	10.4	11.3	11.0	9.6
Nurse practitioner	3.6	4.4	4.5	3.3	3.2
Instruction	3.1	3.9	4.1	5.6	7.3
Patient coordinator	4.4	6.8	7.5	6.4	7.5
Other*	6.0	9.2	10.3	11.9	12.2

*Other includes consultant, midwife, CNS, NA, research, informatics, surveyor/auditor/regulator, and patient education.

Source: 2008 National Sample Survey of Registered Nurses

The majority of all RNs in 2008 were moderately or extremely satisfied with their jobs, regardless of the setting in which they worked. Satisfaction among older RNs was slightly higher than among younger RNs across employment settings. Among older RNs, the highest proportion of satisfied nurses was employed in ambulatory settings; for younger RNs, highest satisfaction was among nurses in academic education settings. The lowest proportion of moderately or extremely satisfied RNs across both age groups worked in nursing homes, followed by hospitals (Table 10-4).

Table 10-4. Job satisfaction, by principal employment setting

	Hospital	Nursing home/ extended care	Academic education	Home health	Public/ community health*	Ambulatory	Other**
Percent moderately or extremely satisfied							
Under age 50	78.9	72.5	86.4	82.2	82.7	82.9	81.4
Age 50 or older	81.6	76.4	86.7	83.5	86.2	88.7	81.6

*Public/community health includes school health and occupational health.

**Other includes insurance, benefits, and utilization review.

Source: 2008 National Sample Survey of Registered Nurses

10.3.2 Hours Worked by Older Registered Nurses

In 2008, older RNs contributed significantly to the hours worked in nursing. Those aged 50–54 years and employed full-time worked an average of 43.7 hours per week (Table 10-5), slightly more hours per week than full-time nurses under age 50, who averaged 42.6 hours of work per week. Part-time nurses aged 50 to 54 years also worked more hours per week than did part-time nurses under 50 years old. Beginning at age 60, there is a steady decline in hours worked among part-time nurses.

Table 10-5. Average hours worked per week for registered nurses in their principal nursing position, by age

	Age of nurses					
	Less than 50 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70 or more years old
Average hours worked, full-time nurses	42.6	43.7	43.6	42.0	42.7	40.9
Average hours worked, part-time nurses	24.6	25.7	25.2	22.3	19.1	18.4

Source: 2008 National Sample Survey of Registered Nurses

10.3.3 Secondary Nursing Employment

Older RNs were less likely to have secondary positions in nursing than younger nurses, and the share with more than one nursing job generally declines with age (Table 10-6). Under age 65, nurses whose principal position was part-time were more likely to have secondary nursing employment than were those whose principal position was full-time.

Table 10-6. Percent of employed registered nurses with secondary nursing positions, by age

	Age of nurses					
	Less than 50 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70 or more years old
Full-time principal position	13.3	12.0	9.8	7.5	10.1	5.1
Part-time principal position	15.5	14.4	12.8	10.6	8.8	8.2

Source: 2008 National Sample Survey of Registered Nurses

10.3.4 Earnings of Older Registered Nurses

Older RNs in 2008 earned more on average than younger RNs from nursing work. This may be due to a greater percentage of older RNs who were employed in management and other higher-paying positions. As nurses age beyond 50 years, however, their average annual earnings decline (Table 10-7). Among part-time RNs, this is likely associated with the drop in the number of hours they work per week. The number of hours worked per week by older RNs who were employed full-time does not decline notably with age; thus, other factors such as changes in employment settings, and the shift of older RNs away from higher paying hospital positions to lower paying home care or ambulatory care settings, may be associated with the decline in annual earnings.

Table 10-7. Average earnings from principal nursing employment, by age

	Full-time principal position		Part-time principal position	
	All positions	Principal position	All positions	Principal position
Under 50 years old	$66,918	$64,689	$41,614	$37,946
50-54 years old	73,514	71,061	45,904	40,996
55-59 years old	72,895	70,775	43,394	38,992
60-64 years old	71,473	69,560	35,618	33,356
65-69 years old	69,189	67,559	26,011	25,052
70 years and older	64,981	64,522	23,956	22,539

Source: 2008 National Sample Survey of Registered Nurses

10.4 Job Changes and Intentions Regarding Nursing Work

While the majority of all RNs in 2008 remained employed with the same employer, older RNs demonstrated less overall job mobility when compared with younger RNs (Table 10-8). For registered nurses 50 to 59 years old, the percent remaining in the same job between 2007 and 2008

was higher than for younger RNs; for RNs between 60 and 69 years, an increasing percentage change to different employers. As RNs grow older, and especially after age 60, retirement and workplace issues become the dominant reasons for employment changes (Table 10-9).

Table 10-8. Registered nurses employed in nursing in 2007 who changed position or employer, by age

	Age of nurses					
	Less than 50 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70 or more years old
Not employed in 2008	1.1	1.2	1.7	3.1	6.3	6.7
Same position, same employer	77.5	84.1	83.3	82.4	76.9	80.8
Different position, same employer	7.1	4.9	5.2	4.3	6.1	–
Different employer	14.4	9.7	9.8	10.2	10.7	–

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

Table 10-9. Reasons for job changes, by age group

	Age of nurses					
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65-69 years old (percent)	70 or more years old (percent)
Retirement	–	–	8.4	31.6	49.6	45.8
Career	40.1	31.4	33.2	20.7	15.5	–
Personal/family	32.6	29.3	28.5	27.9	25.2	–
Workplace	73.3	73.9	71.3	63.0	49.4	48.1

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

As described in Chapter 3, in 2008 more than 50 percent of all employed RNs, including older RNs, did not plan to leave their current nursing jobs. In fact, nurses 50 to 59 years old were less likely to report an intention to leave their current nursing position within 3 years than were nurses under 50 years old (Table 10-10). Above age 60, the percentage of RNs who intended to leave their nursing position increased with age, as did the percentage who intended to stop working in nursing after leaving that position.

Table 10-10. Intentions to change employers or leave the nursing profession, by age group

	Age of nurses					
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65-69 years old (percent)	70 or more years old (percent)
Plans regarding current job						
No plans to leave job	53.3	64.0	59.6	42.5	33.8	34.5
Undecided about plans	16.8	13.9	13.4	14.2	17.6	19.0
Have left job or plan to leave in 12 months	17.6	12.8	13.3	18.1	20.6	21.4
Plan to leave in 1 to 3 years	12.2	9.3	13.7	25.2	28.0	25.1
Total that plans to leave within 3 years	29.8	22.1	27.0	43.3	48.7	46.5
For those who plan to leave their job						
Plan to remain in nursing work	95.3	87.9	70.1	44.4	31.0	22.4
Plan to leave nursing	4.7	12.1	29.9	55.6	69.0	77.6

Source: 2008 National Sample Survey of Registered Nurses

10.5 Older Registered Nurses Not Working in Nursing

Among RNs under 70 years old in 2008, of those who were not working in nursing, a large percentage last worked in nursing 1 to 2 years previously (Table 10-11 and Appendix A, Table 48). However, these data may underestimate the rate at which older RNs stop working in nursing because these data do not include RNs whose licenses have lapsed.

Table 10-11. Length of time since last employed in nursing, for registered nurses not employed in nursing in 2008, by age group

	Age of nurses					
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65-69 years old (percent)	70 or more years old (percent)
Less than 1 year	13.3	12.0	12.5	11.8	9.6	6.5
1 to 2 years	29.3	13.2	27.8	30.6	26.2	20.6
3 to 4 years	14.9	13.6	14.9	15.1	14.9	11.5
5 to 9 years	21.3	19.4	16.6	16.3	25.3	21.6
10 to 19 years	18.9	27.8	16.2	17.9	16.8	29.5
20 or more years	–	14.0	12.0	8.3	7.1	10.4

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

With increasing age, retirement became an increasingly important reason for RNs in 2008 to not be working in nursing, particularly above age 60 (Table 10-12). Personal and family reasons, workplace issues, and career considerations were important factors in deciding to not work in nursing for a sizable proportion of RNs between 50 and 69 years old.

Table 10-12. Reasons for not working in nursing, by age group

	Age of nurses					
	Less than 50 years old (percent)	50-54 years old (percent)	55-59 years old (percent)	60-64 years old (percent)	65-69 years old (percent)	70 or more years old (percent)
Retirement	–	9.1	25.2	63.2	78.7	86.9
Career	39.8	48.3	41.4	30.6	25.9	18.1
Personal/family	68.5	58.3	49.5	43.7	31.8	26.3
Workplace	41.0	51.8	45.0	36.3	31.2	14.1

– Too few cases to report estimated percent (fewer than 30 respondents).

Source: 2008 National Sample Survey of Registered Nurses

Among older RNs not employed in nursing, only 3.3 percent were looking for work in nursing in 2008. Older RNs not working in nursing were less likely than their younger peers to report employment outside nursing (21.3 percent v. 29.4 percent, respectively). Older RNs working outside of nursing represented a small percentage of the nursing population, only 2.2 percent of the total nursing population. Of these, 52 percent were working in a health-related field (Table 10-13).

Table 10-13. Percent of registered nurses not employed in nursing who work in non-nursing positions, by age group

	Under 50 years old	50 years or older	Total
Percent working outside nursing	29.4	21.3	23.8
Of those employed outside nursing, percent whose job is health-related	58.9	52.0	54.7

Source: 2008 National Sample Survey of Registered Nurses

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Appendix A

Data Tables

Table 1. Gender, racial/ethnic background, and age group, by employment status: 2008

Gender, racial/ethnic background and age group	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing	Estimated number employed in nursing	Estimated percent employed in nursing	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	28,554	2,596,599	100.0	4,625	466,564	100.0
Gender									
Male	2,332	202,491	6.6	2,123	183,719	7.1	209	18,772	4.0
Female	30,847	2,860,671	93.4	26,431	2,412,879	92.9	4,416	447,792	96.0
Racial/ethnic background									
White (non-Hispanic)	28,353	2,549,302	83.2	24,235	2,135,592	82.2	4,118	413,710	88.7
Black/African American (non-Hispanic)	1,688	165,352	5.4	1,510	146,459	5.6	178	18,894	4.0
Asian (non-Hispanic)	1,433	169,454	5.5	1,269	150,938	5.8	164	18,516	4.0
Native Hawaiian/Pacific Islander (non-Hispanic)	92	9,528	0.3	84	8,792	0.3	8	736	0.2
American Indian/Alaskan Native (non-Hispanic)	132	8,571	0.3	122	7,838	0.3	10	733	0.2
Hispanic/Latino (any race)	910	109,387	3.6	832	101,045	3.9	78	8,342	1.8
Two or more races (non-Hispanic)	571	51,568	1.7	502	45,935	1.8	69	5,633	1.2
Age group									
Less than 25	730	79,641	2.6	699	77,041	3.0	31	2,600	0.6
25-29	1,966	208,543	6.8	1,868	198,734	7.7	98	9,809	2.1
30-34	2,677	281,999	9.2	2,467	257,472	9.9	210	24,528	5.3
35-39	3,149	331,972	10.8	2,876	302,520	11.7	273	29,452	6.3
40-44	3,623	350,101	11.4	3,293	314,368	12.1	330	35,734	7.7
45-49	4,763	441,831	14.4	4,333	397,552	15.3	430	44,279	9.5
50-54	6,035	495,985	16.2	5,393	433,848	16.7	642	62,137	13.3
55-59	4,858	396,967	13.0	4,209	337,918	13.0	649	59,049	12.7
60-64	2,995	249,533	8.1	2,234	176,932	6.8	761	72,601	15.6
65-69	1,509	140,263	4.6	809	69,595	2.7	700	70,667	15.1
70-74	562	53,670	1.8	251	19,752	0.8	311	33,918	7.3
75 and over	312	32,657	1.1	122	10,867	0.4	190	21,790	4.7
Average age		47.0			45.5			55.3	
Median age		48			46			57	

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 2. Year of graduation from initial nursing education and the average age at graduation, by type of initial nurse education: 2008

Year of graduation from initial nursing education	Total number in sample	Total estimated number*	Total estimated percent	Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's and higher	Estimated percent of bachelor's and higher
Total	33,179	3,063,162	100.0	623,548	100.0	1,388,884	100.0	1,044,306	100.0
Year of graduation from initial nursing education									
2005 or later	2,971	313,622	10.2	9,570	1.5	177,401	12.8	126,105	12.1
2000-2004	3,695	363,607	11.9	11,451	1.8	207,504	14.9	143,822	13.8
1995-1999	4,325	419,229	13.7	26,065	4.2	230,015	16.6	162,545	15.6
1990-1994	4,212	383,674	12.5	34,058	5.5	211,647	15.2	137,947	13.2
1985-1989	3,545	329,612	10.8	43,658	7.0	169,912	12.2	114,945	11.0
1984 or earlier	14,431	1,253,419	40.9	498,746	80.0	392,404	28.3	358,941	34.4

Average age at graduation by year of graduation	Average age all graduates	Average age diploma	Average age associate degree	Average age bachelor's and higher
2005 or later	30.8	32.9	33.1	27.5
2000-2004	29.9	31.0	31.7	27.0
1995-1999	30.3	29.3	32.4	27.6
1990-1994	30.2	29.3	32.5	26.9
1985-1989	27.7	25.8	30.0	25.1
1984 or earlier	23.9	22.2	26.4	23.6

*Includes an estimated 13,325 RNs whose initial nursing education was in a master's degree program, an estimated 954 in a doctorate degree program, and an estimated 6,425 reported as "other." "Other" includes foreign credentials and other types of education which did not have a national equivalent category.
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 3. Financial resources used for tuition and fees for initial nursing education, by type of initial nursing education: 2008

Financial resources used	Total number in sample	Total estimated number*	Total estimated percent	Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's	Estimated percent of bachelor's	Estimated number of master's/ doctorate	Estimated percent of master's/ doctorate
Total**	33,179	3,063,162	100.0	623,548	100.0	1,388,884	100.0	1,030,026	100.0	14,280	100.0
Earnings from healthcare-related employment	10,447	923,996	30.5	124,633	20.0	527,801	38.0	277,945	27.0	--	--
Earnings from nonhealthcare-related employment	7,842	698,292	22.8	107,624	17.3	312,293	22.5	274,847	26.7	--	--
Earnings from other household members	8,034	743,647	24.3	120,029	19.2	387,095	27.9	233,037	22.6	--	--
Personal household savings	6,525	586,853	19.2	83,135	13.3	317,914	22.9	181,724	17.6	--	--
Other family resources (parents or relatives)	13,826	1,308,042	42.7	358,151	57.4	361,661	26.0	581,660	56.5	5,008	35.1
Employer tuition, reimbursement plan	3,363	310,977	10.2	31,031	5.0	205,121	14.8	74,526	7.2	--	--
Federal traineeship, scholarship or grant	5,531	487,972	15.9	53,340	8.6	238,828	17.2	193,252	18.8	--	--
Federally assisted loan	10,171	896,920	29.3	94,762	15.2	391,021	28.2	401,940	39.0	7,846	54.9
Other type of loan	3,768	331,478	10.8	54,955	8.8	117,506	8.5	154,799	15.0	--	--
State/local government scholarship or grant	5,368	498,171	16.3	61,382	9.8	232,454	16.7	202,101	19.6	--	--
Nongovernment scholarship or grant	4,753	427,598	14.0	88,511	14.2	146,772	10.6	189,436	18.4	--	--
Other resources	1,702	149,958	4.9	31,392	5.0	68,408	4.9	48,503	4.7	--	--

*Includes an estimated 2,591 RNs whose initial nursing education was reported as "other." "Other" includes foreign credentials and other types of education which did not have a national equivalent category.
**Entries for financial resources used may add to more than the total because more than one resource may have been named by an individual registered nurse.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 4. Characteristics of registered nurses with a degree before entering initial nursing education, by type of initial nursing education: 2008

Characteristics of nurses with prior degrees	Total number in sample	Total estimated number*	Total estimated percent	Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's and higher	Estimated percent of bachelor's and higher
Total	6,996	665,795	100.0	60,975	100.0	341,025	100.0	261,204	100.0
Degree obtained before initial nursing education**									
Associate degree	3,273	318,190	47.8	24,539	40.2	206,985	60.7	86,631	33.2
Bachelor's	3,775	351,524	52.8	36,392	59.7	142,789	41.9	169,964	65.1
Master's	471	43,124	6.5	7,075	11.6	15,462	4.5	20,255	7.8
Doctorate	50	4,335	0.7	--	--	--	--	--	--
Other	34	3,283	0.5	--	--	--	--	--	--
Major field of study before initial nursing education									
Health-related field	2,872	274,517	41.2	26,335	43.2	141,503	41.5	105,718	40.5
Biological or physical science	948	91,354	13.7	6,361	10.4	34,446	10.1	49,723	19.0
Business or management	639	60,656	9.1	6,242	10.2	34,087	10.0	20,185	7.7
Education	464	42,515	6.4	4,434	7.3	27,272	8.0	10,809	4.1
Liberal arts, social science, or humanities	1,758	165,936	24.9	15,177	24.9	85,707	25.1	64,446	24.7
Law	54	5,171	0.8	--	--	--	--	--	--
Computer science	45	5,157	0.8	--	--	3,661	1.1	--	--
Social work	106	10,541	1.6	--	--	6,110	1.8	3,586	1.4
Other nonhealth-related field	110	9,948	1.5	--	--	5,245	1.5	3,644	1.4
Year of graduation from initial nursing education									
2005 or later	1,064	116,449	17.5	4,509	7.4	63,253	18.5	48,141	18.4
2000-2004	1,180	115,381	17.3	3,885	6.4	64,044	18.8	46,622	17.8
1995-1999	1,279	121,005	18.2	7,722	12.7	64,741	19.0	48,162	18.4
1990-1994	1,037	94,449	14.2	6,070	10.0	50,468	14.8	37,911	14.5
1985-1989	683	61,954	9.3	7,232	11.9	31,797	9.3	22,549	8.6
1984 or earlier	1,753	156,557	23.5	31,557	51.8	66,722	19.6	57,819	22.1

Average age at graduation by year of graduation	Average age all graduates	Average age diploma	Average age associate degree	Average age bachelor's and higher
2005 or later	33.3	32.3	34.9	31.3
2000-2004	32.4	33.3	33.7	30.7
1995-1999	33.1	32.6	34.4	31.3
1990-1994	32.3	31.3	34.1	30.1
1985-1989	30.2	29.1	31.1	29.1
1984 or earlier	26.9	25.1	28.5	25.9

*Includes an estimated 2,591 RNs whose initial nursing education was reported as "other." "Other" includes foreign credentials and other types of education which did not have a national equivalent category.

**The number of degrees may add to more than the total because more than one degree may have been named by an individual registered nurse.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 5. Health occupations prior to initial nursing education, by type of initial nursing education: 2008

Health occupation prior to initial nursing education**	Total number in sample	Total estimated number*	Total estimated percent	Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's and higher	Estimated percent of bachelor's and higher
Total	22,675	2,059,776	100.0	306,086	14.9	1,059,402	51.5	691,251	33.6
Nursing aide/assistant	15,729	1,412,214	100.0	235,855	16.7	648,961	46.0	525,713	37.3
Home health aide/assistant	1,947	177,573	100.0	15,246	8.6	100,273	56.6	61,681	34.8
Licensed practical/vocational nurse	5,017	436,754	100.0	32,548	7.5	349,080	80.0	54,651	12.5
Emergency medical technician (EMT) or paramedic	1,279	108,546	100.0	7,733	7.1	74,419	68.6	26,394	24.3
Medical assistant	1,277	123,180	100.0	13,117	10.7	76,524	62.4	33,009	26.9
Dental assistant	516	48,323	100.0	5,803	12.0	28,612	59.2	13,908	28.8
Allied health technician/technologist	1,806	166,202	100.0	13,659	8.2	98,014	59.1	54,242	32.7
Manager in health care setting	541	48,608	100.0	3,885	8.1	30,671	63.6	13,702	28.4
Clerk in health care setting	2,625	244,073	100.0	29,768	12.2	134,106	55.1	79,716	32.7
Military medical corps	554	44,772	100.0	4,126	9.2	27,489	61.6	13,041	29.2
Medical doctor	56	6,373	100.0	--	--	--	--	--	--
Nurse midwife	45	3,468	100.0	--	--	--	--	--	--
Student nurse extern	229	23,642	100.0	2,910	12.4	6,801	28.9	13,809	58.7
Mental health/psychiatric	229	23,642	100.0	--	--	3,833	55.8	--	--
Health educator	73	7,043	100.0	--	--	--	--	--	--
Other health-related position	204	19,419	100.0	3,226	16.6	9,916	51.1	6,277	32.3

*Includes an estimated 3,038 RNs for whom type of initial nursing education was not reported or reported as "other." "Other" includes foreign credentials and other types of education which did not have a national equivalent category. An estimated 1,003,386 RNs reported no health occupations prior to initial nursing education.

**Health occupation entries add to more than the total because more than one occupation may have been named by an individual registered nurse.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 6. Registered nurses who were ever licensed as practical/vocational nurse, by type of initial nursing education: 2008

Year of graduation from initial nursing education	Total number in sample	Total* estimated number	Total estimated percent	Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's and higher	Estimated percent of bachelor's and higher
Total	6,216	548,397	100.0	44,182	100.0	416,872	100.0	86,608	100.0
Year of graduation from initial nursing education									
2005 or later	640	57,537	10.5	--	--	51,727	12.4	5,105	5.9
2000-2004	824	71,881	13.1	--	--	61,682	14.8	8,427	9.7
1995-1999	955	85,436	15.6	3,409	7.7	69,920	16.8	12,108	14.0
1990-1994	1,060	88,783	16.2	5,149	11.7	69,763	16.7	13,872	16.0
1985-1989	973	86,083	15.7	5,977	13.5	68,547	16.4	11,492	13.3
1984 or earlier	1,764	158,676	28.9	27,172	61.5	95,234	22.8	35,604	41.1

Average age at graduation by year of graduation	Average age all graduates	Average age diploma	Average age associate degree	Average age bachelor's and higher
2005 or later	34.8	--	35.1	31.3
2000-2004	34.5	--	34.7	32.6
1995-1999	33.8	33.7	34.6	29.6
1990-1994	33.9	33.1	34.8	29.3
1985-1989	31.8	29.9	32.6	27.9
1984 or earlier	27.4	25.1	29.2	24.1

*Includes an estimated 735 RNs for whom type of initial nursing education was reported as "other." "Other" includes foreign credentials and other types of education which did not have a national equivalent category.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 7. State of location of registered nurses as of March 2008 and State of graduation, by type of initial nursing education and number of years since graduation: 2008*

Number of years since graduation from initial nursing education program and State of location**	Total number in sample	Total estimated number*	Total estimated percent	Type of initial nursing education: Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's and higher	Estimated percent of bachelor's and higher
Total	31,679	2,892,927	100.0	571,079	100.0	1,373,510	100.0	945,770	100.0
Located in same State	19,622	2,016,215	69.7	360,291	63.1	1,037,450	75.5	616,944	65.2
Located in different State	12,057	876,712	30.3	210,788	36.9	336,060	24.5	328,825	34.8
5 years or less	5,147	523,878	100.0	15,724	100.0	297,665	100.0	209,521	100.0
Located in same State	3,805	423,186	80.8	14,122	89.8	251,385	84.5	157,078	75.0
Located in different State	1,342	100,692	19.2	--	--	46,280	15.5	52,443	25.0
6-10 years	3,721	365,118	100.0	12,983	100.0	216,437	100.0	135,442	100.0
Located in same State	2,543	276,720	75.8	10,214	78.7	174,105	80.4	92,225	68.1
Located in different State	1,178	88,398	24.2	2,769	21.3	42,332	19.6	43,217	31.9
11-15 years	4,451	406,345	100.0	29,999	100.0	237,380	100.0	138,586	100.0
Located in same State	3,029	305,053	75.1	23,587	78.6	184,026	77.5	97,205	70.1
Located in different State	1,422	101,292	24.9	6,412	21.4	53,354	22.5	41,381	29.9
16-25 years	7,002	634,587	100.0	82,203	100.0	341,889	100.0	210,429	100.0
Located in same State	4,396	444,303	70.0	61,056	74.3	246,658	72.1	136,570	64.9
Located in different State	2,606	190,284	30.0	21,147	25.7	95,231	27.9	73,859	35.1
26 years or more	11,358	962,999	100.0	430,169	100.0	280,139	100.0	251,792	100.0
Located in same State	5,849	566,953	58.9	251,312	58.4	181,276	64.7	133,866	53.2
Located in different State	5,509	396,045	41.1	178,857	41.6	98,863	35.3	117,926	46.8

*Excludes an estimated 165,539 RNs who graduated in a foreign country and an estimated 4,696 RNs who graduated in a U.S. territory (Guam, U.S. Virgin Islands or Puerto Rico).

**State of location is the State in which employed if employed in nursing, or State of residence if not employed in nursing.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 8. Highest nursing or nursing-related education, by initial nursing education: 2008

Highest nursing or nursing-related education	Total number in sample	Total estimated number*	Total estimated percent	Number in sample initial education: diploma	Estimated number initial education: diploma	Estimated percent initial education: diploma	Number in sample initial education: associate degree	Estimated number initial education: associate degree	Estimated percent initial education: associate degree	Number in sample initial education: bachelor's and higher	Estimated number initial education: bachelor's and higher	Estimated percent initial education: bachelor's and higher
Total	33,179	3,063,162	100.0	6,901	623,548	100.0	14,849	1,388,884	100.0	11,362	1,044,306	100.0
Diploma	4,640	426,279	13.9	4,640	426,279	68.4	0	--	--	0	--	--
Associate degree	11,657	1,103,471	36.0	71	6,771	1.1	11,585	1,096,601	79.0	0	--	--
Bachelor's in related field	645	56,915	1.9	345	28,619	4.6	300	28,296	2.0	0	--	--
Bachelor's in nursing	11,487	1,068,250	34.9	907	81,689	13.1	1,848	167,887	12.1	8,727	818,343	78.4
Master's in related field	1,028	85,709	2.8	329	28,628	4.6	259	21,136	1.5	439	35,902	3.4
Master's in nursing	3,341	290,084	9.5	521	44,351	7.1	794	69,511	5.0	2,009	174,354	16.7
Doctorate in related field	184	15,229	0.5	55	4,669	0.7	37	2,827	0.2	92	7,732	0.7
Doctorate in nursing	154	13,140	0.4	33	2,541	0.4	26	--	--	95	7,975	0.8
Total employed in nursing	28,554	2,596,599	100.0	5,320	461,771	100.0	13,233	1,224,337	100.0	9,949	905,545	100.0
Diploma	3,554	315,071	12.1	3,554	315,071	68.2	0	--	--	0	--	--
Associate degree	10,398	973,815	37.5	47	3,917	0.8	10,350	969,798	79.2	0	--	--
Bachelor's in related field	478	39,757	1.5	249	19,175	4.2	229	20,582	1.7	0	--	--
Bachelor's in nursing	10,060	927,217	35.7	738	64,028	13.9	1,659	149,702	12.2	7,658	713,156	78.8
Master's in related field	789	62,797	2.4	231	18,446	4.0	217	17,435	1.4	340	26,874	3.0
Master's in nursing	2,971	253,341	9.8	432	35,553	7.7	732	63,380	5.2	1,796	153,232	16.9
Doctorate in related field	134	10,192	0.4	39	3,319	0.7	23	--	--	72	5,566	0.6
Doctorate in nursing	136	11,112	0.4	30	2,262	0.5	23	--	--	83	6,717	0.7
Total not employed in nursing	4,625	466,564	100.0	1,581	161,777	100.0	1,616	164,546	100.0	1,413	138,761	100.0
Diploma	1,086	111,208	23.8	1,086	111,208	68.7	0	--	--	0	--	--
Associate degree	1,259	129,656	27.8	24	--	--	1,235	126,803	77.1	0	--	--
Bachelor's in related field	167	17,158	3.7	96	9,444	5.8	71	7,714	4.7	0	--	--
Bachelor's in nursing	1,427	141,033	30.2	169	17,661	10.9	189	18,185	11.1	1,069	105,187	75.8
Master's in related field	239	22,912	4.9	98	10,182	6.3	42	3,702	2.2	99	9,028	6.5
Master's in nursing	370	36,744	7.9	89	8,798	5.4	62	6,132	3.7	213	21,122	15.2
Doctorate in related field	50	5,037	1.1	16	--	--	14	--	--	20	--	--
Doctorate in nursing	18	--	--	3	--	--	3	--	--	12	--	--

*Includes an estimated 13,325 RNs whose initial nursing education was in a master's degree program, an estimated 954 in a doctorate degree program, and an estimated 6,425 in an other education program. Also includes an estimated 224 initial master's upgraded to doctorate in nursing, of which an estimated 64 are employed in nursing and an estimated 160 are not employed in nursing.
Includes an estimated 4,084 RNs whose highest nursing or nursing-related education was not known. Of these, an estimated 3,297 were employed in nursing and an estimated 787 were not employed
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 9. Primary focus of post-nursing master's and doctorate degrees: 2008*

Primary focus of degree	Master's degree**			Doctorate degree**		
	Number in sample	Estimated number	Estimated percent	Number in sample	Estimated number	Estimated percent
Total	4,544	387,199	100.0	330	27,725	100.0
Clinical practice***	2,192	190,347	49.2	42	3,133	11.3
Administration/business/management	890	76,918	19.9	33	2,885	10.4
Education	565	48,743	12.6	86	6,498	23.4
Public health/community health	306	22,782	5.9	12	--	--
Humanities, liberal arts, or social sciences	33	2,852	0.7	13	--	--
Research	10	--	--	67	6,129	22.1
Law	5	--	--	29	--	--
Biological or physical sciences	28	--	--	5	--	--
Informatics	21	--	--	0	--	--
Social work	14	--	--	0	--	--
Computer science	1	--	--	0	--	--
Other health field	434	35,145	9.1	39	3,518	12.7
Other nonhealth field	45	4,276	1.1	4	--	--

*Includes degrees in nursing or nursing-related areas.
**RNs may have reported multiple master's or doctorate degrees. In such cases, the master's/doctorate in nursing takes precedence and is shown here. Only one master's or doctorate degree for each nurse is shown.
***Excludes RNs whose initial nursing education was at the graduate level: an estimated 13,325 in a master's degree program and an estimated 954 in a doctorate degree program, all of which are in clinical practice.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 10. Current enrollment in nursing or nursing-related education programs, by employment status and student status: 2008*

Employment and student status	Current enrollment		
	Number in sample	Estimated number	Estimated percent
Total	2,048	201,390	100.0
Total employed in nursing full-time	1,514	149,441	74.2
Full-time student	530	54,751	36.6
Part-time student	984	94,690	63.4
Total employed in nursing part-time	383	37,665	18.7
Full-time student	162	16,360	43.4
Part-time student	221	21,305	56.6
Total not employed in nursing	151	14,283	7.1
Full-time student	89	8,374	58.6
Part-time student	62	5,910	41.4

Distance education	Number in sample	Estimated number	Estimated percent
Total	2,048	201,390	100.0
Total employed in nursing full-time	1,514	149,441	74.2
No distance-based	344	38,279	25.6
Up to 75 percent distance-based	386	39,152	26.2
More than 75 percent distance-based	784	72,010	48.2
Total employed in nursing part-time	383	37,665	18.7
No distance-based	105	10,417	27.7
Up to 75 percent distance-based	140	14,640	38.9
More than 75 percent distance-based	138	12,609	33.5
Total not employed in nursing	151	14,283	7.1
No distance-based	54	5,344	37.4
Up to 75 percent distance-based	47	4,634	32.4
More than 75 percent distance-based	50	4,305	30.1

*Of the estimated 251,872 RNs pursuing formal educational programs, this table excludes the estimated 2,065 currently enrolled in post-master's certificate programs, an estimated 25,973 enrolled in other certificate programs, the estimated 22,445 whose certificate or academic programs were in a field not related to nursing, and those whose failed to indicate the type of formal program being pursued.

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 11. National nursing certifications for registered nurses: 2008

Type of certification	Number in sample	Estimated number*	Estimated percent
Total certification	12,209	1,094,838	35.7
Administrator	110	8,317	0.3
Ambulatory	73	5,103	0.2
Anesthesiology	70	6,230	0.2
Cardiac rehabilitation	50	4,569	0.1
Case management	434	31,106	1.0
Community health	46	5,024	0.2
Critical care	609	58,320	1.9
Diabetes educator	108	7,924	0.3
Family practice	61	5,277	0.2
Gastroenterology	51	5,411	0.2
General practice	43	3,686	0.1
General surgery	346	28,599	0.9
Gerontology	134	9,136	0.3
Hospice and palliative care/home health	183	15,058	0.5
Infection control	36	3,725	0.1
Infusion therapy	82	6,856	0.2
Lactation consult	109	9,164	0.3
Legal nurse	70	4,822	0.2
Life support/resuscitation (BLS, ALS, BCLS, CPR, NRP, and others)	10,545	956,472	31.2
Maternal/neonate	450	43,123	1.4
Medical/surgical	302	26,594	0.9
Neonatal intensive care	54	4,880	0.2
Nephrology	57	5,181	0.2
Neuroscience	68	6,764	0.2
Occupational health	74	4,868	0.2
Oncology	380	36,175	1.2
Orthopedic	61	6,110	0.2
Pediatrics	152	13,654	0.4
Psychiatric/mental health/counselor	250	19,126	0.6
Quality care	46	4,182	0.1
Registered nurse first assistant	30	2,920	0.1
Rehabilitation	150	13,054	0.4
Research	39	4,131	0.1
School nurse/college health	75	6,121	0.2
Trauma nursing/emergency medicine (TNCC, ATCN, ATN, EMT, ENPC, and others)	1,512	125,008	4.1
Women's health	31	3,080	0.1
Wound care	101	7,590	0.2
Other**	420	36,061	1.2

*An estimated 2,356 registered nurses who reported an other skill-based certification (e.g. CPR or basic life support) are not included here.

**Other includes urology, pain management, dialysis/hemodialysis, flight nurse, holistic, infectious disease, informatics, nurse educator, telemetry, addictions, radiology, transplant, and continuing education.

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 12. Employment setting in principal nursing position: 2008

Employment setting	Number in sample	Estimated number*	Estimated percent
Total	28,554	2,596,599	100.0
Hospital	16,957	1,601,831	61.7
Community hospital	13,780	1,315,933	50.7
Inpatient unit—community hospital	10,645	1,027,190	39.6
Nursing home unit—community hospital	71	5,887	0.2
Outpatient clinic community hospital owned	1,481	137,910	5.3
Outpatient clinic located at community hospital, not hospital owned	169	16,213	0.6
Other administrative or functional area—community hospital	1,407	128,312	4.9
Specialty hospital	1,243	123,666	4.8
Inpatient unit—specialty hospital	942	94,565	3.6
Outpatient clinic specialty hospital owned	171	16,967	0.7
Outpatient clinic located at specialty hospital, not hospital owned	27	--	--
Other administrative or functional area—specialty hospital	103	9,853	0.4
Long-term hospital	275	24,678	1.0
Inpatient unit—long-term hospital	217	19,886	0.8
Nursing home unit—long-term hospital	24	--	--
Other administrative or functional area—long term hospital	34	2,518	0.1
Psychiatric hospital	370	31,707	1.2
Inpatient unit—psychiatric hospital	306	26,030	1.0
Nursing home unit—psychiatric hospital	5	--	--
Outpatient clinic psychiatric hospital owned	24	--	--
Outpatient clinic located at psychiatric hospital, not hospital owned	5	--	--
Other administrative or functional area—psychiatric hospital	30	2,892	0.1
Federal Government hospital	726	51,782	2.0
Inpatient unit—Federal Government hospital	373	27,371	1.1
Nursing home unit—Federal Government hospital	19	--	--
Outpatient clinic at Federal Government hospital	211	13,895	0.5
Other administrative or functional area—Federal Government hospital	123	8,694	0.3
Institution, infirmary, or correctional facility hospital—all units	71	7,723	0.3
Other type of hospital	479	45,288	1.7
Inpatient unit—other hospital	290	27,801	1.1
Nursing home unit—other hospital	6	--	--
Outpatient clinic other hospital owned	55	4,284	0.2
Outpatient clinic located at other hospital, not hospital owned	22	--	--
Other administrative or functional area—other hospital	104	10,323	0.4
Nursing home/extended care facility	1,636	135,514	5.2
Nursing home/extended care (not in a hospital)	1,320	110,519	4.3
Facility for mentally retarded/developmentally disabled	78	6,338	0.2
Residential care/assisted living	217	16,978	0.7
Other type of extended care	21	--	--
Academic education program	1,137	98,268	3.8
Nursing aide and/or home health aide program	66	5,972	0.2
LPN/LVN program	91	7,332	0.3
Diploma nursing program	124	10,737	0.4
Associate degree nursing program	317	29,192	1.1
Bachelor's and higher degree nursing program	400	32,513	1.3
Associate degree nursing program and LPN/LVN program	44	3,226	0.1
Associate degree nursing program and BSN program	35	2,756	0.1
Other education program, not patient education	59	6,498	0.3

Footnotes at end of table.

Table 12. Employment setting in principal nursing position: 2008 (continued)

Employment setting	Number in sample	Estimated number*	Estimated percent
Home health setting	1,828	165,697	6.4
Visiting nurse service (VNS/VNA)	329	28,822	1.1
Home health service unit (hospital-based)	247	19,752	0.8
Home health agency (nonhospital-based)	590	58,248	2.2
Private duty in a home setting	110	10,640	0.4
Hospice	421	37,528	1.4
Other home health setting	130	10,695	0.4
Community/public health setting	1,114	97,210	3.7
State health or mental health agency	228	16,467	0.6
City or county health department	353	34,637	1.3
Correctional facility (nonhospital)	138	14,214	0.5
Community mental-health organization	104	8,584	0.3
Substance abuse center	30	2,109	0.1
Other community setting**	261	21,199	0.8
School health service	913	84,418	3.3
School system (K-12)	790	73,697	2.8
College or university	79	6,792	0.3
Other school health setting	44	3,928	0.2
Occupational health	246	18,840	0.7
Private industry	129	10,456	0.4
Government	55	3,214	0.1
Other occupational health setting	60	4,764	0.2
Ambulatory care setting (not hospital)	2,904	270,556	10.4
Medical/physician practice	1,450	134,881	5.2
Nurse practice	55	4,968	0.2
In-store or retail clinic	26	--	--
Community health center	113	10,186	0.4
Federal clinic (Military, VA, NIH, or IHS-supported)	87	4,869	0.2
Federally supported clinic (not in a community health center)	31	2,706	0.1
Hospital owned off-site clinics or surgery center	253	24,824	1.0
Ambulatory surgical center (not hospital-owned)	388	39,463	1.5
Urgent care	78	6,245	0.2
Dialysis center/clinic (not in a hospital)	233	22,591	0.9
Other ambulatory setting	189	16,615	0.6
Insurance claims/benefits/utilization review	631	49,441	1.9
Government insurer/benefits department: Federal, State or local	83	7,472	0.3
Insurance company or other private claims/benefits/utilization review	547	41,936	1.6
Other	921	51,947	2.0
Policy, planning, regulatory, or licensing agency	85	6,197	0.2
Consulting organization	151	12,297	0.5
Home-based self-employment	55	4,727	0.2
Telehealth, telenursing, or call center	435	12,516	0.5
Pharmaceutical/medical device/medical software	92	8,062	0.3
Adult/senior day care	29	--	--
Flight nurse/medical air transport	47	3,766	0.1
Other	27	--	--
Not known	267	22,875	0.9

*Includes an estimated 1,659 RNs for whom setting information was known, but subsetting information was not known. Such nurses are represented in the setting totals but not subsetting groups. As a result, subsetting counts and percents may not add to setting totals.

**Other community/public health setting includes blood banks and blood-related services.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 13. Employment setting in principal nursing position, by age group: 2008

Employment setting	Number in sample	Estimated total	Age group											
			Under 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 and over
Total employed	28,554	2,596,599	77,041	198,734	257,472	302,520	314,368	397,552	433,848	337,918	176,932	69,595	19,752	10,867
Hospital	16,957	1,601,831	68,635	163,651	187,954	204,803	201,511	241,578	239,917	177,617	81,114	25,885	6,565	2,602
Nursing home/extended care facility	1,636	135,514	--	4,460	8,744	14,179	13,886	22,117	25,324	21,684	13,216	7,006	2,518	--
Academic education program	1,137	98,268	--	3,835	4,605	7,188	8,291	15,167	19,454	17,055	11,548	7,247	--	--
Home health setting	1,828	165,697	--	4,512	10,896	19,817	20,810	26,453	30,880	25,869	13,545	7,960	--	--
Public or community health setting	1,114	97,210	--	3,370	5,824	6,078	11,902	15,065	19,064	15,848	12,803	4,434	--	--
School health service	913	84,418	--	--	4,518	4,403	9,782	15,312	19,996	14,254	8,636	3,098	--	--
Occupational health	246	18,840	--	--	--	--	--	--	3,231	3,147	2,410	--	--	--
Ambulatory care setting (not hospital)	2,904	270,556	--	13,763	27,054	29,210	32,695	42,138	49,127	42,235	21,132	7,464	2,722	--
Insurance claims/benefits/utilization review	631	49,441	--	--	3,339	6,665	5,949	7,733	11,116	7,263	4,242	--	--	--
Other	921	51,947	--	--	2,148	5,767	5,289	6,206	10,712	10,220	5,911	2,570	--	--
Not known	267	22,875	--	--	--	--	--	3,460	5,027	2,725	2,376	--	--	--

--Too few cases to report estimated number (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal total because of rounding.

Table 14. Employment setting in principal nursing position, by highest nursing or nursing-related education: 2008

Employment setting	Total number in sample	Total estimated number*	Highest nursing or nursing-related educational preparation			
			Estimated number of diploma	Estimated number of associate degree	Estimated number of bachelor's	Estimated number of master's/doctorate**
Total	28,554	2,596,599	315,071	973,815	966,974	337,441
Hospital	16,957	1,601,831	167,942	626,119	646,695	159,090
Nursing home/extended care facility	1,636	135,514	22,417	71,426	33,576	7,840
Academic education program	1,137	98,268	10,897	23,397	24,221	39,753
Home health setting	1,828	165,697	24,043	70,783	57,734	12,766
Public or community health setting	1,114	97,210	13,085	32,781	35,374	15,739
School health service	913	84,418	11,739	17,321	38,748	16,610
Occupational health	246	18,840	3,358	6,517	5,590	3,376
Ambulatory care setting (not hospital)	2,904	270,556	43,943	87,704	76,610	61,979
Insurance claims/benefits/utilization review	631	49,441	7,052	14,646	21,301	6,361
Other	921	51,947	8,302	14,882	19,063	9,647
Not known	267	22,875	2,293	8,239	8,062	4,281

*Includes an estimated 3,297 RNs for whom highest educational preparation was not known.
**Across all employment settings, an estimated 316,137 registered nurses reported their highest education preparation as a master's degree, and an estimated 21,304 reported their highest education preparation as a doctorate degree.
NOTE: Estimated numbers may not equal totals because of rounding.

Table 15. Job title in principal nursing position: 2008

General and specific job titles	Number in sample	Estimated number	Estimated percent
Total	28,554	2,596,599	100.0
Staff nurse	18,176	1,711,271	65.9
Staff nurse or direct care nurse	14,421	1,369,847	52.8
Charge nurse or team leader	2,440	222,052	8.6
School nurse	737	68,588	2.6
Public health nurse	297	26,172	1.0
Community health nurse	281	24,612	0.9
Management/administration	3,642	322,790	12.4
First-line management	1,139	105,829	4.1
Middle management/administration	1,782	154,809	6.0
Senior management/administration	721	62,152	2.4
Certified registered nurse anesthetist	443	29,538	1.1
Clinical nurse specialist	258	22,070	0.8
Nurse midwife	77	6,455	0.2
Nurse practitioner	1,094	98,487	3.8
Patient educator	285	18,405	0.7
Instruction	1,084	94,946	3.7
Staff educator or instructor in clinical setting	428	40,772	1.6
Staff development director	78	7,356	0.3
Instructor/lecturer	320	26,624	1.0
Professor	258	20,194	0.8
Patient coordinator	1,729	140,060	5.4
Patient care coordinator, case manager, discharge planner	1,374	117,420	4.5
Advice/triage nurse	355	22,641	0.9
Informatics nurse	128	8,952	0.3
Consultant	290	23,115	0.9
Researcher	191	17,136	0.7
Surveyor/auditor/regulator	124	10,652	0.4
Other	861	76,323	2.9
Quality improvement nurse, utilization review nurse	503	44,523	1.7
Infection control	110	10,166	0.4
Legal nurse	52	4,848	0.2
Other	31	2,178	0.1
No position title specified	165	14,608	0.6
Not known	172	16,397	0.6

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.
Aggregated job titles as shown in this table are subsequently used to describe job title in a grouped manor.

Table 16. Job title in principal nursing position, by hospital and nonhospital setting: 2008

Job title	Total estimated number	Estimated number hospital setting	Estimated number nonhospital setting
Total	2,596,599	1,601,831	994,768
Staff nurse	1,711,271	1,232,586	478,685
Management/administration	322,790	145,574	177,216
Certified registered nurse anesthetist	29,538	23,856	5,682
Clinical nurse specialist	22,070	13,943	8,127
Nurse midwife	6,455	2,682	3,773
Nurse practitioner	98,487	36,533	61,954
Patient educator	18,405	9,053	9,352
Instruction	94,946	28,857	66,089
Patient coordinator	140,060	48,605	91,456
Informatics nurse	8,952	6,105	2,847
Consultant	23,115	3,788	19,327
Researcher	17,136	8,625	8,510
Surveyor/auditor/regulator	10,652	--	8,686
Other*	92,720	39,658	53,062

*Other job title includes an estimated 16,397 RNs for whom job title was not known.
--Too few cases to report estimated number (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals because of rounding.

Table 17. Employment setting in principal nursing position, by selected job titles: 2008

Employment setting	Total estimated number	Staff nurse	Management/ administration	Patient coordinator	Other job titles
Total	2,596,599	1,711,271	322,790	140,060	422,477
Hospital	1,601,831	1,232,586	145,574	48,605	175,066
Nursing home/extended care facility	135,514	54,632	54,746	7,640	18,496
Academic education program	98,268	33,865	8,986	--	54,112
Home health setting	165,697	82,935	34,513	32,317	15,933
Public or community health setting	97,210	58,820	15,671	4,094	18,625
School health service	84,418	74,593	3,544	--	5,517
Occupational health	18,840	10,648	2,435	--	4,311
Ambulatory care setting (not hospital)	270,556	146,842	36,574	12,801	74,339
Insurance claims/benefits/utilization review	49,441	--	9,551	19,692	17,952
Other*	74,822	14,104	11,197	11,394	38,127

*Other employment setting includes an estimated 22,875 RNs for whom employment setting was not known.
--Too few cases to report estimated number (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals because of rounding.

Table 18. Job title in principal nursing position, by highest nursing or nursing-related education: 2008

Job title	Number in sample	Total estimated number*	Total estimated percent	Highest nursing or nursing-related education preparation							
				Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's	Estimated percent of bachelor's	Estimated number of master's/ doctorate**	Estimated percent of master's/ doctorate
Total	28,554	2,596,599	100.0	315,071	12.1	973,815	37.5	966,974	37.2	337,441	13.0
Staff nurse	18,176	1,711,271	100.0	218,399	12.8	739,456	43.2	685,446	40.1	65,198	3.8
Management/administration	3,642	322,790	100.0	38,302	11.9	108,445	33.6	112,286	34.8	63,347	19.6
Certified registered nurse anesthetist	443	29,538	100.0	3,078	10.4	1,221	4.1	4,652	15.7	20,588	69.7
Clinical nurse specialist	258	22,070	100.0	--	--	4,807	21.8	4,975	22.5	10,763	48.8
Nurse midwife	77	6,455	100.0	--	--	--	--	--	--	5,128	79.4
Nurse practitioner	1,094	98,487	100.0	--	--	--	--	4,241	4.3	88,280	89.6
Patient educator	285	18,405	100.0	2,339	12.7	5,607	30.5	7,858	42.7	2,601	14.1
Instruction	1,084	94,946	100.0	5,432	5.7	14,260	15.0	29,513	31.1	45,725	48.2
Patient coordinator	1,729	140,060	100.0	22,488	16.1	50,177	35.8	57,007	40.7	10,308	7.4
Informatics nurse	128	8,952	100.0	--	--	2,832	31.6	3,420	38.2	--	--
Consultant	290	23,115	100.0	3,603	15.6	4,620	20.0	8,783	38.0	6,110	26.4
Researcher	191	17,136	100.0	--	--	4,469	26.1	8,193	47.8	2,749	16.0
Surveyor/auditor/regulator	124	10,652	100.0	--	--	3,942	37.0	3,813	35.8	--	--
Other	861	76,323	100.0	10,928	14.3	24,075	31.5	29,924	39.2	11,376	14.9
Not known	172	16,397	100.0	--	--	6,310	38.5	6,337	38.6	--	--

*Includes an estimated 3,297 RNs for whom education preparation was not known.
**Across all job titles, an estimated 316,137 registered nurses reported their highest education preparation as a master's degree, and an estimated 21,304 reported their highest education preparation as a doctorate degree.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding

Table 19. Employment status and average total earnings for registered nurses with one and more than one nursing position: 2008

Employment status	Number in sample	Total estimated number*	Total estimated percent	Average earnings: All nursing jobs (dollars)	Average earnings: Principal nursing job only (dollars)	Average earnings: Nonprincipal nursing jobs (dollars)**
Total	28,542	2,595,591	100.0	61,176	59,324	14,693
Principal position: Full-time	21,300	1,936,698	74.6	68,818	66,970	15,201
Principal position: Part-time	7,242	658,893	25.4	38,715	36,849	13,392
Nurses with principal nursing position only	24,822	2,268,332	100.0	59,197	59,197	
Principal position: Full-time	18,609	1,701,259	75.0	66,742	66,742	
Principal position: Part-time	6,213	567,073	25.0	36,562	36,562	
Nurses with two or more nursing positions	3,720	327,259	100.0	74,894	60,201	14,693
Principal position: Full-time	2,691	235,439	71.9	83,818	68,618	15,201
Principal position: Part-time	1,029	91,820	28.1	52,011	38,620	13,392

*Excludes an estimated 1,008 RNs for whom annual earnings amount was not known.
**Excludes RNs who do not hold a nonprincipal nursing job.
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 20. Average annual hours worked and employment setting in principal nursing position: 2008

Employment setting	Total estimated number	Total estimated percent	Total average annual hours worked*	Employment status: Estimated number full-time	Estimated percent full-time	Full-time average annual hours worked	Estimated number part-time	Estimated percent part-time	Part-time average annual hours worked
Total	2,596,599	100.0	1,944	1,937,405	74.6	2,205	659,194	25.4	1,178
Hospital	1,601,831	100.0	1,969	1,206,920	75.3	2,202	394,911	24.7	1,257
Nursing home/extended care facility	135,514	100.0	2,107	107,676	79.5	2,373	27,838	20.5	1,080
Academic education program	98,268	100.0	1,852	72,654	73.9	2,146	25,615	26.1	1,020
Home health setting	165,697	100.0	2,008	117,404	70.9	2,344	48,293	29.1	1,190
Community/public health setting	97,210	100.0	1,958	76,779	79.0	2,209	20,432	21.0	1,017
School health service	84,418	100.0	1,443	61,500	72.9	1,701	22,918	27.1	750
Occupational health	18,840	100.0	1,808	13,111	69.6	2,191	5,729	30.4	933
Ambulatory care setting	270,556	100.0	1,860	186,570	69.0	2,199	83,986	31.0	1,106
Insurance claims/benefits	49,441	100.0	2,059	42,907	86.8	2,230	6,534	13.2	940
Other	51,947	100.0	1,950	36,292	69.9	2,335	15,655	30.1	1,058
Not known	22,875	100.0	1,782	15,593	68.2	2,141	7,282	31.8	1,015

*Hours worked includes regular hours of work, paid overtime, unpaid overtime, and on-call hours worked. Annual hours are estimated based on hours per typical work week multiplied by estimated months per year anticipated to be working per year in this principal nursing position.

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 21. Average hours per week and employment setting for registered nurses working full-time in their principal nursing position: 2008

Employment setting	Total estimated number	Average hours worked/week	Estimated percent with paid overtime	Average paid overtime hours/week	Estimated percent with mandatory overtime	Average mandatory hours/week
Total	1,937,405	42.9	27.5	7.5	7.0	6.6
Hospital	1,206,920	42.6	33.8	7.5	8.2	6.4
Nursing home/extended care	107,676	45.8	25.6	8.0	6.5	6.4
Academic education	72,654	44.0	18.7	8.4	4.8	8.9
Home health	117,404	45.3	21.4	7.8	7.9	8.1
Public/community health**	151,390	41.2	9.2	8.9	3.1	7.1
Ambulatory care	186,570	42.5	19.9	5.3	5.5	5.2
Other***	79,199	44.0	7.1	9.9	--	--

Employment setting	Estimated percent with on-call hours*	Average on-call hours/week worked*	Estimated percent with any standby hours	Average standby hours/week	Estimated percent with paid standby hours	Average paid standby hours/week
Total	14.5	13.3	13.0	25.1	9.3	20.1
Hospital	15.7	12.2	14.5	21.5	11.7	18.2
Nursing home/extended care	15.9	16.4	14.6	35.4	3.1	16.8
Academic education	10.1	13.7	7.4	21.5	5.1	16.9
Home health	30.1	13.2	25.5	32.2	17.9	27.9
Public/community health**	6.1	19.5	6.0	32.8	2.7	24.3
Ambulatory care	8.6	17.8	6.9	40.9	2.9	36.8
Other***	6.1	20.6	3.6	28.9	--	--

*Reported on-call hours exclude hours that were standby only.
**Public/community health includes school and occupational health.
***Other includes insurance, benefits, and utilization review.
--Too few cases to report estimated percent and average (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 22. Average hours per week and employment setting for registered nurses working part-time in their principal nursing position: 2008

Employment setting	Total estimated number	Average hours worked/week	Estimated percent with paid overtime	Average paid overtime hours/week	Estimated percent with mandatory overtime	Average mandatory hours/week
Total	659,194	24.1	15.1	5.4	3.4	4.8
Hospital	394,911	25.2	19.9	5.5	3.7	4.5
Nursing home/extended care	27,838	22.4	13.5	6.4	--	--
Academic education	25,615	22.8	--	--	--	--
Home health	48,293	24.4	7.3	7.3	--	--
Public/community health**	49,079	20.5	--	--	--	--
Ambulatory care	83,986	22.3	8.5	3.5	--	--
Other***	22,189	20.5	--	--	--	--

Employment setting	Estimated percent with on-call hours*	Average on-call hours/week worked*	Estimated percent with any standby hours	Average standby hours/week	Estimated percent with paid standby hours	Average paid standby hours/week
Total	12.2	10.0	10.5	15.4	8.6	14.0
Hospital	13.8	8.6	12.9	13.0	11.3	12.5
Nursing home/extended care	11.1	10.3	--	--	--	--
Academic education	--	--	--	--	--	--
Home health	20.4	13.3	16.0	25.9	13.4	24.8
Public/community health**	8.9	14.8	--	--	--	--
Ambulatory care	5.2	12.0	3.8	18.8	--	--
Other***	5.7	14.8	--	--	--	--

* Reported on-call hours exclude hours that were standby only.
**Public/community health includes school and occupational health.
***Other includes insurance, benefits, and utilization review.
--Too few cases to report estimated percent and average (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 23. Level of care by type of clinical specialty in principal nursing position: 2008

Level of care/type of work	All clinical specialties*	Clinical specialty (estimated number)*								
		Critical care	Cardiac care	Chronic care	Emergency/ trauma care	Gastrointestinal	General medical surgical	Gynecology (women's health)	Hospice	Infectious/ communicable disease
All levels of care/types of work*	2,596,599	318,779	310,544	172,342	218,794	120,737	635,007	98,668	81,607	95,177
General or specialty inpatient	699,106	45,811	72,480	34,435	32,677	39,279	270,596	35,045	21,185	32,857
Critical/intensive care	345,396	262,073	93,113	12,358	39,105	15,819	41,509	5,039	4,666	13,167
Step down/transitional/progressive/telemetry	197,457	39,277	120,430	17,890	15,022	17,550	75,236	5,543	5,634	14,924
Subacute care	70,073	8,836	14,947	13,112	7,561	7,489	31,095	3,252	5,508	7,567
Emergency	199,333	30,833	22,847	9,778	160,539	10,767	29,673	6,268	--	10,648
Urgent care	49,087	7,468	7,118	7,617	19,760	6,403	13,395	4,562	--	8,163
Rehabilitation	86,348	4,539	12,219	18,436	3,351	4,449	25,668	--	8,931	6,178
Long-term care/nursing home	152,523	2,781	7,337	56,306	2,333	3,415	34,291	--	21,010	7,689
Surgery	377,112	34,817	45,260	11,709	24,484	41,726	228,224	31,796	4,773	11,354
Ambulatory care	358,936	7,074	29,968	29,951	14,107	32,113	45,833	33,020	3,491	16,696
Home health	155,677	--	13,070	27,521	--	4,947	42,282	--	25,315	6,142
Public/community health	125,859	--	2,352	8,986	7,527	--	12,949	7,974	--	22,465
Education	181,076	8,286	12,811	22,569	16,225	7,953	33,327	7,370	5,233	15,652
Business/administration/review	231,166	6,672	9,604	12,702	8,231	4,474	20,493	3,930	6,553	7,546
Other***	78,180	7,738	12,759	4,861	7,205	4,085	7,604	--	--	5,000

Level of care/type of work	Clinical specialty (estimated number)*									
	Labor and delivery	Neurological	Obstetrics	Oncology	Primary care	Psychiatric/ mental health	Pulmonary/ respiratory	Renal/ dialysis	No patient care	Other specialty**
All levels of care/types of work*	94,929	85,238	132,911	119,894	220,678	133,791	120,880	89,372	314,916	237,380
General or specialty inpatient	78,894	34,521	89,393	58,822	53,865	63,311	40,351	34,782	28,414	52,039
Critical/intensive care	8,293	23,514	7,358	8,604	10,266	7,941	31,121	17,752	12,210	8,752
Step down/transitional/progressive/telemetry	--	19,314	3,416	11,083	10,358	7,205	32,712	17,508	9,162	7,352
Subacute care	--	4,651	--	6,996	10,042	5,009	11,770	5,968	5,532	9,103
Emergency	4,253	7,489	4,467	4,523	9,604	10,818	11,858	4,705	9,133	12,786
Urgent care	--	3,877	--	--	14,381	6,110	6,017	--	--	11,274
Rehabilitation	--	7,963	--	3,197	12,667	7,029	9,795	2,777	10,024	11,077
Long-term care/nursing home	--	3,673	--	2,522	20,597	12,340	8,716	2,419	23,610	18,764
Surgery	12,586	19,469	14,121	13,681	11,743	4,377	18,219	10,202	12,457	54,145
Ambulatory care	5,624	9,891	24,751	34,898	90,251	18,439	16,915	23,601	16,433	52,342
Home health	--	4,673	--	5,981	20,589	5,364	12,887	3,132	23,590	21,954
Public/community health	--	--	5,257	--	28,719	14,033	3,674	--	22,702	20,861
Education	4,546	6,762	9,376	6,665	22,592	12,589	10,632	5,261	65,249	19,628
Business/administration/review	--	4,709	5,388	7,247	10,074	8,579	5,512	4,567	139,968	20,837
Other***	--	4,780	--	7,531	4,962	3,572	4,820	--	26,566	13,506

*The number of reported clinical specialties and levels of care will exceed the total number of employed RNs because each RN may report more than one clinical specialty and level of care.
**Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, radiology, urology, no specific area, and other specialties.
***Other level of care/type of work includes ancillary care, research, informatics, flight nurse, and other.
--Too few cases to report estimated number (fewer than 30 cases unweighted).

Table 24. Clinical specialty by patient population in principal nursing position for registered nurses who provide patient care: 2008

Clinical specialty	Total estimated number**	Patient population: Adult only	Geriatric only	Adult and geriatric	Pediatric/ maternal-child/ newborn***	Multiple ages/ all ages
All clinical specialties*	2,281,683	1,223,259	407,377	61,418	397,358	170,164
Critical care	318,779	182,167	31,640	12,476	75,745	16,509
Cardiac care	310,544	197,969	68,210	16,720	13,573	13,602
Chronic care	172,342	56,262	83,079	6,244	16,506	9,606
Emergency/trauma care	218,794	122,145	15,785	5,998	21,038	53,430
Gastrointestinal	120,737	76,833	16,242	5,652	10,988	10,978
General medical surgical	635,007	367,222	145,459	22,485	50,655	47,352
Gynecology (women's health)	98,668	57,842	2,471	--	21,769	14,303
Hospice	81,607	25,347	45,650	3,817	--	5,378
Infectious/communicable disease	95,177	43,240	18,254	4,142	18,047	10,814
Labor and delivery	94,929	35,445	--	--	52,843	5,588
Neurological	85,238	50,956	15,484	3,816	8,033	6,779
Obstetrics	132,911	47,486	--	--	74,158	10,302
Oncology	119,894	81,542	16,545	4,607	10,651	6,448
Primary care	220,678	78,865	42,866	4,700	69,600	22,836
Psychiatric/mental health	133,791	80,764	20,099	3,070	18,524	10,756
Pulmonary/respiratory	120,880	57,997	32,769	5,917	13,961	9,920
Renal/dialysis	89,372	56,941	17,488	5,118	3,973	5,042
Other specialty****	237,380	127,917	48,036	6,015	30,522	23,316

*The number of reported clinical specialties will exceed the total number of employed RNs because each RN may report more than one specialty.

**Includes an estimated 22,106 RNs for whom patient population for principal nursing position was not known.

***An estimated 313,759 RNs provide patient care to a pediatric population, including newborn, neonatal, pediatric, and adolescent.

****Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, radiology, urology, no specific area, and other specialties.

--Too few cases to report estimated number (fewer than 30 cases unweighted).

Table 25. Level of care by clinical specialty in principal nursing position for registered nurses who provide patient care in hospital settings: 2008

Level of care/type of work	All clinical specialties*	Clinical specialty (estimated number)*								
		Critical care	Cardiac care	Chronic care	Emergency/ trauma care	Gastrointestinal	General medical surgical	Gynecology (women's health)	Hospice	Infectious/ communicable disease
All levels of care/types of work*	1,479,993	301,271	262,175	60,237	186,451	85,806	459,315	60,739	22,459	50,647
General or specialty inpatient	572,291	42,636	66,210	25,378	25,178	35,634	244,796	32,590	15,141	25,679
Critical/intensive care	318,265	251,241	89,159	11,497	35,711	14,829	38,487	4,879	4,377	12,591
Step down/transitional/progressive/telemetry	179,632	35,935	115,564	16,631	14,375	16,375	71,457	5,315	5,194	14,097
Subacute care	41,713	7,478	12,782	6,956	5,517	6,578	23,401	3,047	2,479	5,960
Emergency	166,588	26,434	19,439	7,325	145,941	8,810	23,769	5,554	--	6,791
Urgent care	21,966	6,652	5,867	3,789	11,771	4,263	7,947	--	--	4,151
Rehabilitation	41,650	3,423	9,356	6,078	--	3,309	14,524	--	3,218	3,897
Surgery	294,142	32,671	42,241	9,705	23,683	30,671	192,535	27,244	4,475	10,740
Ambulatory care	129,801	5,807	17,501	13,320	8,133	20,726	24,047	10,093	--	7,686
Education	39,204	5,799	8,312	7,543	7,531	4,485	12,807	3,847	--	5,004
Other***	84,753	10,696	16,378	11,728	10,043	5,992	20,916	--	4,237	7,918

Level of care/type of work	Clinical specialty (estimated number)*									
	Labor and delivery	Neurological	Obstetrics	Oncology	Primary care	Psychiatric/ mental health	Pulmonary/ respiratory	Radiology	Renal/ dialysis	Other specialty**
All levels of care/types of work*	86,271	67,151	102,300	89,611	57,861	79,638	85,602	19,215	57,094	78,318
General or specialty inpatient	75,343	31,675	84,274	55,569	23,975	52,888	36,823	6,812	31,083	30,812
Critical/intensive care	7,944	21,976	6,981	8,231	9,169	7,576	28,703	5,384	16,550	--
Step down/transitional/progressive/telemetry	--	18,346	3,416	10,525	9,565	6,635	30,887	--	15,918	4,764
Subacute care	--	3,931	--	6,040	4,308	3,552	9,019	--	4,388	2,860
Emergency	3,812	6,510	3,774	4,123	5,326	8,166	9,317	--	4,276	4,717
Urgent care	--	--	--	--	3,960	--	4,015	--	--	--
Rehabilitation	--	5,718	--	--	6,170	3,972	6,194	--	--	4,346
Surgery	11,784	17,531	12,856	12,914	9,856	3,781	17,251	6,355	9,410	29,576
Ambulatory care	4,064	5,280	9,050	19,968	19,207	6,503	10,108	5,618	6,807	14,437
Education	3,037	4,061	4,509	3,918	5,109	2,806	5,761	--	--	2,917
Other***	2,919	4,960	4,738	8,506	7,206	8,220	7,350	7,582	3,523	8,477

*The number of reported clinical specialties and levels of care will exceed the total number of employed RNs in hospital settings because each RN may report more than one clinical specialty and level of care.
**Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, urology, no specific area, and other specialties.
***Other level of care/type of work includes ancillary care, long-term care, home health, public/community health, business/administration/review, research, informatics, flight nurse, and other.
--Too few cases to report estimated number (fewer than 30 cases unweighted).

Table 26. Clinical specialty by patient population in principal nursing position for registered nurses who provide patient care in hospital settings: 2008

Clinical Specialty	Total estimated number**	Patient population				
		Adult only	Geriatric only	Adult and geriatric	Pediatric/ maternal-child/ newborn***	Multiple ages/ all ages
All clinical specialties*	1,479,993	882,787	187,144	46,718	245,428	107,460
Critical care	301,271	172,475	30,073	10,959	72,978	14,545
Cardiac care	262,175	176,040	47,921	14,738	12,618	10,626
Chronic care	60,237	27,863	18,180	3,274	5,038	5,287
Emergency/trauma care	186,451	108,475	13,671	5,265	10,682	48,073
Gastrointestinal	85,806	54,470	11,287	5,334	7,268	7,447
General medical surgical	459,315	292,976	82,231	17,632	32,292	33,946
Gynecology (women's health)	60,739	36,762	--	--	11,169	9,042
Hospice	22,459	9,240	8,917	--	--	--
Infectious/communicable disease	50,647	27,949	10,920	--	3,517	5,102
Labor and delivery	86,271	32,889	--	--	47,607	4,918
Neurological	67,151	42,764	10,244	3,256	5,735	5,152
Obstetrics	102,300	36,361	--	--	57,685	7,495
Oncology	89,611	61,976	9,500	3,796	9,479	4,860
Primary care	57,861	28,259	11,409	--	9,578	5,536
Psychiatric/mental health	79,638	51,133	12,217	--	7,235	6,571
Pulmonary/respiratory	85,602	45,944	19,694	5,127	8,181	6,383
Radiology	19,215	12,993	--	--	--	--
Renal/dialysis	57,094	35,127	11,115	4,012	--	3,448
Other specialty****	78,318	50,569	9,475	--	6,726	8,658

*The number of reported clinical specialties will exceed the total number of employed RNs in hospital settings because each RN may report more than one specialty.
**Includes an estimated 10,455 RNs for whom patient population for principal nursing position was not known.
***An estimated 180,521 RNs provide patient care in a hospital setting to a pediatric population, including newborn, neonatal, pediatric, and adolescent.
****Other clinical specialty includes dermatology, endocrinology, infusion, occupational health, ophthalmology, orthopedic, otolaryngology, plastic/cosmetic surgery, urology, no specific area, and other specialties.
--Too few cases to report estimated number (fewer than 30 cases unweighted).

Table 27. Percent of time in each functional area during usual work week in principal nursing position: 2008

Percentage of time spent during usual work week	Functional area											
	Number in sample patient care/charting	Estimated number patient care/charting	Estimated percent patient care/charting	Number in sample non-nursing tasks	Estimated number non-nursing tasks	Estimated percent non-nursing tasks	Number in sample consultation	Estimated number consultation	Estimated percent consultation	Number in sample supervision	Estimated number supervision	Estimated percent supervision
Total	28,554	2,596,599	100.0	28,554	2,596,599	100.0	28,554	2,596,599	100.0	28,554	2,596,599	100.0
None	3,857	327,192	12.6	9,740	841,860	32.4	11,153	1,009,762	38.9	15,686	1,420,385	54.7
1-24	2,837	258,136	9.9	17,885	1,665,891	64.2	15,342	1,404,757	54.1	8,777	804,392	31.0
25-49	2,357	213,727	8.2	814	76,440	2.9	1,332	118,526	4.6	1,902	174,450	6.7
50-74	6,314	582,913	22.4	103	11,189	0.4	425	36,721	1.4	1,279	115,217	4.4
75-100	13,189	1,214,630	46.8	12	--	--	302	26,832	1.0	910	82,155	3.2

Percentage of time spent during usual work week	Functional area											
	Number in sample administration	Estimated number administration	Estimated percent administration	Number in sample research	Estimated number research	Estimated percent research	Number in sample teaching	Estimated number teaching	Estimated percent teaching	Number in sample other	Estimated number other	Estimated percent other
Total	28,554	2,596,599	100.0	28,554	2,596,599	100.0	28,554	2,596,599	100.0	28,554	2,596,599	100.0
None	21,440	1,967,927	75.8	22,759	2,070,299	79.7	13,687	1,230,338	47.4	22,840	2,089,570	80.5
1-24	5,427	482,419	18.6	5,312	484,723	18.7	12,824	1,187,142	45.7	4,000	364,273	14.0
25-49	873	75,047	2.9	258	21,654	0.8	1,010	88,717	3.4	491	43,536	1.7
50-74	448	39,132	1.5	122	10,901	0.4	462	41,637	1.6	462	38,537	1.5
75-100	366	32,073	1.2	103	9,022	0.3	571	48,765	1.9	761	60,683	2.3

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 28. Average percent of time in each functional area during usual work week in principal nursing position, by highest nursing or nursing-related education: 2008

Highest education preparation	Average percent time in patient care/charting	Average percent time in non-nursing tasks	Average percent time in consultation	Average percent time in supervision
Total	58.1	6.1	7.5	10.2
Diploma	60.3	6.0	7.2	10.3
Associate degree	61.4	6.9	6.7	9.9
Bachelor's	58.1	6.5	7.9	10.2
Master's	48.2	3.0	8.9	10.7
Doctorate	18.1	1.6	8.8	8.7
Not known*	66.3	5.8	7.7	6.5

Highest education preparation	Average percent time in administration	Average percent time in research	Average percent time in teaching	Average percent time in other
Total	4.4	1.9	7.3	4.6
Diploma	3.3	1.5	5.6	6.0
Associate degree	3.2	1.7	6.1	4.1
Bachelor's	3.9	1.9	7.0	4.6
Master's	9.7	2.5	12.4	4.7
Doctorate	19.6	9.7	26.7	6.7
Not known*	9.0	1.2	2.4	1.2

*Not known represents registered nurses for whom education preparation information was not provided.

Table 29. Employment setting in principal nursing position, by employment relationship: 2008

Employment setting	Number in sample	Total estimated number	Total estimated percent	Estimated number employee of organization	Estimated percent employee of organization	Estimated number employment agency	Estimated percent employment agency	Estimated number traveling nurse	Estimated percent traveling nurse	Estimated number self-employed/ per-diem	Estimated percent self-employed/ per-diem
Total	28,554	2,596,599	100.0	2,412,775	92.9	36,863	1.4	26,182	1.0	120,778	4.7
Hospital	16,957	1,601,831	100.0	1,507,944	94.1	18,244	1.1	23,049	1.4	52,594	3.3
Nursing home/extended care facility	1,636	135,514	100.0	127,229	93.9	--	--	--	--	5,746	4.2
Academic education program	1,137	98,268	100.0	91,906	93.5	--	--	--	--	4,895	5.0
Home health setting	1,828	165,697	100.0	141,077	85.1	7,104	4.3	--	--	16,140	9.7
Public or community health setting	1,114	97,210	100.0	93,412	96.1	--	--	--	--	3,050	3.1
School health service	913	84,418	100.0	77,440	91.7	--	--	--	--	5,543	6.6
Occupational health	246	18,840	100.0	14,881	79.0	1,844	9.8	--	--	--	--
Ambulatory care setting (not hospital)	2,904	270,556	100.0	252,081	93.2	--	--	--	--	16,174	6.0
Insurance claims/benefits/utilization review	631	49,441	100.0	45,590	92.2	--	--	--	--	--	--
Other	921	51,947	100.0	40,404	77.8	--	--	--	--	11,137	21.4
Not known	267	22,875	100.0	20,811	91.0	--	--	--	--	--	--

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 30. Average annual earnings for registered nurses working full-time in their principal nursing position, by job title: 2008

Job title	Overall average (dollars)*	Hospital setting (dollars)	Nonhospital setting (dollars)
Total	66,973	69,079	63,491
Staff nurse	61,706	63,809	55,851
Management/administration	78,356	85,431	72,493
Certified registered nurse anesthetist	154,221	157,184	139,179
Clinical nurse specialist	72,856	76,386	65,177
Nurse midwife	82,111	--	78,777
Nurse practitioner	85,025	89,362	82,018
Patient educator	59,421	62,759	56,438
Instruction	65,844	72,163	62,758
Patient coordinator	62,978	67,463	60,603
Informatics nurse	75,242	76,886	71,186
Consultant	76,473	--	75,872
Researcher	67,491	68,278	66,695
Surveyor/auditor/regulator	65,009	--	65,768
Other**	64,003	67,682	60,778

* Excludes an estimated 467 RNs for whom annual earnings amount was not known.
**Other job title includes RNs for whom job title was not known.
--Too few cases to compute average salaries (fewer than 30 cases unweighted).

Table 31. Average annual earnings for registered nurses working full-time in their principal nursing position, by employment setting: 2008

Employment setting	Overall average (dollars)*	Staff nurse (dollars)	Management/ administration (dollars)	Patient coordinator (dollars)	Other job titles (dollars)***
Total	66,973	61,706	78,356	62,978	77,904
Hospital	69,079	63,809	85,431	67,463	87,162
Nursing home/extended care facility	61,507	54,239	65,351	58,387	67,177
Academic education program	66,701	66,542	82,387	--	63,399
Home health setting	63,490	59,289	72,882	59,555	64,465
Public or community health setting	60,580	55,708	70,352	58,404	65,732
School health service	47,851	46,416	53,343	--	64,723
Occupational health	65,947	62,086	72,716	--	--
Ambulatory care setting (not hospital)	65,976	55,657	76,412	53,811	80,105
Insurance claims/benefits/utilization review	67,897	--	81,787	64,680	64,547
Other**	72,750	67,660	87,051	64,577	71,229

*Excludes an estimated 467 RNs for whom annual earnings amount was not known.

**Other employment setting includes RNs for whom employment setting was not known.

***Other job titles include consultant, instruction, NP, NM, CNS, NA, researcher, informatics, surveyor/auditor/regulator, patient educator, and RNs with no job title.

--Too few cases to compute average salaries (fewer than 30 cases unweighted).

Table 32. Average annual earnings for registered nurses working full-time in their principal nursing position, by job title and highest nursing or nursing-related education: 2008

Job title	Overall average (dollars)*	Diploma (dollars)	Associate degree (dollars)	Bachelor's (dollars)	Master's/ doctorate (dollars)**
Total	66,973	65,349	60,890	66,316	87,363
Staff nurse	61,706	63,027	59,310	63,382	69,616
Management/administration	78,356	71,970	68,533	78,155	98,817
Certified registered nurse anesthetist	154,221	--	--	153,314	154,912
Clinical nurse specialist	72,856	--	59,192	68,960	80,195
Nurse midwife	82,111	--	--	--	81,824
Nurse practitioner	85,025	--	--	85,298	85,037
Patient educator	59,421	56,776	57,458	59,576	--
Instruction	65,844	58,551	61,379	63,598	69,077
Patient coordinator	62,978	62,693	60,240	64,068	71,516
Informatics nurse	75,242	--	69,950	78,046	--
Consultant	76,473	--	67,151	75,446	93,576
Researcher	67,491	--	63,016	70,634	71,084
Surveyor/auditor/regulator	65,009	--	64,308	62,675	--
Other***	64,003	60,756	57,287	64,628	79,618

* Excludes an estimated 467 RNs for whom annual earnings amount was not known.
**Average annual earnings for registered nurses across all job titles who reported working full-time in their principal nursing position and holding a doctorate degree was an estimated $86,173.
***Other employment setting includes nurses for whom employment setting was not known.
--Too few cases to compute average salaries (fewer than 30 cases unweighted).

Table 33. Job satisfaction, by employment setting in principal nursing position: 2008

Level of job satisfaction	All settings*	Employment setting: Hospital	Nursing home/ extended care	Academic education program	Home health	Public/community health
Total	2,573,723	1,601,831	135,514	98,268	165,697	97,210
Extremely satisfied	29.2	25.9	26.0	34.4	32.5	31.8
Moderately satisfied	51.8	53.9	48.5	52.2	50.3	49.5
Neither satisfied nor dissatisfied	7.8	8.3	8.6	6.0	6.9	7.4
Moderately dissatisfied	8.6	9.3	12.1	6.1	7.7	7.9
Extremely dissatisfied	2.5	2.5	4.8	--	2.6	--

Level of job satisfaction	Employment setting: School health service	Occupational health	Ambulatory care	Insurance claims/benefits	Other
Total	84,418	18,840	270,556	49,441	51,947
Extremely satisfied	39.7	37.8	38.5	38.4	39.3
Moderately satisfied	48.2	49.8	47.0	42.4	42.9
Neither satisfied nor dissatisfied	6.2	--	5.8	10.1	8.6
Moderately dissatisfied	4.6	--	7.0	6.4	6.8
Extremely dissatisfied	--	--	1.6	--	--

*Includes an estimated 22,875 RNs for whom employment setting was not known.
--Too few cases to report estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 34. Job satisfaction, by job title in principal nursing position: 2008

Level of job satisfaction (percent)	Total estimated number*	Job title: Staff nurse	Management/ administration	Certified registered nurse anesthetist	Clinical nurse specialist	Nurse midwife	Nurse practitioner
Total	2,580,201	1,711,271	322,790	29,538	22,070	6,455	98,487
Extremely satisfied	29.3	25.3	36.5	52.0	37.8	41.1	40.9
Moderately satisfied	51.8	53.8	46.9	42.0	51.3	52.5	48.8
Neither satisfied nor dissatisfied	7.8	8.9	5.5	--	--	--	3.8
Moderately dissatisfied	8.6	9.4	8.3	--	--	--	5.0
Extremely dissatisfied	2.5	2.6	2.7	--	--	--	--

Level of job satisfaction (percent)	Job title: Patient educator	Instruction	Patient coordinator	Informatics nurse	Consultant	Researcher	Surveyor/ auditor	Other
Total	18,405	94,946	140,060	8,952	23,115	17,136	10,652	76,323
Extremely satisfied	48.5	37.8	31.3	49.7	41.3	29.7	39.2	37.1
Moderately satisfied	41.0	52.6	50.9	30.7	44.4	55.6	42.4	43.7
Neither satisfied nor dissatisfied	--	2.9	7.5	--	--	--	--	8.7
Moderately dissatisfied	--	5.4	8.0	--	--	--	--	7.7
Extremely dissatisfied	--	--	2.3	--	--	--	--	--

*Includes an estimated 16,397 RNs for whom job title was not known.
--Too few cases to report estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 35. Job satisfaction of registered nurses employed in nursing, by age group: 2008

Age group	Total estimated percent	Estimated percent extremely satisfied	Estimated percent moderately satisfied	Estimated percent neither satisfied nor dissatisfied	Estimated percent moderately dissatisfied	Estimated percent extremely dissatisfied
Total	2,596,599	761,178	1,344,064	202,618	224,573	64,165
Less than 25	100.0	18.6	59.9	9.9	9.8	--
25-29	100.0	22.1	56.1	11.1	9.1	1.5
30-34	100.0	22.2	56.8	9.1	9.3	2.6
35-39	100.0	25.7	55.5	8.5	8.0	2.3
40-44	100.0	25.2	54.0	8.5	9.7	2.7
45-49	100.0	30.2	50.2	7.1	9.6	2.9
50-54	100.0	31.4	50.6	6.8	8.9	2.3
55-59	100.0	34.3	47.7	6.7	8.3	3.0
60-64	100.0	37.8	46.7	6.3	6.8	2.5
65-69	100.0	46.8	42.5	5.4	3.8	--
70-74	100.0	57.2	29.6	--	--	--
75 and over	100.0	54.7	38.1	--	--	--

--Too few cases to report estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 36. Job satisfaction of registered nurses employed in nursing, by highest nursing or nursing-related education: 2008

Level of job satisfaction	Total*	Highest education preparation			
		Diploma	Associate degree	Bachelor's	Master's/doctorate
Total	2,593,301	315,071	973,815	966,974	337,441
Extremely satisfied	29.3	31.4	26.1	28.4	39.2
Moderately satisfied	51.8	51.9	51.9	52.9	48.1
Neither satisfied nor dissatisfied	7.8	6.9	8.9	8.1	4.5
Moderately dissatisfied	8.7	7.3	10.1	8.5	6.1
Extremely dissatisfied	2.5	2.5	3.0	2.1	2.0

*Includes an estimated 3,297 RNs for whom highest nursing or nursing-related education preparation was not known.
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 37. Employment status in 2007 by employment status in 2008: 2008

Employment status in 2008	Employment status in 2007											
	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	21,323	1,916,670	62.6	6,823	619,490	20.2	5,033	527,002	17.2
Employed in nursing full-time	21,307	1,937,405	100.0	19,453	1,753,305	90.5	778	69,166	3.6	1,076	114,934	5.9
Employed in nursing part-time	7,247	659,194	100.0	1,255	110,737	16.8	5,625	513,551	77.9	367	34,905	5.3
Not employed in nursing	4,625	466,564	100.0	615	52,628	11.3	420	36,773	7.9	3,590	377,163	80.8

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 38. Employment setting in 2007 by employment setting in 2008: 2008

				Employment setting in 2007								
Employment setting in 2008	Number in sample	Total estimated number*	Total estimated percent	Hospital	Nursing home/ extended care	Academic education	Home health	Public/ community health**	Ambulatory care	Other***	Not employed	New graduate
Total	33,179	3,063,162	100.0	58.9	5.2	3.5	5.9	7.2	9.8	3.7	2.8	2.9
Hospital	16,957	1,601,831	100.0	90.8	0.6	0.2	0.4	0.3	0.7	0.2	2.4	4.3
Nursing home/extended care	1,636	135,514	100.0	5.5	85.3	--	1.5	--	--	--	3.1	--
Academic education	1,137	98,268	100.0	4.9	--	85.8	--	--	--	--	4.4	--
Home health	1,828	165,697	100.0	7.9	--	--	82.5	--	--	--	3.4	--
Public/community health**	2,273	200,469	100.0	4.4	--	--	--	86.4	2.2	--	4.3	--
Ambulatory care	2,904	270,556	100.0	8.2	--	--	--	0.7	85.5	--	2.5	--
Other***	1,552	101,388	100.0	6.4	--	--	--	--	--	85.5	4.2	--
Not employed in nursing	4,625	466,564	100.0	9.5	1.4	1.6	2.3	2.2	1.2	1.0	79.9	--

*Includes an estimated 22,875 RNs whose employment setting was not known for 2008 and an estimated 16,295 RNs for whom employment setting was not known for 2007.
**Public/community health setting includes school health and occupational health.
***Other includes insurance, benefits, and utilization review.
--Too few cases to report estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 39. Reasons for employer or position change among registered nurses employed in nursing in 2007 and 2008: 2008

Reasons for employer or position change	Number in sample	Estimated number	Estimated percent
Total	5,670	473,248	100.0
Relocated to different area	1059	70,427	14.9
Personal/family reasons	882	72,756	15.4
Disability	89	6,265	1.3
Illness	103	7,837	1.7
Interested in another position/job	1618	139,413	29.5
Opportunity to do the nursing that I like	634	54,987	11.6
Went back to school	211	20,524	4.3
Burnout	881	78,617	16.6
Stressful work environment	1599	140,013	29.6
Lack of advancement opportunities	696	59,613	12.6
Lack of collaboration/communication	696	61,934	13.1
Lack of good management/leadership	1511	131,686	27.8
Career advancement/promotion	862	83,094	17.6
Inadequate staffing	1029	94,941	20.1
Interpersonal differences with colleagues	579	49,070	10.4
Physical demands of job	507	44,958	9.5
Pay/benefits better	1057	90,955	19.2
Scheduling/inconvenient hours/too many hours	909	82,614	17.5
Reorganization that shifted positions	244	21,029	4.4
Laid off/downsizing/contract	295	23,019	4.9
Sign-on bonus offered	98	8,947	1.9
Retired	238	20,814	4.4
Other	15	--	--
Summary of reasons for employment change			
Personal/family reasons	1877	139,360	29.4
Personal career reasons	2,067	177,651	37.5
Workplace reasons	3,963	346,179	73.1

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers and percents may not add up to totals because registered nurses may have answered to more than one reason.

Table 40. Reasons for registered nurses to have occupation other than nursing: 2008

Reasons for other occupation	Number in sample*	Estimated number	Estimated percent
Total	1,112	111,062	100.0
Retired	94	8,966	8.1
Taking care of home and family	237	23,422	21.1
Burnout	175	17,122	15.4
Stressful work environment	251	24,694	22.2
Scheduling/inconvenient hours/too many hours	293	29,918	26.9
Physical demands of job	158	15,246	13.7
Disability/Illness	45	5,091	4.6
Inadequate staffing	221	22,726	20.5
Salaries too low/better pay elsewhere	248	24,291	21.9
Skills are out of date	141	13,956	12.6
Liability concerns	94	9,265	8.3
Lack of collaboration/communication	111	11,348	10.2
Inability to practice nursing on professional level	60	6,318	5.7
Lack of advancement opportunities	96	9,186	8.3
Lack of good management/leadership	147	14,747	13.3
Career change	526	53,201	47.9
Difficult to find nursing position	33	3,924	3.5
Went back to school	57	5,369	4.8
Other**	50	4,442	4.0
Summary of reasons for other occupations			
Personal/family reasons	286	28,783	25.9
Personal career reasons	704	71,722	64.6
Workplace reasons	594	59,418	53.5
Retirement reasons	94	8,966	8.1

*The number in sample excludes RNs who are employed in nursing, but have additional employment outside of nursing.

**Other includes travel, volunteering in nursing, and other reasons.

NOTE: Estimated numbers and percents may not add up to totals because registered nurses may have answered to more than one reason.

Table 41. Type of employment of registered nurses who are in non-nursing occupations and not employed in nursing: 2008

Type of non-nursing employment	Number in sample	Estimated number*	Estimated percent
Total	1,112	111,062	100.0
Health-related occupation	605	60,716	54.7
Full-time	434	44,770	40.3
Part-time	171	15,947	14.4
Not health-related occupation	507	50,346	45.3
Full-time	252	25,488	22.9
Part-time	255	24,858	22.4

*Includes an estimated 5,073 RNs who are employed in non-nursing and are actively seeking nursing employment. Excludes an estimated 97,365 RNs who are employed in nursing and have other employment in non-nursing.
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 42. Detailed type of employment of registered nurses who are in non-nursing occupations and not employed in nursing: 2008

Type of non-nursing employment	Number in sample*	Total estimated number	Total estimated percent	Type of position outside of nursing: Estimated number health-related	Estimated percent health-related	Estimated number not health-related	Estimated percent not health-related
Total	1,112	111,062	100.0	60,716	100.0	50,346	100.0
Health-related services, outside nursing	354	34,891	31.4	31,892	52.5	--	--
Retail sales/services and food services	160	16,040	14.4	--	--	14,587	29.0
Education (elementary and secondary)	120	11,517	10.4	2,789	4.6	8,728	17.3
Administration/HR/consulting organization/legal	92	9,767	8.8	5,960	9.8	3,806	7.6
Pharmaceutical/biotechnology/medical equipment	89	9,955	9.0	9,563	15.8	--	--
Financial/accounting/insurance services	68	6,931	6.2	--	--	4,794	9.5
Computer services	49	4,768	4.3	3,659	6.0	--	--
Government	38	3,300	3.0	--	--	--	--
Real estate	33	3,241	2.9	--	--	3,241	6.4
Other**	109	10,652	9.6	--	--	8,991	17.9

*The number in sample excludes RNs who are employed in nursing, but have other employment outside of nursing.

**Other includes agriculture/farming/ranching, fine arts/performing arts, emergency response, fitness/sport, religious organizations, etc.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 43. Job title of registered nurses who are in non-nursing occupations and not employed in nursing: 2008

Job title of non-nursing occupation	Number in sample*	Total estimated number	Total estimated percent	Type of position outside of nursing: Estimated number health-related	Estimated percent health-related	Estimated number not health-related	Estimated percent not health-related
Total	1,112	111,062	100.0	60,716	100.0	50,346	100.0
Management	247	25,892	23.3	19,594	32.3	6,299	12.5
Business owner/proprietor	188	17,914	16.1	4,807	7.9	13,107	26.0
Administrative/clerical support	171	17,410	15.7	9,145	15.1	8,265	16.4
Instructor/professor	130	12,527	11.3	4,899	8.1	7,629	15.2
Consultant	116	11,761	10.6	8,839	14.6	2,921	5.8
Sales	111	11,695	10.5	4,622	7.6	7,073	14.0
Health practitioner	54	5,094	4.6	4,254	7.0	--	--
Other**	95	8,770	7.9	4,557	7.5	4,212	8.4

*The number in sample excludes RNs who are employed in nursing, but have other employment outside of nursing.
**Other includes such job titles as emergency response, clinical research, construction, clergy, chef, IT, etc.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 44. Advanced practice registered nurses, by employment status: 2008

Advanced practice preparation combinations	Total number in sample	Total estimated number*	Total estimated percent	Estimated number employed in nursing	Estimated percent employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total nurses with advanced practice preparation	2,897	250,527	100.0	220,494	100.0	30,033	100.0
Nurse anesthetists only	489	33,950	13.6	30,997	14.1	2,953	9.8
Clinical nurse specialists only	509	42,414	16.9	34,987	15.9	7,427	24.7
Nurse practitioners only	1,495	138,558	55.3	123,759	56.1	14,799	49.3
Nurse practitioners/ clinical nurse specialists	186	16,370	6.5	14,427	6.5	--	--
Nurse midwives only	169	15,327	6.1	12,737	5.8	--	--
Nurse midwives/ nurse practitioners	30	2,764	1.1	--	--	--	--

*Total includes an estimated 1,144 RNs with combinations of advanced practice preparation other than those listed in the table.

Table 45. Advanced practice registered nurses and job title, by national certification and State Board recognition: 2008

Type of advanced practice nurse and employment status	Total estimated number*	Employed in nursing					
		Estimated number employed in nursing*	National certification or State Board recognition	Estimated number national certification	National certification required for job	Estimated number State Board recognition	State Board recognition required for job
Total	250,527	220,494	194,661	177,190	126,050	176,783	142,228
Clinical nurse specialists	59,242	49,792	27,205	19,786	7,814	20,699	9,763
With position title		9,327	7,962	6,409	3,881	6,610	5,338
Without position title		40,466	19,243	13,377	3,933	14,089	4,424
Nurse practitioners	158,348	141,286	131,612	118,462	84,778	124,487	103,095
With position title		97,876	97,463	91,518	72,417	93,320	86,621
Without position title		43,410	34,149	26,944	12,361	31,167	16,473
Nurse anesthetists**	34,821	31,868	31,636	31,636	28,360	28,593	25,589
With position title		29,429	29,429	29,429	27,252	26,699	24,462
Nurse midwives	18,492	15,581	14,256	13,983	8,097	10,913	7,841
With position title		6,455	6,455	6,455	5,926	6,287	5,775
Without position title		9,126	7,801	7,527	--	4,626	--

*Estimated numbers of individual specialties of advanced practice registered nurses and their percents add to more than the total of RNs who have achieved advanced practice registered nurse status because registered nurses may have had preparation in more than one advanced practice specialty.

**Nurse anesthetists without position title are not reported due to too few cases (fewer than 30 cases unweighted).

--Too few cases to report estimated number (fewer than 30 cases unweighted).

Table 46. Advanced practice study focus: 2008

Advanced practice study focus	All advanced practice RNs			Nurse practitioners**		Clinical nurse specialists**	
	Number in sample	Estimated number*	Estimated percent	Estimated number*	Estimated percent	Estimated number*	Estimated percent
Total number of advanced practice registered nurses	2,897	250,527	100.0	158,348	100.0	59,242	100.0
Acute care	239	21,723	8.7	11,406	7.2	7,488	12.6
Adult health	577	54,617	21.8	40,715	25.7	15,625	26.4
Anesthesia	475	33,302	13.3	--	--	--	--
Cardiac care	156	14,035	5.6	4,598	2.9	5,839	9.9
Community health	128	10,744	4.3	5,970	3.8	4,192	7.1
Critical care	159	13,779	5.5	3,359	2.1	6,440	10.9
Family care	810	68,949	27.5	66,377	41.9	4,249	7.2
General medical surgical	160	13,988	5.6	4,623	2.9	5,672	9.6
Geriatrics/gerontology	241	21,535	8.6	12,540	7.9	6,768	11.4
Maternal-child health	196	16,089	6.4	6,402	4.0	4,363	7.4
Neonatal	124	11,230	4.5	5,334	3.4	--	--
Nurse-midwifery	160	14,228	5.7	--	--	--	--
Obstetrics/gynecology	249	22,483	9.0	11,333	7.2	--	--
Oncology	67	6,550	2.6	--	--	3,929	6.6
Pediatrics	340	32,194	12.9	24,773	15.6	5,152	8.7
Psychiatric/mental health	273	22,471	9.0	10,792	6.8	14,265	24.1
Women's health	297	25,393	10.1	19,436	12.3	--	--
Other***	161	14,436	5.8	6,755	4.3	5,919	10.0

*The number of advanced practice study foci will exceed the total number of advanced practice registered nurses because each APRN may have more than one focus.

**Nurse practitioners and clinical nurse specialists represent subsets of the total of all advanced practice registered nurses. These subset groups are not mutually exclusive. An APRN who reported being trained as both nurse practitioner and clinical nurse specialist will be counted in both sets of columns.

***Other advanced practice study foci include home health, occupational health, palliative care, rehabilitation, school health, and others.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 47. Certifications in advanced practice registered nursing: 2008

Type of certification	Advanced practice registered nurses with certification		
	Number in sample*	Estimated number	Estimated percent
Total number of advanced practice registered nurses	2,953	254,711	100.0
Acute care/critical care	74	6,624	2.6
Adult	284	27,113	10.6
Anesthesia	389	26,941	10.6
Family	645	52,039	20.4
Gerontological	54	4,963	1.9
Midwifery	110	9,427	3.7
Neonatal	38	3,521	1.4
Pediatric	143	13,373	5.3
Psychiatric/mental health	147	11,163	4.4
Women's health care	141	13,198	5.2
Other	87	7,133	2.8

*Advanced practice registered nurses may have completed educational requirements or certification in one or more specialties in advanced practice nursing. If specialty education certifications were received across disciplines, both specialty subjects are included in these distributions.
NOTE: Estimated numbers may not equal totals because of rounding, and percents will not total 100 because advanced practice registered nurses may not have reported a certification or may have reported multiple certifications.

Table 48. Age distribution of registered nurses not employed in nursing, by length of time not working in nursing: 2008

Age groups	Number in sample	Total estimated number*	Estimated number up to 5 years not working in nursing	Estimated percent up to 5 years not working in nursing	Estimated number 6-10 years not working in nursing	Estimated percent 6-10 years not working in nursing	Estimated number 11-15 years not working in nursing	Estimated percent 11-15 years not working in nursing	Estimated number 16 or more years not working in nursing	Estimated percent 16 or more years not working in nursing
Total	4,071	415,450	230,432	100.0	87,496	100.0	44,814	100.0	47,733	100.0
Less than 30	77	7,511	6,302	2.7	--	--	--	--	--	--
30-39	376	43,488	31,189	13.5	8,499	9.7	--	--	--	--
40-44	267	28,883	15,551	6.7	8,943	10.2	3,142	7.0	--	--
45-49	349	36,875	17,433	7.6	8,976	10.3	5,664	12.6	4,748	9.9
50-54	558	54,778	23,626	10.3	11,077	12.7	7,904	17.6	11,594	24.3
55-59	572	52,897	30,710	13.3	9,513	10.9	4,655	10.4	7,580	15.9
60-64	718	69,001	42,571	18.5	11,677	13.3	6,298	14.1	8,164	17.1
65-69	667	67,573	39,142	17.0	15,121	17.3	6,586	14.7	6,261	13.1
70-74	302	32,962	14,949	6.5	9,387	10.7	5,351	11.9	--	--
75 and over	185	21,482	8,961	3.9	4,152	4.7	3,778	8.4	4,592	9.6

*Includes an estimated 4,975 licensed registered nurses who never worked in nursing.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 49. Age and presence of children, by employment status in principal nursing position: 2008

Age and presence of children	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	21,307	1,937,405	63.2	7,247	659,194	21.5	4,625	466,564	15.2
Less than 40 years old	8,522	902,155	100.0	6,108	644,826	71.5	1,802	190,941	21.2	612	66,388	7.4
Children under 6 only	2,249	243,121	100.0	1,333	143,139	58.9	708	77,565	31.9	208	22,417	9.2
Children 6-18 only	1,980	212,340	100.0	1,482	158,906	74.8	377	39,674	18.7	121	13,761	6.5
Children in both age groups	1,423	149,485	100.0	863	91,462	61.2	421	43,229	28.9	139	14,794	9.9
No children	2,870	297,209	100.0	2,430	251,319	84.6	296	30,474	10.3	144	15,416	5.2
40-49 years old	8,386	791,932	100.0	5,805	537,400	67.9	1,821	174,519	22.0	760	80,013	10.1
Children under 6 only	318	30,981	100.0	194	18,330	59.2	79	7,229	23.3	45	5,423	17.5
Children 6-18 only	4,386	428,646	100.0	2,843	272,088	63.5	1,146	113,919	26.6	397	42,639	9.9
Children in both age groups	414	38,151	100.0	238	20,520	53.8	114	10,801	28.3	62	6,830	17.9
No children	3,268	294,154	100.0	2,530	226,462	77.0	482	42,570	14.5	256	25,122	8.5
50 years and older	16,271	1,369,074	100.0	9,394	755,179	55.2	3,624	293,734	21.5	3,253	320,162	23.4
Children under 6 only	145	13,006	100.0	101	9,121	70.1	19	--	--	25	--	--
Children 6-18 only	2,026	174,062	100.0	1,283	105,956	60.9	492	41,532	23.9	251	26,574	15.3
Children in both age groups	81	7,771	100.0	54	4,937	63.5	13	--	--	14	--	--
No children	14,019	1,174,235	100.0	7,956	635,165	54.1	3,100	249,822	21.3	2,963	289,248	24.6

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 50. Resident State in 2007 and 2008, by age group: 2008

Age group	Number in sample	Total estimated number	Total estimated percent	Estimated number resident State same in 2007 and 2008	Estimated percent resident State same in 2007 and 2008	Estimated number resident State different in 2007 and 2008*	Estimated percent resident State different in 2007 and 2008*
Total	33,179	3,063,162	100.0	2,965,809	96.8	97,353	3.2
Less than 25	730	79,641	100.0	71,838	90.2	7,803	9.8
25-29	1,966	208,543	100.0	192,028	92.1	16,515	7.9
30-34	2,677	281,999	100.0	267,969	95.0	14,030	5.0
35-39	3,149	331,972	100.0	319,042	96.1	12,930	3.9
40-44	3,623	350,101	100.0	340,459	97.2	9,642	2.8
45-49	4,763	441,831	100.0	433,489	98.1	8,342	1.9
50-54	6,035	495,985	100.0	486,055	98.0	9,930	2.0
55-59	4,858	396,967	100.0	387,513	97.6	9,454	2.4
60-64	2,995	249,533	100.0	243,671	97.7	5,862	2.3
65-69	1,509	140,263	100.0	138,174	98.5	2,089	1.5
70-74	562	53,670	100.0	52,979	98.7	--	--
75 and over	312	32,657	100.0	32,591	99.8	--	--

*Resident State different includes cases where either 2007 or 2008 residence was a foreign country or a U.S. territory.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 51. Registered nurses not employed in nursing and length of time since last worked as a nurse, by whether or not registered nurse was seeking nursing position or had other occupation outside of nursing: 2008

Length of time since worked	Number in sample	Total estimated number*	Total estimated percent	Estimated number seeking nursing employment	Estimated percent seeking nursing employment	Estimated number with health-related employment	Estimated percent with health-related employment	Estimated number with nonhealth-related employment	Estimated percent with nonhealth-related employment
Total	4,071	415,450	100.0	22,770	100.0	57,983	100.0	45,824	100.0
Less than 1 year	517	46,204	11.1	6,582	28.9	5,324	9.2	3,744	8.2
1-4 years	1,692	163,595	39.4	8,320	36.5	16,827	29.0	12,345	26.9
5-9 years	776	83,417	20.1	3,344	14.7	12,524	21.6	11,935	26.0
10-19 years	738	84,677	20.4	--	--	15,577	26.9	10,122	22.1
20 years or more	313	32,583	7.8	--	--	6,451	11.1	6,642	14.5

*Includes an estimated 4,975 licensed registered nurses who never worked in nursing. Also includes an estimated 2,147 registered nurses who were seeking nursing employment while employed in a non-nursing, health-related occupation, and an estimated 2,926 registered nurses who were seeking nursing employment while employed in a nonhealth-related occupation.

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 52. Registered nurses not employed in nursing and actively seeking nursing employment, by type of employment sought and number of months looking: 2008

Type of employment sought and months looking	Number in sample	Total estimated number*	Total estimated percent
Total	231	22,770	100.0
Type of employment			
Full-time	60	5878	25.8
Part-time	94	8,950	39.3
Either	77	7,943	34.9
Number of months looking			
Up to 1 month	96	8,608	37.8
2-3 months	40	3,750	16.5
4-9 months	66	7,206	31.6
More than 9 months	29	--	--

*Of the estimated 22,770 RNs not employed in nursing and actively seeking nursing employment, and an estimated 5,073 were employed in non-nursing occupations and an estimated 17,697 were not employed for pay in any occupation.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 53. Age and caring for adults at home or others elsewhere, by employment status in principal nursing position: 2008

Age and presence of adults and dependents	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	21,307	1,937,405	63.2	7,247	659,194	21.5	4,625	466,564	15.2
Less than 50 years old	16,908	1,694,088	100.0	11,913	1,182,226	69.8	3,623	365,460	21.6	1,372	146,402	8.6
Adult dependents at home	1,745	183,626	100.0	1,325	139,417	75.9	284	30,034	16.4	136	14,175	7.7
Other dependents living elsewhere	1,657	164,062	100.0	1,177	113,370	69.1	326	33,589	20.5	154	17,103	10.4
Both adults at home and others living elsewhere	390	38,298	100.0	296	29,033	75.8	76	7,555	19.7	18	--	--
No adult dependents	13,116	1,308,102	100.0	9,115	900,407	68.8	2,937	294,282	22.5	1,064	113,413	8.7
50-59 years old	10,893	892,952	100.0	7,416	596,847	66.8	2,186	174,919	19.6	1,291	121,186	13.6
Adult dependents at home	1,741	154,432	100.0	1,228	107,568	69.7	313	27,071	17.5	200	19,793	12.8
Other dependents living elsewhere	1,900	159,702	100.0	1,268	104,286	65.3	394	32,938	20.6	238	22,478	14.1
Both adults at home and others living elsewhere	537	45,880	100.0	374	31,906	69.5	100	7,798	17.0	63	6,177	13.5
No adult dependents	6,715	532,937	100.0	4,546	353,087	66.3	1,379	107,113	20.1	790	72,738	13.6
60 years and older	5,378	476,123	100.0	1,978	158,332	33.3	1,438	118,815	25.0	1,962	198,976	41.8
Adult dependents at home	563	49,720	100.0	254	20,725	41.7	121	9,663	19.4	188	19,332	38.9
Other dependents living elsewhere	583	51,510	100.0	229	17,486	33.9	148	12,137	23.6	206	21,886	42.5
Both adults at home and others living elsewhere	96	8,538	100.0	38	2,770	32.4	20	--	--	38	4,149	48.6
No adult dependents	4,136	366,355	100.0	1,457	117,351	32.0	1,149	95,396	26.0	1,530	153,608	41.9

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 54. Marital status and presence of children, by employment status in principal nursing position: 2008

Marital status and presence of children	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Married/domestic partnership	24,380	2,259,553	73.8	15,020	1,368,085	70.6	5,926	543,404	82.4	3,434	348,065	74.6
Children under 6 only	2,464	261,699	8.5	1,434	151,025	7.8	771	82,475	12.5	259	28,199	6.0
Children 6-18 only	6,932	670,920	21.9	4,441	422,643	21.8	1,826	176,325	26.7	665	71,952	15.4
Children in both age groups	1,735	177,082	5.8	1,016	103,650	5.3	519	51,645	7.8	200	21,787	4.7
No children	13,249	1,149,853	37.5	8,129	690,767	35.7	2,810	232,959	35.3	2,310	226,127	48.5
Widowed/separated/divorced	5,854	515,455	16.8	3,993	344,117	17.8	957	82,303	12.5	904	89,035	19.1
Children under 6 only	163	15,587	0.5	122	11,205	0.6	26	--	--	15	--	--
Children 6-18 only	1,221	118,390	3.9	961	91,771	4.7	169	16,883	2.6	91	9,736	2.1
Children in both age groups	157	15,651	0.5	118	11,215	0.6	26	--	--	13	--	--
No children	4,313	365,827	11.9	2,792	229,926	11.9	736	59,704	9.1	785	76,196	16.3
Never married	2,945	288,153	9.4	2,294	225,203	11.6	364	33,486	5.1	287	29,464	6.3
Children under 6 only	85	9,822	0.3	72	8,360	0.4	9	--	--	4	--	--
Children 6-18 only	239	25,738	0.8	206	22,535	1.2	20	--	--	13	--	--
Children in both age groups	26	--	--	21	--	--	3	--	--	2	--	--
No children	2,595	249,918	8.2	1,995	192,252	9.9	332	30,202	4.6	268	27,464	5.9

-- Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 55. Marital status and caring for adults at home or others elsewhere, by employment status in principal nursing position: 2008

Marital status and caring for adults at home or others elsewhere	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	21,307	1,937,405	100.0	7,247	659,194	100.0	4,625	466,564	100.0
Marital status/presence of adults												
Married or in domestic partnership	24,380	2,259,553	73.8	15,020	1,368,085	70.6	5,926	543,404	82.4	3,434	348,065	74.6
Adult dependents at home	3,596	338,937	11.1	2,414	225,503	11.6	720	65,619	10.0	462	47,815	10.2
No adult dependents at home	20,784	1,920,616	62.7	12,606	1,142,582	59.0	5,206	477,785	72.5	2,972	300,249	64.4
Widowed/separated/divorced	5,854	515,455	16.8	3,993	344,117	17.8	957	82,303	12.5	904	89,035	19.1
Adult dependents at home	1,073	96,929	3.2	805	72,170	3.7	135	12,430	1.9	133	12,329	2.6
No adult dependents at home	4,781	418,526	13.7	3,188	271,948	14.0	822	69,873	10.6	771	76,706	16.4
Never married	2,945	288,153	9.4	2,294	225,203	11.6	364	33,486	5.1	287	29,464	6.3
Adult dependents at home	403	44,629	1.5	296	33,746	1.7	59	5,690	0.9	48	5,192	1.1
No adult dependents at home	2,542	243,525	8.0	1,998	191,457	9.9	305	27,796	4.2	239	24,272	5.2
Marital status/care for others living elsewhere												
Married or in domestic partnership	24,380	2,259,553	73.8	15,020	1,368,085	70.6	5,926	543,404	82.4	3,434	348,065	74.6
Other dependents living elsewhere	4,028	367,445	12.0	2,525	224,110	11.6	919	82,252	12.5	584	61,083	13.1
No other dependents elsewhere	20,352	1,892,109	61.8	12,495	1,143,975	59.0	5,007	461,151	70.0	2,850	286,982	61.5
Widowed/separated/divorced	5,854	515,455	16.8	3,993	344,117	17.8	957	82,303	12.5	904	89,035	19.1
Other dependents living elsewhere	952	81,603	2.7	711	60,183	3.1	121	10,945	1.7	120	10,475	2.2
No other dependents elsewhere	4,902	433,853	14.2	3,282	283,935	14.7	836	71,358	10.8	784	78,560	16.8
Never married	2,945	288,153	9.4	2,294	225,203	11.6	364	33,486	5.1	287	29,464	6.3
Other dependents living elsewhere	183	18,942	0.6	146	14,558	0.8	24	--	--	13	--	--
No other dependents elsewhere	2,762	269,211	8.8	2,148	210,644	10.9	340	31,049	4.7	274	27,518	5.9

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 56. Household income and marital status, by employment status in principal nursing position: 2008

Marital status and household income	Total number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing full-time	Estimated number employed in nursing full-time	Estimated percent employed in nursing full-time	Number in sample employed in nursing part-time	Estimated number employed in nursing part-time	Estimated percent employed in nursing part-time	Number in sample not employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing
Total	33,179	3,063,162	100.0	21,307	1,937,405	100.0	7,247	659,194	100.0	4,625	466,564	100.0
$ 15,000 or less	260	25,673	0.8	3	--	--	76	7,162	1.1	181	18,118	3.9
$ 15,001 - $ 25,000	382	35,099	1.1	21	--	--	112	9,326	1.4	249	24,436	5.2
$ 25,001 - $ 35,000	768	71,485	2.3	119	9,925	0.5	246	21,801	3.3	403	39,760	8.5
$ 35,001 - $ 50,000	2,754	250,131	8.2	1,375	123,373	6.4	751	64,691	9.8	628	62,067	13.3
$ 50,001 - $ 75,000	7,796	705,874	23.0	5,363	480,099	24.8	1,523	133,354	20.2	910	92,422	19.8
$ 75,001 - $100,000	8,188	747,704	24.4	5,764	522,626	27.0	1,682	153,799	23.3	742	71,279	15.3
$100,001 - $150,000	8,386	786,510	25.7	5,861	542,026	28.0	1,797	169,533	25.7	728	74,951	16.1
$150,001 - $200,000	2,787	266,890	8.7	1,848	172,746	8.9	575	55,748	8.5	364	38,396	8.2
More than $200,000	1,858	173,795	5.7	953	84,880	4.4	485	43,781	6.6	420	45,134	9.7
Married	24,380	2,259,553	100.0	15,020	1,368,085	100.0	5,926	543,404	100.0	3,434	348,065	100.0
$ 15,000 or less	92	8,369	0.4	2	--	--	31	2,392	0.4	59	5,596	1.6
$ 15,001 - $ 25,000	109	9,688	0.4	6	--	--	37	3,201	0.6	66	6,263	1.8
$ 25,001 - $ 35,000	334	31,673	1.4	37	2,526	0.2	102	9,709	1.8	195	19,438	5.6
$ 35,001 - $ 50,000	1,249	111,828	4.9	460	39,381	2.9	402	34,147	6.3	387	38,300	11.0
$ 50,001 - $ 75,000	4,427	404,574	17.9	2,620	237,795	17.4	1,121	97,695	18.0	686	69,084	19.8
$ 75,001 - $100,000	6,291	574,884	25.4	4,159	376,732	27.5	1,500	137,232	25.3	632	60,920	17.5
$100,001 - $150,000	7,510	702,926	31.1	5,137	472,550	34.5	1,712	162,104	29.8	661	68,272	19.6
$150,001 - $200,000	2,597	248,852	11.0	1,699	158,186	11.6	551	53,790	9.9	347	36,877	10.6
More than $200,000	1,771	166,759	7.4	900	80,312	5.9	470	43,134	7.9	401	43,314	12.4

--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 57. Registered nurses in each State and geographic area, by activity status: 2008

State and geographic area	Number in sample	Total estimated number	Estimated number employed in nursing	Estimated percent employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing	Employed nurses per 100,000*	State licensure rate, per 100,000*
United States	33,179	3,063,162	2,596,599	84.8	466,564	15.2	854	1,007
New England	3,614	187,542	161,627	86.2	25,915	13.8	1,130	1,311
Connecticut	584	42,215	35,343	83.7	6,871	16.3	1,009	1,206
Maine	517	19,249	16,279	84.6	2,971	15.4	1,237	1,462
Massachusetts	868	89,434	77,574	86.7	11,860	13.3	1,194	1,376
New Hampshire	628	15,468	13,562	87.7	1,906	12.3	1,031	1,176
Rhode Island	494	12,887	11,531	89.5	1,356	10.5	1,097	1,226
Vermont	523	8,290	7,338	88.5	951	11.5	1,181	1,334
Middle Atlantic	3,178	462,263	377,938	81.8	84,325	18.2	930	1,138
New Jersey	745	89,314	73,634	82.4	15,679	17.6	848	1,029
New York	1,246	203,597	167,427	82.2	36,170	17.8	859	1,045
Pennsylvania	1,187	169,352	136,876	80.8	32,476	19.2	1,100	1,360
South Atlantic	6,604	576,337	481,050	83.5	95,287	16.5	824	987
Delaware	605	10,547	9,169	86.9	1,377	13.1	1,050	1,208
District of Columbia	434	11,487	11,053	96.2	--	--	1,868	1,941
Florida	1,227	186,349	150,321	80.7	36,027	19.3	820	1,017
Georgia	634	84,489	68,254	80.8	16,235	19.2	705	872
Maryland	848	55,276	50,159	90.7	5,117	9.3	890	981
North Carolina	825	96,864	82,104	84.8	14,760	15.2	890	1,050
South Carolina	469	41,371	37,472	90.6	3,899	9.4	836	923
Virginia	1,077	70,499	54,988	78.0	15,511	22.0	708	907
West Virginia	485	19,456	17,529	90.1	1,927	9.9	966	1,072
East South Central	1,987	195,713	171,020	87.4	24,693	12.6	946	1,082
Alabama	534	49,780	41,488	83.3	8,291	16.7	890	1,068
Kentucky	487	46,473	41,520	89.3	4,953	10.7	973	1,089
Mississippi	430	30,801	27,414	89.0	3,387	11.0	933	1,048
Tennessee	536	68,660	60,598	88.3	8,063	11.7	975	1,105
West South Central	2,697	290,304	249,889	86.1	40,415	13.9	709	824
Arkansas	503	26,096	22,443	86.0	3,653	14.0	786	914
Louisiana	491	41,863	36,859	88.0	5,004	12.0	836	949
Oklahoma	490	32,522	27,256	83.8	5,266	16.2	748	893
Texas	1,213	189,823	163,331	86.0	26,492	14.0	671	780

Footnotes at end of table.

Table 57. Registered nurses in each State and geographic area, by activity status: 2008 (continued)

State and geographic area	Number in sample	Total estimated number	Estimated number employed in nursing	Estimated percent employed in nursing	Estimated number not employed in nursing	Estimated percent not employed in nursing	Employed nurses per 100,000*	State licensure rate, per 100,000*
East North Central	3,882	516,080	435,942	84.5	80,138	15.5	940	1,112
Illinois	922	136,213	111,939	82.2	24,275	17.8	868	1,056
Indiana	579	69,672	58,089	83.4	11,584	16.6	911	1,093
Michigan	733	105,222	88,449	84.1	16,773	15.9	884	1,052
Ohio	1,032	138,743	120,642	87.0	18,100	13.0	1,050	1,208
Wisconsin	616	66,229	56,823	85.8	9,407	14.2	1,010	1,177
West North Central	3,814	251,281	221,392	88.1	29,889	11.9	1,098	1,246
Iowa	525	38,208	33,929	88.8	4,279	11.2	1,130	1,273
Kansas	553	32,165	27,032	84.0	5,134	16.0	965	1,148
Minnesota	650	67,551	58,391	86.4	9,160	13.6	1,119	1,294
Missouri	658	72,698	64,064	88.1	8,634	11.9	1,084	1,230
Nebraska	479	20,501	19,086	93.1	1,415	6.9	1,070	1,150
North Dakota	500	8,566	8,169	95.4	--	--	1,273	1,335
South Dakota	449	11,591	10,720	92.5	871	7.5	1,333	1,441
Mountain	3,780	187,159	161,591	86.3	25,568	13.7	742	859
Arizona	528	55,001	49,325	89.7	5,676	10.3	759	846
Colorado	668	47,805	39,461	82.5	8,344	17.5	799	968
Idaho	502	12,922	10,808	83.6	2,114	16.4	709	848
Montana	423	10,373	8,877	85.6	1,496	14.4	918	1,072
Nevada	454	17,902	16,069	89.8	1,833	10.2	618	688
New Mexico	345	18,949	16,240	85.7	2,709	14.3	818	955
Utah	487	19,200	16,364	85.2	2,835	14.8	598	702
Wyoming	373	5,008	4,446	88.8	561	11.2	835	940
Pacific	3,623	396,484	336,150	84.8	60,334	15.2	685	808
Alaska	450	5,883	5,247	89.2	636	10.8	765	857
California	1,541	277,575	234,530	84.5	43,045	15.5	638	755
Hawaii	363	12,061	10,195	84.5	1,866	15.5	791	936
Oregon	585	37,170	33,773	90.9	3,397	9.1	891	981
Washington	684	63,795	52,405	82.1	11,390	17.9	800	974

*Population data were based on July 1, 2008 estimates of resident population of States from Census Bureau Press Release NST-EST2008-01.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted)
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 58. State and geographic area of registered nurses, by employment status in principal nursing position: 2008

State and geographic area	Number in sample	Total estimated number employed	Total estimated percent employed	Estimated number employed full-time	Estimated percent employed full-time	Estimated number employed part-time	Estimated percent employed part-time	Estimated full-time equivalent*	Estimated full-time equivalent per 100,000**
United States	28,554	2,596,599	100.0	1,937,405	74.6	659,194	25.4	2,267,002	746
New England	3,198	161,627	100.0	108,388	67.1	53,239	32.9	135,007	944
Connecticut	487	35,343	100.0	23,616	66.8	11,727	33.2	29,480	842
Maine	444	16,279	100.0	11,667	71.7	4,612	28.3	13,973	1,061
Massachusetts	757	77,574	100.0	51,172	66.0	26,402	34.0	64,373	991
New Hampshire	586	13,562	100.0	9,791	72.2	3,771	27.8	11,676	887
Rhode Island	445	11,531	100.0	7,539	65.4	3,992	34.6	9,535	907
Vermont	479	7,338	100.0	4,603	62.7	2,735	37.3	5,971	961
Middle Atlantic	2,604	377,938	100.0	281,527	74.5	96,411	25.5	329,732	812
New Jersey	616	73,634	100.0	54,042	73.4	19,592	26.6	63,838	735
New York	1,016	167,427	100.0	130,502	77.9	36,925	22.1	148,964	764
Pennsylvania	972	136,876	100.0	96,982	70.9	39,894	29.1	116,929	939
South Atlantic	5,617	481,050	100.0	381,517	79.3	99,534	20.7	431,283	739
Delaware	556	9,169	100.0	6,999	76.3	2,170	23.7	8,084	926
District of Columbia	417	11,053	100.0	9,061	82.0	1,992	18.0	10,057	1,699
Florida	981	150,321	100.0	122,499	81.5	27,822	18.5	136,410	744
Georgia	520	68,254	100.0	53,873	78.9	14,381	21.1	61,063	630
Maryland	753	50,159	100.0	37,765	75.3	12,393	24.7	43,962	780
North Carolina	701	82,104	100.0	65,997	80.4	16,107	19.6	74,051	803
South Carolina	427	37,472	100.0	30,098	80.3	7,373	19.7	33,785	754
Virginia	825	54,988	100.0	41,911	76.2	13,077	23.8	48,450	624
West Virginia	437	17,529	100.0	13,312	75.9	4,217	24.1	15,421	850
East South Central	1,725	171,020	100.0	135,139	79.0	35,881	21.0	153,079	846
Alabama	448	41,488	100.0	33,559	80.9	7,929	19.1	37,524	805
Kentucky	431	41,520	100.0	31,939	76.9	9,581	23.1	36,730	860
Mississippi	380	27,414	100.0	23,434	85.5	3,980	14.5	25,424	865
Tennessee	466	60,597	100.0	46,207	76.3	14,391	23.7	53,402	859
West South Central	2,311	249,889	100.0	213,406	85.4	36,483	14.6	231,647	657
Arkansas	428	22,443	100.0	19,129	85.2	3,314	14.8	20,786	728
Louisiana	433	36,859	100.0	31,808	86.3	5,051	13.7	34,334	778
Oklahoma	410	27,256	100.0	23,008	84.4	4,248	15.6	25,132	690
Texas	1,040	163,331	100.0	139,461	85.4	23,870	14.6	151,396	622

Footnotes at end of table.

Table 58. State and geographic area of registered nurses, by employment status in principal nursing position: 2008 (continued)

State and geographic area	Number in sample	Total estimated number employed	Total estimated percent employed	Estimated number employed full-time	Estimated percent employed full-time	Estimated number employed part-time	Estimated percent employed part-time	Estimated full-time equivalent*	Estimated full-time equivalent per 100,000**
East North Central	3,280	435,942	100.0	309,693	71.0	126,249	29.0	372,817	804
Illinois	765	111,939	100.0	78,700	70.3	33,239	29.7	95,319	739
Indiana	484	58,089	100.0	42,207	72.7	15,881	27.3	50,148	786
Michigan	613	88,449	100.0	63,171	71.4	25,278	28.6	75,810	758
Ohio	895	120,642	100.0	87,280	72.3	33,363	27.7	103,961	905
Wisconsin	523	56,822	100.0	38,334	67.5	18,489	32.5	47,578	845
West North Central	3,410	221,392	100.0	155,961	70.4	65,431	29.6	188,677	936
Iowa	464	33,929	100.0	25,788	76.0	8,142	24.0	29,859	994
Kansas	469	27,032	100.0	21,322	78.9	5,709	21.1	24,177	863
Minnesota	558	58,391	100.0	32,831	56.2	25,560	43.8	45,611	874
Missouri	585	64,064	100.0	47,209	73.7	16,854	26.3	55,637	941
Nebraska	446	19,086	100.0	14,727	77.2	4,360	22.8	16,907	948
North Dakota	474	8,169	100.0	5,935	72.6	2,234	27.4	7,052	1,099
South Dakota	414	10,720	100.0	8,149	76.0	2,571	24.0	9,435	1,173
Mountain	3,281	161,591	100.0	120,919	74.8	40,673	25.2	141,255	648
Arizona	472	49,325	100.0	37,834	76.7	11,491	23.3	43,580	670
Colorado	565	39,461	100.0	28,024	71.0	11,437	29.0	33,743	683
Idaho	420	10,808	100.0	7,962	73.7	2,846	26.3	9,385	616
Montana	363	8,877	100.0	6,580	74.1	2,297	25.9	7,729	799
Nevada	413	16,069	100.0	13,076	81.4	2,992	18.6	14,573	560
New Mexico	298	16,240	100.0	12,172	75.0	4,068	25.0	14,206	716
Utah	418	16,364	100.0	11,835	72.3	4,530	27.7	14,100	515
Wyoming	332	4,446	100.0	3,435	77.3	1,011	22.7	3,940	740
Pacific	3,128	336,150	100.0	230,857	68.7	105,293	31.3	283,503	578
Alaska	404	5,247	100.0	3,911	74.5	1,336	25.5	4,579	667
California	1,312	234,530	100.0	163,664	69.8	70,866	30.2	199,097	542
Hawaii	308	10,195	100.0	7,742	75.9	2,453	24.1	8,968	696
Oregon	539	33,773	100.0	22,044	65.3	11,729	34.7	27,908	736
Washington	565	52,405	100.0	33,496	63.9	18,909	36.1	42,951	656

*Nurses working full-time plus one-half of working part-time.
**Population data were based on July 1, 2008 estimates of resident population of States from Census Bureau Press Release NST-EST2008-01.
NOTE: Estimated numbers may not equal total, and percents may not add to 100, because of rounding.

Table 59. Employment setting of principal nursing position, by geographic area: 2008

Employment setting of principal nursing position	Geographic area									
	Total United States*	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Estimated registered nurses in area	2,596,599	161,627	377,938	481,050	171,020	249,889	435,942	221,392	161,591	336,150
Hospital	1,601,831	91,254	223,786	301,463	109,506	156,273	268,423	137,024	98,668	215,434
Nursing home/extended care	135,514	14,747	25,033	21,643	7,236	7,859	27,356	15,313	7,688	8,640
Academic education	98,268	5,187	12,942	18,883	6,877	8,756	17,447	7,997	6,384	13,795
Home health	165,697	13,767	27,298	30,842	10,767	21,597	26,478	12,732	9,909	12,307
Community/public health**	116,051	6,347	14,785	22,992	7,765	9,172	18,898	11,362	6,971	17,760
School health	84,418	9,376	21,023	12,848	3,174	9,533	9,445	6,716	4,834	7,468
Ambulatory care	270,556	12,657	36,111	46,496	17,225	24,130	50,209	21,305	18,677	43,746
Insurance claims/benefits/utilization review	49,441	3,125	7,618	9,392	3,425	4,419	8,216	3,007	2,998	7,241
Other	51,947	3,445	6,080	12,205	3,539	5,974	6,813	4,184	3,741	5,966

*Includes an estimated 22,875 RNs for whom employment setting was not known.
**Community/public health includes occupational health.
NOTE: Estimated numbers may not equal totals because of rounding.

Table 60. Average annual earnings for registered nurses working full-time as staff nurses in their principal nursing position, by geographical area: 2008

Geographic area of employment	Full-time staff nurses		
	Number in sample	Estimated number*	Annual earnings (dollars)
Total	12,808	1,212,525	61,706
New England	1,235	66,117	65,799
Middle Atlantic	1,172	175,327	66,228
South Atlantic	2,598	235,974	59,022
East South Central	831	83,316	53,514
West South Central	1,198	135,373	59,612
East North Central	1,386	192,610	57,356
West North Central	1,490	96,531	52,627
Mountain	1,525	77,386	61,823
Pacific	1,373	149,890	76,665

*Excludes an estimated 467 full-time staff nurses who did not report annual earnings.
NOTE: Estimated numbers may not equal totals because of rounding.

Table 61. Registered nurses employed in nursing in each State and geographic area, by highest nursing or nursing-related education: 2008

State and geographic area	Number in sample	Total estimated number*	Highest nursing or nursing-related education preparation: Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's	Estimated percent of bachelor's	Estimated number of master's/ doctorate	Estimated percent of master's/ doctorate
United States	28,554	2,596,599	315,071	12.1	973,815	37.6	966,974	37.3	337,441	13.0
New England	3,198	161,627	25,428	15.8	50,713	31.5	59,805	37.1	25,265	15.7
Connecticut	487	35,343	6,630	18.9	10,673	30.4	12,202	34.7	5,657	16.1
Maine	444	16,279	2,195	13.5	6,249	38.5	5,133	31.6	2,644	16.3
Massachusetts	757	77,574	11,410	14.7	21,742	28.1	31,960	41.3	12,347	15.9
New Hampshire	586	13,562	2,439	18.0	5,493	40.6	3,657	27.1	1,928	14.3
Rhode Island	445	11,531	1,641	14.2	3,692	32.1	4,340	37.7	1,844	16.0
Vermont	479	7,338	1,114	15.2	2,864	39.0	2,514	34.3	846	11.5
Middle Atlantic	2,604	377,938	69,648	18.4	121,438	32.2	135,040	35.8	51,370	13.6
New Jersey	616	73,634	11,659	15.8	23,556	32.0	29,228	39.7	9,192	12.5
New York	1,016	167,427	16,868	10.1	63,846	38.2	59,210	35.5	27,060	16.2
Pennsylvania	972	136,876	41,120	30.0	34,036	24.9	46,602	34.0	15,119	11.0
South Atlantic	5,617	481,050	52,753	11.0	198,578	41.4	164,259	34.2	64,465	13.4
Delaware	556	9,169	1,329	14.5	2,771	30.2	3,429	37.4	1,641	17.9
District of Columbia	417	11,053	911	8.2	2,222	20.1	5,034	45.5	2,887	26.1
Florida	981	150,321	15,511	10.4	68,080	45.6	48,178	32.2	17,691	11.8
Georgia	520	68,254	7,153	10.5	28,218	41.3	24,544	36.0	8,338	12.2
Maryland	753	50,159	5,716	11.4	18,536	37.0	17,658	35.2	8,249	16.4
North Carolina	701	82,104	9,070	11.1	34,053	41.5	27,843	33.9	11,061	13.5
South Carolina	427	37,472	3,708	9.9	16,170	43.2	13,581	36.2	4,012	10.7
Virginia	825	54,988	7,794	14.2	19,901	36.2	18,425	33.5	8,812	16.0
West Virginia	437	17,529	1,561	8.9	8,626	49.2	5,567	31.8	1,774	10.1
East South Central	1,725	171,020	11,842	6.9	82,705	48.4	55,413	32.4	21,060	12.3
Alabama	448	41,488	--	--	21,378	51.5	12,747	30.7	4,905	11.8
Kentucky	431	41,520	--	--	22,475	54.1	12,354	29.8	4,748	11.4
Mississippi	380	27,414	--	--	14,732	53.7	8,415	30.7	3,208	11.7
Tennessee	466	60,597	6,380	10.5	24,121	39.8	21,897	36.1	8,199	13.5
West South Central	2,311	249,889	22,772	9.1	97,382	39.0	100,601	40.3	29,118	11.7
Arkansas	428	22,443	3,612	16.1	10,794	48.1	6,297	28.1	1,740	7.8
Louisiana	433	36,859	3,450	9.4	13,242	35.9	14,952	40.6	5,216	14.2
Oklahoma	410	27,256	--	--	12,411	45.5	10,172	37.3	3,068	11.3
Texas	1,040	163,331	14,105	8.6	60,934	37.3	69,181	42.4	19,094	11.7

Footnotes at end of table.

Table 61. Registered nurses employed in nursing in each State and geographic area, by highest nursing or nursing-related education: 2008 (continued)

State and geographic area	Number in sample	Total estimated number*	Highest nursing or nursing-related education preparation: Estimated number of diploma	Estimated percent of diploma	Estimated number of associate degree	Estimated percent of associate degree	Estimated number of bachelor's	Estimated percent of bachelor's	Estimated number of master's/ doctorate	Estimated percent of master's/ doctorate
East North Central	3,280	435,942	61,780	14.2	159,091	36.5	165,053	37.9	49,491	11.4
Illinois	765	111,939	16,922	15.1	36,073	32.3	43,374	38.8	15,392	13.8
Indiana	484	58,089	5,448	9.4	24,395	42.0	22,464	38.7	5,782	10.0
Michigan	613	88,449	9,194	10.4	36,130	40.8	33,021	37.3	10,104	11.4
Ohio	895	120,642	23,065	19.2	43,106	35.8	41,705	34.7	12,469	10.4
Wisconsin	523	56,822	7,150	12.6	19,387	34.1	24,489	43.1	5,744	10.1
West North Central	3,410	221,392	28,462	12.9	81,047	36.7	86,827	39.3	24,771	11.2
Iowa	464	33,929	5,260	15.5	15,721	46.3	9,709	28.6	3,239	9.5
Kansas	469	27,032	3,771	14.0	9,947	36.8	10,685	39.5	2,628	9.7
Minnesota	558	58,391	5,661	9.7	22,948	39.5	22,987	39.6	6,518	11.2
Missouri	585	64,064	7,499	11.7	22,021	34.4	25,666	40.1	8,878	13.9
Nebraska	446	19,086	3,838	20.1	4,427	23.2	9,040	47.4	1,782	9.3
North Dakota	474	8,169	1,271	15.6	1,493	18.3	4,567	56.0	831	10.2
South Dakota	414	10,720	1,162	10.8	4,490	41.9	4,172	38.9	897	8.4
Mountain	3,281	161,591	13,116	8.1	61,196	38.0	64,507	40.0	22,424	13.9
Arizona	472	49,325	4,889	10.0	19,638	40.1	17,039	34.8	7,455	15.2
Colorado	565	39,461	3,809	9.7	11,010	27.9	18,128	45.9	6,514	16.5
Idaho	420	10,808	--	--	5,220	48.3	3,958	36.6	1,180	10.9
Montana	363	8,877	699	7.9	2,735	30.8	4,424	49.8	1,019	11.5
Nevada	413	16,069	1,587	9.9	5,653	35.2	6,355	39.6	2,445	15.2
New Mexico	298	16,240	--	--	7,171	44.2	6,196	38.2	2,034	12.5
Utah	418	16,364	--	--	7,426	45.4	7,074	43.2	1,313	8.0
Wyoming	332	4,446	--	--	2,344	52.9	1,333	30.1	463	10.5
Pacific	3,128	336,150	29,271	8.7	121,665	36.2	135,468	40.3	49,477	14.7
Alaska	404	5,247	403	7.7	1,639	31.2	2,345	44.7	860	16.4
California	1,312	234,530	19,970	8.5	82,739	35.3	94,673	40.4	36,879	15.7
Hawaii	308	10,195	--	--	2,654	26.0	5,345	52.4	1,540	15.1
Oregon	539	33,773	2,842	8.4	13,226	39.2	13,829	40.9	3,876	11.5
Washington	565	52,405	5,400	10.3	21,408	40.9	19,275	36.8	6,321	12.1

*Includes an estimated 3,297 RNs for whom highest nursing education was not known.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 62. Age distribution and average age of registered nurses, by geographic area for all registered nurses and registered nurses employed in nursing: 2008

Age group	Geographic area									
	Total United States	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Estimated registered nurses in area	3,063,162	187,542	462,263	576,337	195,713	290,304	516,080	251,281	187,159	396,484
Less than 30	9.4	7.9	6.9	9.4	12.0	10.7	9.2	12.6	10.5	8.6
30-34	9.2	7.0	8.6	9.4	11.4	10.8	8.6	9.6	8.6	9.3
35-39	10.8	9.3	10.2	11.0	13.2	13.0	10.7	9.2	10.3	10.8
40-44	11.4	11.5	10.9	12.4	12.4	11.1	11.6	11.7	10.2	10.5
45-49	14.4	15.1	14.4	13.7	14.9	14.2	14.8	15.3	14.8	13.9
50-54	16.2	16.8	17.6	15.3	14.0	16.2	16.5	16.1	15.7	16.5
55-59	13.0	13.8	12.9	12.7	11.1	12.0	13.6	12.2	14.2	13.8
60-64	8.1	10.1	8.8	8.8	6.6	7.1	7.1	7.2	9.0	8.6
65 years and over	7.4	8.6	9.7	7.3	4.5	5.0	7.9	6.0	6.8	7.9
Average age	47.0	48.5	48.4	46.9	44.6	45.5	47.2	45.9	47.0	47.6
Median age	48	49	49	48	45	46	48	47	48	49
Estimated registered nurses employed in nursing in area	2,596,599	161,627	377,938	481,050	171,020	249,889	435,942	221,392	161,591	336,150
Less than 30	10.6	8.7	7.9	10.7	13.5	11.4	10.6	13.9	11.8	9.7
30-34	9.9	7.9	9.4	10.0	11.8	11.7	9.4	10.1	9.0	10.0
35-39	11.7	10.3	11.7	11.6	13.1	14.2	11.3	9.7	10.8	11.8
40-44	12.1	12.0	11.9	13.2	13.2	11.6	12.4	11.9	10.5	11.2
45-49	15.3	15.8	15.6	14.6	15.7	14.5	15.8	16.2	15.9	14.7
50-54	16.7	17.3	18.9	15.6	14.3	16.3	17.0	16.7	16.3	17.1
55-59	13.0	13.8	13.3	12.7	10.4	11.9	13.8	12.3	14.3	13.7
60-64	6.8	9.4	7.2	7.5	5.1	5.9	5.7	6.2	7.8	7.1
65 years and over	3.9	4.8	4.1	4.2	2.9	2.5	4.0	3.0	3.7	4.7
Average age	45.5	47.1	46.4	45.5	43.6	44.3	45.5	44.7	45.8	46.1
Median age	46	48	47	46	44	45	46	46	47	47

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 63. Racial/ethnic background of registered nurses, by geographic area: 2008

Racial/ethnic background	Geographic area									
	Total United States	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Estimated registered nurses in area	3,063,162	187,542	462,263	576,337	195,713	290,304	516,080	251,281	187,159	396,484
Racial/ethnic background										
White (non-Hispanic)	83.2	93.1	82.9	80.7	89.0	75.4	89.4	94.2	85.8	69.3
Black/African American (non-Hispanic)	5.4	2.0	6.2	9.5	7.7	8.8	3.7	1.6	1.3	3.0
Asian (non-Hispanic)	5.5	2.1	7.3	4.2	--	5.6	3.2	1.0	3.7	16.0
Native Hawaiian/Pacific Islander (non-Hispanic)	0.3	--	--	--	--	--	--	--	--	1.3
American Indian/Alaska Native (non-Hispanic)	0.3	--	--	--	--	--	--	--	1.3	--
Hispanic/Latino (any race)	3.6	1.4	2.2	3.6	--	7.8	1.9	1.3	6.1	6.7
Two or more races (non-Hispanic)	1.7	1.2	1.1	1.5	1.4	1.7	1.5	1.7	1.3	3.5

--Too few cases to report estimated percent (fewer than 30 cases unweighted).

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 64. Geographic location of registered nurses, by employment status: 2008

	Total estimated number*	Metro area employed in nursing	Metro area not employed in nursing	Nonmetro area employed in nursing	Nonmetro area not employed in nursing
Total	3,063,162	1,971,644	358,212	501,480	95,927
New England	187,542	103,196	19,386	46,012	6,029
Middle Atlantic	462,263	319,350	72,102	39,995	10,450
South Atlantic	576,337	384,972	74,898	72,148	18,143
East South Central	195,713	116,486	15,986	49,539	7,435
West South Central	290,304	198,862	30,379	37,606	8,947
East North Central	516,080	302,975	56,922	116,369	21,604
West North Central	251,281	146,712	19,925	66,131	9,515
Mountain	187,159	124,230	19,079	31,103	5,800
Pacific	396,484	274,861	49,535	42,576	8,005

*Includes an estimated 135,899 RNs for whom metro/nonmetro area status was not known.
NOTE: Estimated numbers may not equal totals because of rounding.

Table 65. Predominant countries where internationally educated nurses received initial nursing education, by employment status: 2008

Predominant countries where internationally educated nurses received initial nursing education	Number in sample	Total estimated number	Total estimated percent	Number in sample employed in nursing	Estimated number employed in nursing	Estimated percent employed in nursing	Estimated percent of all employed internationally educated nurses
Total (excluding U.S. territories)	1,461	165,539	100.0	1,296	146,097	88.3	100.0
Asia/Australia	937	114,299	69.0	846	102,792	89.9	70.4
Philippines	681	82,988	50.1	620	76,021	91.6	52.0
India	120	15,827	9.6	113	14,593	92.2	10.0
Korea	36	4,359	2.6	28	--	--	--
Other Asia/Australia	100	11,124	6.7	85	8,983	80.8	6.1
North/South America/Caribbean	290	28,942	17.5	254	25,140	86.9	17.2
Canada	218	19,619	11.9	192	17,152	87.4	11.7
Other North/South America/Caribbean	72	9,322	5.6	62	7,988	85.7	5.5
Europe	150	15,410	9.3	115	11,573	75.1	7.9
United Kingdom	95	9,921	6.0	74	7,206	72.6	4.9
Other Europe	55	5,489	3.3	41	4,366	79.5	3.0
Africa	84	6,888	4.2	81	6,592	95.7	4.5
Nigeria	36	3,409	2.1	33	3,113	91.3	2.1
Other Africa	48	3,479	2.1	48	3,479	100.0	2.4
U.S. territories*	39	4,696		37	4,405	93.8	

*Counts for U.S. territories are provided to complement the information for internationally educated nurses, but are not included in the column totals.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 66. Predominant States employing internationally educated nurses (IENs): 2008

State employing IENs	Number in sample	Estimated number IENs employed in nursing	Estimated percent IENs employed in nursing	Percent of employed IENs in the State
Total	1,296	146,097	100.0	5.6
California	202	38,615	26.4	16.5
New York	108	16,803	11.5	10.0
Texas	91	14,922	10.2	9.1
Florida	86	14,009	9.6	9.3
New Jersey	70	8,552	5.9	11.6
Illinois	51	7,947	5.4	7.1
Maryland	80	4,019	2.8	8.0
Virginia	53	2,215	1.5	4.0
Nevada	50	1,971	1.3	12.3
All other states	505	37,043	25.4	2.4

NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Table 67. Employment setting of internationally educated nurses (IENs), by selected job titles: 2008

Employment setting of IENs	Total estimated number of employed IENs*	Total estimated percent of employed IENs	Estimated number of IENs employed as staff nurse	Estimated percent of IENs employed as staff nurse	Estimated number of IENs employed in all other positions	Estimated percent of IENs employed in all other positions
Total	146,097	100.0	113,274	100.0	30,461	100.0
Hospital	105,320	72.1	87,245	77.0	16,561	54.4
Nursing home/extended care facility	9,559	6.5	6,163	5.4	3,359	11.0
Academic education program	9,490	6.5	6,694	5.9	--	--
Home health setting	5,785	4.0	--	--	--	--
Public/community health**	4,985	3.4	3,835	3.4	--	--
Ambulatory care setting	6,276	4.3	4,323	3.8	--	--
Other ***	3,042	2.1	--	--	--	--

*Includes an estimated 15 IENs for whom employment setting was not known.
**Public/community health includes school health and occupational health.
***Other includes insurance, benefits, and utilization review.
--Too few cases to report estimated number and estimated percent (fewer than 30 cases unweighted).
NOTE: Estimated numbers may not equal totals, and percents may not add to 100, because of rounding.

Appendix B

Survey Methodology

Appendix B: Survey Methodology

B.1 Sampling

Since the inception of the National Sample Survey of Registered Nurses (NSSRN), the sample of Registered Nurses (RNs) was based on a nested cluster design, clustering RNs based on last names. This last name cluster design is referred to as the alpha-segment design. While the alpha-segment design helped produce good estimates of the nursing workforce over the years, it has some shortcomings. Since people of the same racial/ethnic background tended to be clustered within the same alphabetic clusters of last names, the clustered design resulted in larger than desired variation for some estimates, most notably the racial and ethnic composition of the RN workforce. Additionally, constructing the alpha-segment frame and implementing the sample design were tedious and time-consuming tasks. Sorting to achieve implicit stratification was not feasible, and the alpha-segment design made adjustments to account for differential nonresponse a bit more cumbersome.

For the 2008 NSSRN, the Health Resources and Service Administration (HRSA) implemented a sample design based on independent systematic random samples selected from State-based strata with equal probability of selection within each stratum. An equal probability systematic random sample can be thought of as randomly selecting a record from the beginning of a list with probability 1/n and then every nth record after that until all records on the list have had a chance of being selected. This kind of design was not feasible in 1976, but technological advances and the advent of electronic recordkeeping have largely eliminated the barriers that existed previously. This design was straightforward to implement and eliminated the clustering that could contribute undesirably to the variability of sample estimates, particularly for those associated with race/ethnicity.

B.1.1 Sample Selection

The 2008 NSSRN included a sample of 55,151 RN records.

Systematic random samples of RNs were selected from each of the sample frames established. A sample frame was developed for each of the 50 States (and the District of Columbia) of those RNs with currently active licenses in the State. The sample frames were developed from listings obtained from each of the State licensure boards.

State frames were first partitioned into explicit strata for sample selection purposes. RNs appearing in sample frame of licensed nurses for more than one State had multiple chances of selection for the 2008 NSSRN. Hence multi-State strata were formed for several groups of States where a relatively high degree of interstate commuting was expected. Probability matching was used to form such strata, using only a single record for those RNs found on listings from two or more States in a given group (for example, a stratum was formed for all RNs with licenses found in New York and New Jersey, each such RN having only a single record in that stratum). Following are the groupings of States where such strata were formed:

- District of Columbia, Maryland, and Virginia
- New York, New Jersey, and Pennsylvania
- Arizona, California, and Nevada
- Massachusetts, New Hampshire, and Vermont
- Delaware, Pennsylvania, and New Jersey

For most of the remaining States, four geographic sampling strata were used: one stratum for the State itself, and three additional, much smaller, strata. These three strata were for RNs whose respective residence was listed as Alaska, Hawaii, or New Mexico. These additional strata were created because nurses working in Federal facilities need not be licensed in the State in which they work, and such RNs are found at disproportionately high rates in Alaska, Hawaii, and New Mexico. When sampling for Alaska, Hawaii, and New Mexico, only three total strata were used. Alaska, Hawaii, and New Mexico strata were also formed for the "multi-State strata" groups listed above.

Prior to sample selection, the sample frame for each stratum was sorted on variables such as age group, ZIP Code, or other variables. The choice of variables depended on the variables available on a State's frame and which among them were of greatest analytic interest or were related to variables of analytic interest. If a frame was sorted only on one variable, say ZIP Code, then the sample would have a proportionate or approximately proportionate distribution across the ZIP Codes appearing on the frame. If a second variable was added, say age group, then within each ZIP Code a proportionate distribution across age groups would be obtained. Thus, sorting was done to help achieve a proportionate or approximately proportionate sample distribution across important variables related to analytic variables of interest, helping to increase the precision of the Survey estimates.

B.1.2 Final Sample Allocation

Tables B1-1 and B1-2 show the final allocation of sampled RNs across the States where the multi-State strata mentioned earlier were not established. Table B1-1 is arranged in the order of size of frame from largest to smallest while Table B1-2 is arranged alphabetically. Table B1-3 shows the final allocation of RNs across the States where multiple strata were established associated with neighboring States.

Four columns of numbers are provided for each State or strata: the 2008 State and strata frame size after unduplication; 2008 sample size after assigning Alaska, Hawaii, and Mexico samples from different State or strata back to Alaska, Hawaii, and New Mexico; targeted sample size used to set the sampling rate for the State or stratum; and the difference between the targeted sample size and the actual sample size.[1] Note that for the District of Columbia/Maryland/Virginia strata it was decided to form strata taking into account whether or not the RN lived in the DC metro area regardless of which records matched. So summing across strata does not produce unduplicated totals for the District of Columbia, Maryland, or Virginia separately. Had the Nurse Licensure Compact (the Compact) State specifications been applied perfectly, there would have been no RNs found on both the Virginia and Maryland listings. However, there were a few (perhaps due to very recent residential moves from one State to the other) where synchronization of the licensing to eliminate the earlier compact license had not yet been achieved.

B.2 Sample Performance

Response rates serve to help assess the quality or unbiasedness of survey results and are often reported both unweighted and weighted. An unweighted response rate provides an indication of the degree to which the RNs actually selected for the sample decided to participate in the survey. A weighted response rate provides an estimate of the propensity to respond to the survey among the members of the target population generally. A weighted response rate accounts for factors such as oversampling. For example, for the 2008 NSSRN, RNs have been allocated to the smaller States at disproportionately high rates (i.e., they have been "oversampled") in order to help achieve adequate precision for State level estimates for all States.

[1] Departures arose due to the relatively few RNs in each State with a residence address of Alaska, Hawaii, or New Mexico

Table B1-1. Sample information for States where the strata were based only on Alaska, Hawaii, and New Mexico (sorted by frame size)

Single State samples	Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, and NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Florida	221,482	1,896	1,900	-4
Texas	203,595	1,796	1,800	-4
Illinois	160,909	1,598	1,600	-2
Ohio	153,487	1,449	1,450	-1
Michigan	126,007	1,198	1,200	-2
North Carolina	105,317	1,100	1,100	0
Georgia	99,795	1,099	1,100	-1
Missouri	89,035	899	900	-1
Indiana	80,779	850	850	0
Minnesota	76,708	849	850	-1
Washington	76,364	900	900	0
Wisconsin	74,891	849	850	-1
Tennessee	72,754	800	800	0
Alabama	55,862	849	850	-1
Colorado	53,871	896	900	-4
Connecticut	52,898	999	1,000	-1
Kentucky	51,229	749	750	-1
South Carolina	47,808	849	850	-1
Louisiana	47,419	799	800	-1
Oregon	42,995	845	850	-5
Iowa	42,419	800	800	0
Kansas	39,801	899	900	-1
Oklahoma	38,914	946	950	-4
Mississippi	38,406	949	950	-1
Arkansas	30,677	899	900	-1
New Mexico	24,658	882	800	82
West Virginia	24,184	949	950	-1
Maine	23,210	898	900	-2
Utah	23,019	797	800	-3
Nebraska	22,358	699	700	-1
Hawaii	17,155	964	900	64
Rhode Island	16,706	999	1,000	-1
Idaho	15,059	798	800	-2
Montana	13,835	793	800	-7
South Dakota	13,827	748	750	-2
North Dakota	9,395	750	750	0
Alaska	8,478	980	800	180
Wyoming	7,826	794	800	-6
Subtotal single States	**2,303,132**	**36,813**	**36,550**	**263**

Table B1-2. Sample information for States where strata were based only on Alaska, Hawaii, and New Mexico (sorted alphabetically)

Single State Samples	Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, and NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Alabama	55,862	849	850	-1
Alaska	8,478	980	800	180
Arkansas	30,677	899	900	-1
Colorado	53,871	896	900	-4
Connecticut	52,898	999	1,000	-1
Florida	221,482	1,896	1,900	-4
Georgia	99,795	1,099	1,100	-1
Hawaii	17,155	964	900	64
Idaho	15,059	798	800	-2
Illinois	160,909	1,598	1,600	-2
Indiana	80,779	850	850	0
Iowa	42,419	800	800	0
Kansas	39,801	899	900	-1
Kentucky	51,229	749	750	-1
Louisiana	47,419	799	800	-1
Maine	23,210	898	900	-2
Michigan	126,007	1,198	1,200	-2
Minnesota	76,708	849	850	-1
Mississippi	38,406	949	950	-1
Missouri	89,035	899	900	-1
Montana	13,835	793	800	-7
Nebraska	22,358	699	700	-1
New Mexico	24,658	882	800	82
North Carolina	105,317	1,100	1,100	0
North Dakota	9,395	750	750	0
Ohio	153,487	1,449	1,450	-1
Oklahoma	38,914	946	950	-4
Oregon	42,995	845	850	-5
Rhode Island	16,706	999	1,000	-1
South Carolina	47,808	849	850	-1
South Dakota	13,827	748	750	-2
Tennessee	72,754	800	800	0
Texas	203,595	1,796	1,800	-4
Utah	23,019	797	800	-3
Washington	76,364	900	900	0
West Virginia	24,184	949	950	-1
Wisconsin	74,891	849	850	-1
Wyoming	7,826	794	800	-6
Subtotal single States	**2,303,132**	**36,813**	**36,550**	**263**

Table B1-3. Sampling States where strata are based on RNs licensed in neighboring States as well

Descriptions		Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Cumulative State totals or estimated State totals across Strata					
California	CA	349,916	3,257	3,260	-3
Arizona	AZ	65,387	924	930	-6
Nevada	NV	24,412	1,065	1,070	-5
Strata based on address in:					
Alaska	AK	263	25	x	x
Hawaii	HI	672	34	x	x
New Mexico	NM	531	17	x	x
Strata descriptions					
Licensed in both NV and CA, no match with AZ	NVCA	6,782	288	290	-2
Licensed in both NV and AZ, no match with CA	NVAZ	572	20	20	0
Licensed in NV, AZ, and CA	NVCAAZ	742	20	20	0
Remainder of those licensed in NV	NV_REMAINDER	16,316	737	740	-3
Licensed in both CA and AZ, no match with NV	AZCA	6,328	69	70	-1
Remainder of those licensed in AZ	AZ_REMAINDER	57,745	815	820	-5
Remainder of those licensed in CA	CA_REMAINDER (half sample)	168,032	2,880	2,880	0
(after doubling CA remainder total to obtain appropriate estimate)	Subtotal est., CA NV AZ	425,537	4,905	4,840	-11
Cumulative State totals or estimated State totals across Strata					
New York	NY	255,459	2,644	2,650	-6
Pennsylvania	PA	204,371	1,887	1,890	-3
New Jersey	NJ	111,117	1,418	1,420	-2

Table B1-3. Sampling States where strata are based on RNs licensed in neighboring States as well (continued)

Descriptions		Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Strata based on address in					
Alaska	AK	135	13	x	x
Hawaii	HI	228	11	x	x
New Mexico	NM	295	9	x	x
Strata descriptions					
Licensed in both NJ and NY, no match with PA	NJ_NY	12,663	160	160	0
Licensed in both NJ and PA, no match with NY	NJ_PA	12,872	170	170	0
Licensed in NJ, NY, and PA	NJ_NY_PA	2,152	30	30	0
Remainder of those licensed in NJ	NJ_REMAINDER	83,430	1,058	1,060	-2
Licensed in both NY and PA, no match with NJ	NY_PA	4,979	60	60	0
Remainder of those licensed in PA	PA_REMAINDER	184,368	1,627	1,630	-3
Remainder of those licensed in NY	NY_REMAINDER	235,665	2,394	2,400	-6
	Subtotal, NY PA NJ	536,787	5,532	5,510	-11
Cumulative State totals or estimated State totals across Strata					
Massachusetts	MA	111,845	1,382	1,385	-3
New Hampshire	NH	18,447	1,029	1,030	-1
Vermont	VT	15,494	958	960	-2
Strata based on address in					
Alaska	AK	44	4	x	x
Hawaii	HI	59	3	x	x
New Mexico	NM	84	2	x	x

Table B1-3. Sampling States where strata are based on RNs licensed in neighboring States as well (continued)

Descriptions		Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Strata descriptions					
Licensed in VT, matched with record in MA, resides in VT, MA, or NH	VT_MTCH_MA_IN3	418	30	30	0
Licensed in VT, matched with record in NH, resides in VT, MA, or NH	VT_MTCH_NH_IN3	863	70	70	0
Licensed in VT, did not match with records from either MA and NH, resides in VT, MA, or NH	VT_MTCH_MANH_IN3	354	15	15	0
Licensed in VT, matched with records in both MA and NH, resides in VT, MA, or NH	VT_NOMTCH_IN3	6,014	723	725	-2
Licensed in VT, foreign residential address	VT_FOREIGN	2,059	25	25	0
Licensed in VT, NY residential address	VT_NY	749	40	40	0
Remainder in VT	VT_REMAINDER	4,994	55	55	0
Licensed in NH, matched with a record from MA but not one from VT	NH_MTCHMA	4,161	169	170	-1
Licensed in NH, did not match with a MA or VT record	NH_NOMTCH	12,866	775	775	0
Licensed in MA, did not match with a NH or VT record	MA_NOMTCH	105,797	1,168	1,170	-2
	Subtotal, MA VT NH	138,462	3,079	3,075	-5
Cumulative State totals or estimated State totals across strata					
Virginia	VA	80,553*	1,787	1,787.5	-0.5
Maryland	MD	63,645*	1,523	1,523.9	-0.9
District of Columbia	DC	20,289*	1,330	1,330.7	-0.7

Table B1-3. Sampling States where strata are based on RNs licensed in neighboring States as well (continued)

Descriptions		Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Strata based on address in					
Alaska	AK	49	5	x	X
Hawaii	HI	87	5	x	x
New Mexico	NM	26	1	x	X
Strata descriptions					
Licensed in MD, matched a record from DC or VA, living in DC metro area	MD_MTCH_METRO	5,449	447	446.9	0.1
Licensed in MD, matched a record from DC or VA, living outside DC metro area	MD_MTCH_NOMET	2,455	105	104.9	0.1
Licensed in MD, did not match a record from DC or VA, living in DC metro area	MD_NOMTCH_METRO	7,874	541	541.3	-0.3
Licensed in MD, did not match a record from DC or VA, living outside DC metro area	MD_NOMTCH_NOMET	47,813	430	430.7	-0.7
Licensed in VA, matched a record from DC but not MD, living in DC metro area	VA_MTCH_METRO	2,400	197	196.8	0.2
Licensed in VA, matched a record from DC but not MD, living outside DC metro area	VA_MTCH_NOMET	1,080	46	46.2	-0.2
Licensed in VA, did not match a record from DC or MD, living in DC metro area	VA_NOMTCH_METRO	11,087	762	762.2	-0.2
Licensed in VA, did not match a record from DC or MD, living outside DC metro area	VA_NOMTCH_NOMET	65,094	782	782.3	-0.3
Licensed in DC, did not match VA or MD, living in Metro area	DC_NOMTCH_METRO	5,571	383	383	0
Licensed in DC, did not match VA or MD, living outside Metro area	DC_NOMTCH_NOMET	3,802	152	152.9	-0.9
	Subtotal, VA MD DC	152,787	3,856	3,847.3	-2.3

Table B1-3. Sampling States where strata are based on RNs licensed in neighboring States as well (continued)

Descriptions		Final 2008 frame size after unduplication	2008 sample sizes after assigning AK, HI, NM samples from different States or strata to AK, HI, and NM	2008 allocation on which sampling rates were based	Difference between final and targeted sample sizes (differences due to sampling RNs living in AK, HI, and NM separately)
Cumulative State totals or estimated State totals across strata					
Delaware	DE	12,235	1,115	1,115	0
Strata based on address in					
Alaska	AK	1	0	x	x
Hawaii	HI	0	0	x	x
New Mexico	NM	0	0	x	x
Strata descriptions					
Licensed in DE and NJ, but not PA	DE_NJ	371	20	20	0
Licensed in DE and PA, but not NJ	DE_PA	2,234	160	160	0
Licensed in DE, NJ, and PA	DE_NJ_PA	646	35	35	0
Remainder of those licensed in DE	DE_REMAINDER	8,983	900	900	0
Subtotal, DE		12,235	1,115	1,115	0
Subtotal, Multistrata States		1,265,808	18,487	18,387	-29.3
Total		3,568,940	55,171	54,937.3	233.7

* Total prior to unduplication–a small number of RNs licensed in VA but living in MD or vice versa appear in both lists though they should not since they are Compact States– as a result, strata, taking into account residence in the DC metro area, were not formed in a fashion that would permit the sum of the stratum totals to provide unduplicated totals for VA, MD, and DC separately.

The overall NSSRN unweighted response rate was 62.41 percent while the overall weighted response rate was 61.48 percent.[2] Response rates varied by State (Table B2-1). Unweighted response rates ranged from 49.62 percent (New Mexico) to 74.79 percent (Wisconsin), while weighted response rates ranged from 49.54 percent to 74.87 percent (also for New Mexico and Wisconsin, respectively). State is defined here as the State licensure file(s) on which the given RN could be found; RNs appearing in more than one State's licensure files can contribute to more than one State's (weighted and unweighted) response rate.

B.2.1 Vermont Sample Performance

Vermont's listing of RNs with currently active licenses was partitioned into a number of strata in order to deal with a variety of issues. These include: RNs licensed in Vermont and either Massachusetts or New Hampshire, or both; a large number of RNs licensed in Vermont, but living in foreign countries; and RNs licensed in Vermont but with addresses indicating they are living in States but not in the immediate vicinity of Vermont. Vermont appears to be somewhat of a gateway for RNs from foreign countries seeking to become licensed in the United States.

RNs licensed in Vermont with addresses indicating they are living in the United States but not in the immediate vicinity of Vermont were sampled at a disproportionately low rate for Vermont. It was considered highly unlikely that this group of RNs would either work or live in Vermont and as a result, would not contribute to the Vermont estimates. In fact, no RNs who responded from this latter group did work or live in Vermont, so this sampling strategy appears to have accomplished what it was intended to: reduce the expenditure of survey resources on records not likely to contribute to estimates for groups of analytic interest for Vermont estimates.

Among RNs licensed in Vermont, living in the United States but not in the immediate vicinity, the response rates were low. From among 49 sampled RNs, only 13 completed the 2008 NSSRN, yielding a response rate of roughly 25 percent. The reason for the low response rate for this particular group is uncertain. While this portion of the Vermont sample was small, it had a dramatic impact on the weighted response rate for RNs sampled from among those licensed in Vermont.

[2] The American Association for Public Opinion Research Response Rate #3 calculation was used; it is defined as the number of completed surveys divided by the number of returned surveys (complete plus partial) plus an estimate of the number of eligible cases among those who did not respond and whose eligibility could not be ascertained.

Table B2-1. Response rates, unweighted and weighted by State and for the United States as a whole

State	Sample size	Responding sample size	Unweighted response rate	Weighted response rate
Total	54,805	34,219	62.44	61.47
Alaska	777	479	61.65	61.43
Alabama	843	516	61.21	61.31
Arkansas	894	561	62.75	62.78
Arizona	952	505	53.05	53.03
California	3,283	1,744	53.12	52.91
Colorado	899	606	67.41	67.52
Connecticut	992	663	66.83	66.77
DC	1,331	761	57.18	57.20
Delaware	1,114	716	64.27	64.19
Florida	1,902	1,060	55.73	55.58
Georgia	1,096	596	54.38	54.49
Hawaii	845	483	57.16	57.03
Iowa	799	550	68.84	68.92
Idaho	796	558	70.10	70.12
Illinois	1,603	921	57.45	57.56
Indiana	845	568	67.22	67.21
Kansas	893	598	66.97	66.99
Kentucky	750	474	63.20	63.23
Louisiana	796	482	60.55	60.45
Massachusetts	1,384	931	67.27	66.87
Maryland	1,525	971	63.67	65.88
Maine	898	589	65.59	65.63
Michigan	1,204	819	68.02	68.21
Minnesota	848	613	72.29	72.21
Missouri	898	616	68.60	68.46
Mississippi	950	533	56.11	56.21
Montana	784	528	67.35	67.39
North Carolina	1,100	721	65.55	65.64
North Dakota	747	526	70.41	70.41
Nebraska	696	496	71.26	71.24
New Hampshire	1,031	705	68.38	68.57
New Jersey	1,423	862	60.58	60.55
New Mexico	798	396	49.62	49.54
Nevada	1,067	580	54.36	54.34
New York	2,647	1,427	53.91	53.79
Ohio	1,447	983	67.93	67.98
Oklahoma	941	541	57.49	57.37
Oregon	849	595	70.08	69.97
Pennsylvania	1,897	1,274	67.16	67.25
Rhode Island	980	614	62.65	62.68
South Carolina	848	500	58.96	59.02
South Dakota	744	533	71.64	71.61
Tennessee	801	477	59.55	59.47
Texas	1,815	1,012	55.76	55.93
Utah	799	548	68.59	68.47
Virginia	1,792	1,144	63.84	62.86

Table B2-1. Response rates, unweighted and weighted by State and for the United States as a whole (continued)

State	Sample size	Responding sample size	Unweighted response rate	Weighted response rate
Vermont (all)	937	610	65.10	52.04
Vermont (excluding the "outlier" stratum)	888	597	67.23	63.34
Washington	922	642	69.63	69.67
Wisconsin	853	638	74.79	74.87
West Virginia	936	567	60.58	60.56
Wyoming	785	559	71.21	71.28

To provide a clear picture of the Vermont sample performance, two sets of response rates are provided. The response rates for Vermont including the RNs sampled from the stratum of Vermont licensees living in States not in the immediate vicinity were 65.10 percent unweighted but 52.04 percent weighted. The response rates presented for Vermont were 67.23 percent unweighted and 63.34 percent weighted when excluding the RNs sampled from this stratum.

B.3 Imputation

Statistical imputation is the process by which question-level missing values are assigned likely or plausible values based on other respondent-provided data elements. Imputation is widely used, and a lot of research has been done on the topic. However, one should not consider imputation as the panacea for nonresponse phenomenon in surveys, but rather as the last resort after trying to get respondent answers. The goal of imputation is to help data users avoid complications that could arise with other options addressing the problem of item missing values.

There are two types of nonresponse in surveys: unit nonresponse and item nonresponse. Unit nonresponse occurs when a sampled RN does not complete all of the questions in the survey. Unit nonresponses were reflected in the calculation of the response rate and in weighting through nonresponse adjustment.

Item nonresponse refers to nonresponse to individual questions, which result in a missing value for an individual question. Item missing values in the 2008 NSSRN were filled in, if available, from the State sample frame files. The variables available in the frames included demographic characteristics (date of birth, race/ethnicity, and gender), resident address, and first RN license date. Not all States provided these variables, and data could be very sparse even when available (e.g., race/ethnicity). If any critical item nonresponse existed after review of the State sample files, respondents were called

and queried about the missing data item(s). The process of calling respondents to fill in item nonresponse is referred to as data retrieval. For item nonresponse that persisted after review of the sample frame file, data cleaning and data retrieval, as a last resort, statistical imputation was used to assign values.

To improve response rates, a short form of the questionnaire was adapted for the telephone interview. The short form included all the questionnaire items deemed necessary to obtain a completed survey. Questions not asked in the short form were designated as missing and imputed. However, it should be noted that these contribute to a small percentage of missing values and do not compromise the integrity of the data.

B.3.1 Imputation Methods

In using an imputation procedure, one tries to obtain the best value for the missing case instead of picking an arbitrary value to fill in the missing. Regression modeling is very useful in this process. If a strong regression model is available for a particular variable with missing values, good imputed values can be generated using the model. For example, a registered nurse's year of graduation from initial nursing education and year of first licensure are highly correlated. If the year of licensure is missing, but not the year of graduation, the missing year of licensure value can be imputed using the predicted value of the year of licensure. This is done by a regression model with the year of licensure as the dependent variable and the year of graduation as the independent (or predictor) variable—the possible value for the year of licensure is predicted using the regression model and the predictor variable, year of graduation. The regression model can be estimated from respondent cases with nonmissing year of licensure and year of graduation. The regression model can be improved by using more predictor variables.

To avoid nonsensical values, donor imputation is used. Regression modeling is used to facilitate the donor imputation procedure. Donor imputation is a popular technique whereby a donor cell is selected and the donor's value is donated or copied to the missing (recipient) case on a cell by cell basis. If donor and recipients are selected randomly, the procedure is known as hot-deck imputation. Hot-deck imputation was used extensively for the 2008 NSSRN data.

B.3.2 Procedures

Sometimes, missing values can be precisely deduced. For example, if variables A and B are percentages that are supposed to be summed to 100. If A is present and B is missing, then B should be (100 – A). Such imputation is called deterministic imputation. This step was included in data cleaning and not discussed here.

The majority of missing values however, cannot be deduced with certainty. These missing values are prime candidates for statistical imputation.

Imputation was not attempted for some variables because imputation was unnecessary or impractical (such as the "Other Specify" variables). The "other-specify" variables were not imputed, not because their imputation was too difficult, but because nonmissing answers were unique in the sense that the respondents could not find appropriate answers among the common categories provided in the questionnaire and their answers were individualistic so that using them as donors for missing cases does not make sense. Further, some variables were simply too difficult to impute coherently while maintaining complex inter-relationships with other variables, such as employment setting, job title, upgrade education, and preparation for advanced practice RNs.

Variables that were not statistically imputed for 2008 NSSRN include the following:

- Survey eligibility and nursing employment status (questions 1, 19, and 21). These items were considered essential for survey completion and therefore did not have missing values;
- Address fields except State in questions 55, 59, and 61;
- Licensure and certification detail (questions 70A, 70B, 70C, and 70D);
- All "other-specify" variables and their leading questions;
- Education upgrades (questions13E_A through 13E_J);
- All subitems in the question series about preparation as a nurse practitioner, clinical nurse specialist, nurse midwife and nurse anesthetist (questions 14, 14A, 14B, 14C, 14D, 14E, 14E2, 14F, 14F2, and 14G);
- Employment setting (question 23);
- Job title (question 24);

- Level of care (question 29A);
- Patient population served (question 29B); and
- Clinical specialty; (question 29C).

Lastly, while questions 30, 37, and 49 (the three salary variables) were imputed, some cases still have missing values for these three variables. Imputation could not provide a logical value for these cases. So, even though they were imputed, there are still some missing values for these three variables.

The imputation procedures can be summarized as follows:

1. Impute data for items using a preliminary hot deck imputation that respects skip patterns;
2. Build a regression model for each variable to be imputed through stepwise regression modeling starting with all available predictors;
3. Re-impute data using predictive means matching, through grouping similar regression predicted values, again respecting skip patterns; and
4. Cycle through steps 2 and 3 until convergence criteria are met for all the variables or the maximum number of iterations specified is reached.

B.3.3 Results and Implications on Variance Estimates

For each imputed variable a conditional imputation rate was computed. Conditional rate is defined as the ratio of the number of imputed applicable cases by the total number of applicable cases in the data set. The conditional rate allows the analyst to see impact of imputation on data analysis.

Eighty percent of the imputed variables for the 2008 NSSRN have imputation rates below 10 percent (Table B3-1), 19 percent are borderline (imputation rate of 10-19 percent), and three variables (1 percent) have an imputation rate greater than 20 percent. The three variables are: question 11B—total number of hours provided for emergency preparedness training in the past year (imputation rate: 46 percent); question 13D_A—year receiving an upgrade Associate Degree in Nursing (ADN) (imputation rate: 36 percent); and question 41—years until planned return to paid work in nursing (imputation rate: 21 percent). When these variables are analyzed, the analyst should be aware of the potential underestimation of the variance and bias in the point estimates.

Table B3-1. Distribution of imputation rates

Imputation Rate	Number of Variables	Percent of Variables
Less than 5	126	37.6
5 to 9.9	135	42.0
10 to 14.9	57	17.8
15 to 19.9	6	1.6
20 to 24.9	1	0.3
25 to 29.9	0	0.0
30 to 34.9	0	0.0
35 to 39.9	1	0.3
40 to 44.9	0	0.0
45 to 49.9	1	0.3

There is a component of variation associated with the generation of imputed values that is generally not reflected in survey estimates of variance. As a result, use of imputation can result in an understatement of the variance of survey estimates. The degree to which estimates of variability have been understated is generally considered negligible if the imputation rate is low (less than 10 percent). However, if the imputation rate is over 20 percent, the degree of underestimation may be nontrivial. When these variables are analyzed, the analyst should be aware of the potential underestimation of the variance and bias in the point estimates.

B.4 Weighting and Estimation

The 2008 NSSRN used a stratified, single-stage list frame sample of registered nurses in the United States. Sample weights have been established to permit the development of national or State-level estimates for RNs licensed, working, or residing in the United States. The final weight assigned to a participating registered nurse may be interpreted as the number of RNs with a currently active license in at least one State that the RN represents.

This section describes the methods used for computing the sampling weights and for calculating estimates and their variances. The final sample weights incorporate a number of different components:

- Assignment of initial weights to responding and ineligible RNs in each sample stratum;
- Adjustments for survey nonresponse;

- Adjustments to reflect multiple chances for selection; and
- Adjustments to achieve agreement with State totals of number of RNs licensed.

Survey estimates can be obtained by applying the final sample weights to records representing the eligible responding RNs. Corresponding estimates of variability (standard errors or confidence intervals) can be obtained through the use of 100 jackknife replicate weights developed for this purpose.

B.4.1 Sample Weighting

The 2008 NSSRN weighting process consisted of several steps. The first few steps involved the use of records at the "sampled license" level. The sampled license level reflects the original unit of sample selection that was a record on the list of RNs with currently active licenses. Thus, for these initial steps, any RN sampled multiple times (due to the holding of licenses in multiple States) will have several records associated with her/him. After completion of the adjustments at the sampled license level, any RN sampled multiple times had her/his records "folded" into a single record, producing a database with a single record representing each RN who participated in the 2008 NSSRN.

The weighting process can be described as follows:

- Determination of the initially assigned weights at the sampled license level;
- Adjustment for survey nonresponse by age group (for strata where age was available);
- Assignment of factors to account for multiple opportunities for selection (determined as part of a matching effort to determine the number of sample frames on which an RN appeared);
- Establishing an initial weight at the RN level; and
- Iterative Raking procedures to converge on State and national totals.

Each step is described in more detail below.

B.4.1.1 Initially Assigned Weights

In past implementations of the NSSRN, a single weight was assigned to each RN. This weight was designed to incorporate both the probability of selection and attain a global adjustment for nonresponse for each State separately. No information was used to try to address issues of differential nonresponse by subgroups (e.g., by age). In part, this may have been due to the cumbersome nature of the weighting process employed. Moreover, there were relatively few variables available on both respondents and nonrespondents from which adjustment classes could be formed. Nevertheless, there have been concerns that younger RNs were underrepresented in the survey effort.

As a result of concerns about the representativeness of the various age groups, plans were made to incorporate age into the process for nonresponse adjustment of the weights for the 2008 NSSRN where possible. It was operationally most efficient to initially assign a "global nonresponse adjustment weight" to those sampled RN records with a response disposition of "eligible respondent" or "ineligible" (similar to what has been done for previous implementations of the NSSRN). Then, for those States where age was available for nonresponse adjustment purposes, an additional adjustment was made to account for differential propensities to respond by age group. This approach is mathematically equivalent to assigning weights reflecting the reciprocal of the probability of selection to all sampled records, including nonrespondents, within a stratum and then undertaking the same adjustments for nonresponse, but it requires far less effort.

The nonresponse adjustment process (for both the global and the age-group approaches) was actually a poststratification with population totals obtained from the corresponding sample frame for a given stratum. The initially assigned weight for all eligible respondents and ineligibles in stratum *h* was calculated as follows:

$$w_{hi} = \frac{N_h}{n_{h,resp\ or\ inelig}}$$

Where

w_{hi} = the initially assigned weight for an RN sampled record *i* from stratum *h* that had been assigned a response disposition indicating an eligible respondent or ineligible

N_h = the frame count in stratum *h*

$n_{h,resp\ or\ inelig}$ = the number of eligible responding or ineligible sampled RN records selected from stratum *h*

Note that the sum of the initially assigned weights for all responding or ineligible RN records within stratum *h* is thus equal to the frame count for the stratum.

B.4.1.2 Adjustment for Differential Nonresponse by Age Groups

For those States where age of the RN at the time of sample selection could be determined, response rates by age group were examined. Date of birth was not provided on the sample frames for the following States: Georgia, Hawaii, Illinois, Louisiana, New York, Pennsylvania, and Rhode Island. While New York did not provide date of birth in their sample frame, the State subsequently provided an age distribution of RNs appearing on the New York listing. Age was provided by virtually all RNs who responded to the survey and was imputed for the remaining few cases where age was not obtained. Age was imputed for roughly 3 percent of all respondents—those respondents who did not provide their age during data collection, plus some ineligible cases.

Examination of frequency distributions by age showed that propensity to respond to the 2008 NSSRN varied by age. Younger RNs (chiefly, those under 40 though this could vary by State) generally had lower response rates than did older RNs (those aged 50 or older). Thus, nonresponse adjustments were undertaken by age group for those States where age was available. Again, the adjustment process was handled through poststratification: the adjustment factors were computed within sample strata as the ratio of a population (frame) total associated with a given age group to the sum of the weights of the eligible respondents and the ineligibles in that same age group. The resulting poststratified weights were thus computed as:

$$w_{hci} = \left(\frac{N_{hc}}{\sum_{i \in c} w_{hi}} \right) w_{hi}$$

Where

w_{hci} = the poststratified weight calculated for RN record *i* in poststratification cell *c* of stratum *h*

N_{hc} = the frame count in for adjustment cell *c* within stratum *h*

w_{hi} = the initially assigned weight for RN record *i* in stratum *h*

The poststratification cells *c* within each stratum were defined by age.

For those States where age was not available (with one exception discussed below), the initially assigned weight was simply retained.

Note that for the purposes of computing adjustments for differential nonresponse by age, RN records selected from strata associated with residence in Alaska, Hawaii, or New Mexico (regardless of the State frame from which they were sampled) were treated as if they were sampled from a single stratum associated with Alaska, Hawaii, and New Mexico, respectively. (Please see Section B.1 for a discussion of the strata associated with Alaska, Hawaii and New Mexico).

As described in Section B.1 on Sampling, the New York sample frame was partitioned into strata representing overlap between the New Jersey and Pennsylvania frames. New Jersey records included date of birth, so those RNs licensed in both New York and New Jersey already had their weights adjusted for nonresponse. The focus of the nonresponse adjustment here was for those RNs who were licensed in New York but not New Jersey, which represented about 92 percent of all records on the New York frame.

For such RNs who responded or were ineligible and that were sampled from a stratum which included New York licensees but not those from New Jersey, estimates of the number of RNs in two age-based adjustment cells ("under 40" and "41 or older") were developed and served as control totals for the poststratification process so that the weights of eligible responding and ineligible RNs were calibrated to match the cell estimates. Since there was a bit more uncertainty associated with the New York poststratification (estimates of the control totals had to be developed and a few records had imputed ages), it was decided to use only two cells, thus simplifying the poststratification process and limiting the opportunities for misclassification which would be a potential source of bias. It was expected that the gains in reducing the potential for bias due to differential nonresponse would be greater than the potential for bias arising from any misclassification that might be incurred.

Upon completion of this poststratification process, the sum of the resulting weights for all responding or ineligible cases within a stratum equaled the frame counts for each stratum, and, if summed within age groups for the States where age adjustments were possible, corresponded to frame counts by age group as well.

B.4.1.3 Adjustment to Account for Multiple Chances of Selection

An extensive effort was undertaken to identify the number of sample frames on which a selected RN appeared, and thus, the number of chances that an RN had to be sampled. To appropriately account for this probability of selection in the development of the sample weight, a factor H_i was established indicating the number of different strata in which RN i appeared, whether or not he or she happened to be sampled from a given frame. This factor can be used to implement the "generalized weight share method" described by Lavallee (2007). Lohr (2010) provides an illustrative example of this method in the form of a textbook problem. The weight adjustment is simply the reciprocal of H_i. It is multiplied by the nonresponse adjusted weight associated with each eligible responding or ineligible RN sampled record (license) i to produce the "penultimate" weight $w_{p,i}$ (the "final weight at the sampled RN record" level—responding RNs sampled from multiple strata will have a different "final" weight associated with each sampled record, with each weight depending on the stratum from which the record was sampled):

$$w_{p,i} = \left(\frac{1}{H_i}\right) w_{hci}$$

B.4.1.4 Establishing a Sample Weight for Each Registered Nurse

The final sample weight is at the RN level. That is, each eligible responding RN receives a single weight, regardless of the number of times he or she was sampled. Up to this point the weighting process was at the level of (RN) sampled record(s) (licenses). To obtain a single weight w_j for each RN j, the weights $w_{p,i}$ for all sampled license records i associated with the same RN j were summed. This serves as the initial RN level weight w_j (prior to raking) and was calculated as follows:

$$w_j = \sum_{i \in j} w_{p,i}$$

The sum over all of the RN level weights w_j across all States provides an estimate of the number of registered nurses in the nation who appear on at least one sample frame used in sampling. Thus, it represents an estimate of all RNs with currently active licenses in the United States, plus a relatively small number of RNs who previously had active licenses and have had them lapse, but who have not been purged from the State files of licensed RNs. This national estimate of the number of unique

RNs (virtually all with currently active licenses) is represented as the quantity Y in the discussion of Raking in the next section.

B.4.1.5 Raking to State and National Totals

In the development of weights to represent individual RNs rather than sampled licenses, some departures from the numbers licensed in a State were introduced. To restore consistency with State totals while maintaining consistency with the national estimate Y described above, the weights were raked to a set of marginal distributions. Raking is an iterative process of adjusting weights that, when convergence is obtained, achieves consistency with a set of dimensions, with each dimension representing a population distribution across one or more variables (see, for example, Brick and Kalton (1996)). It is a standard way of calibrating sample weights, generally serving the same purpose as poststratification but without needing to account for the full cross-classification of all levels of all dimensions. It can be useful when there are many different sets of control totals with which one would wish to achieve consistency, none of which represent extremely detailed interactions of different variables.

For the 2008 NSSRN, 51 sets of raking control totals were established associated with the 50 States and the District of Columbia. For each set, two totals were used as follows:

Dimension	Total
State k (e.g., Ohio)	X_k
Balance of United States	$Y - X_k$

Here X_k represents the number of unique RNs appearing on the sample frame of a given State (most of whom are currently active, a few of whom may not be but have not yet been purged from the State file of licensed RNs in State k). Y is the estimate of the number of unique RNs appearing on at least one State's listing of RNs with currently active licenses.

The raking process can be described as follows. The State(s) where each RN was licensed was determined, based on an extensive matching effort between the sample and frames. The weights of all RNs determined to be licensed in State 1 (whether sampled from frames associated with State 1 or not) were adjusted so that they summed to the number on the frame for State 1 while the remainder of the weights (those associated with States 2-51) were adjusted to sum to the estimate of the remainder of the unique RNs appearing on frames 2-51. Then, the weights of all RNs

determined to be licensed in State 2 (whether sampled from frames associated with State 2 or not) were adjusted so that they summed to the number on the frame for State 2 while the remainder of the weights (those associated with States 1 or 3-51) were adjusted to sum to the estimate of the remainder of the unique RNs appearing on frames 1 plus 3-51. This process was continued until the targeted consistency with the 51 State totals and the national total was achieved (the weights converged to the targeted totals).

The final weight for RN j is indicated as $w_{f,j}$. After the completion of the raking process, all RNs characterized as ineligible for the survey were removed from further consideration. The sum of the weights $w_{f,j}$ across all eligible respondents to the 2008 NSSRN thus provides an estimate of the total number of RNs with currently active licenses at the time of the NSSRN. Note that there is no State subscript because an RN may be licensed in multiple States. Estimates of the number of RNs employed in a given State, or currently resident in a given State, can be developed based on the data collected from survey respondents (such information was not utilized as part of the weighting process since all sampling frames and corresponding control totals reflect licensure status only).

B.4.2 Estimation, Variance Estimation, and Sampling and Nonsampling Errors

B.4.2.1 Estimation

Final 2008 NSSRN estimates are computed using the final, full-sample weight $W_{f,j}$ for a given RN j along with the variable of interest. For example, an estimate of the total number of RNs working in a particular State is based on the following indicator variable x where:

x_j = 1 if RN j worked in State k,

= 0 otherwise

The estimated total $\hat{X}$ is computed as:

$$\hat{X} = \sum_{j \in \text{ state } k} W_{f,j} x_j$$

Where

$W_{f,j}$ = the final full-sample weight for a given RN j

Estimates of ratios and averages are obtained as the ratio of estimated totals, where the estimated totals are defined as given above (for averages the estimated total in the denominator will be determined as a sum of weights).

B.4.2.2 Variance Estimation

The 2008 NSSRN, as with previous administrations of the NSSRN, is considered a complex sample survey. To avoid concerns of bias, estimates of variance must be developed that fully reflect the sample design and sample weighting. One such approach is Jackknife replication (Wolter, 2007), which has been used for the 2008 NSSRN as well as for previous NSSRNs.

Variance estimation using the jackknife approach requires the weights for the full sample and a set of replicate weights using standard procedures for identifying and computing replicate weights. Each replicate weight is based on a subsample of the full NSSRN sample. The variability of an estimate is measured as the variation of the estimates obtained from the replicate subsamples about the estimate based on the full sample weight. For the 2008 NSSRN, 100 replicate weights were constructed. This is a substantial increase over the 20 replicate weights obtained under the previous NSSRN sample design (the alpha segment approach) and thus provides more degrees of freedom for variance estimation.

The variance of estimate *y* is estimated as follows using the jackknife replication method of variance estimation developed for the 2008 NSSRN:

$$Var(y) = \sum_{m=1}^{100} (y_m - y)^2$$

Where

y = an estimated total obtained using the full sample weight

and

y_m = an estimated total obtained using replicate weight m

There are many widely available software packages such as SUDAAN, WesVar, and Stata that permit the development of variance estimates using replicate weights.

B.4.2.3 Sampling and Nonsampling Errors

Given reasonably large sample sizes, relatively precise estimates of the licensed RN population of the United States can be made because of the underlying probability sample. However, several sources of error can cause sample estimates to differ from the true population values. These sources of error are commonly classified as sampling errors and nonsampling errors. Each of these sources of error is briefly described.

Sampling Error

Sample survey estimates are subject to variation. This error is known as sampling error and is the consequence of not measuring every unit in the population. Sampling error is measurable, however, and can be reduced with larger sample sizes and more efficient sample designs. Sample design elements that increase variances of estimates are variation in sampling rates and clustering of the sample. In the 2008 NSSRN, in order to increase precision for estimation purposes at the State level, variation in sampling rates arose between States. Sampling rates for smaller States were generally larger than sampling rates for larger States. Rates also varied between strata within a State for the small percentage who were:

- In a State frame and also resident of Alaska, New Mexico, or Hawaii; and
- Members of the groups of States where multi-State strata were developed.

The sampling error of an estimate is measured as its variance or standard error (the square root of the variance.) Given the 100 replicate weights and the roughly 100 degrees of freedom thus available, the probability is approximately 95 percent that the statistic of interest differs from the true population value by not more than 1.96 standard errors.

Specifically, a 95 percent confidence interval for an estimate x can be constructed as:

$$x \pm 1.96\sigma_x$$

where

σ_x = the estimated standard error of x.

Standard errors for a select list of estimates is presented in Table B4-1.

Table B4-1. Standard errors for select estimates*

Description	RN population estimate	Estimated percentage	S.E. of estimated percentage
Initial nursing education			
Diploma program	623,548	20.36	0.23
Associate degree	1,388,884	45.34	0.33
Bachelor's degree	1,030,026	33.63	0.33
Master's degree	13,325	0.44	0.05
Doctorate	954	0.03	0.01
Not reported	6,425	0.21	0.03
Employed in nursing			
Yes	2,596,599	84.77	0.23
No	466,564	15.23	0.23
Racial/ethnic background			
White (non-Hispanic)	2,549,484	83.22	0.25
Black/African American (non-Hispanic)	165,433	5.40	0.16
Asian (non-Hispanic)	169,454	5.53	0.16
American Indian/Alaskan Native (non-Hispanic)	8,571	0.28	0.03
Native Hawaiian/Pacific Islander (non-Hispanic)	9,528	0.31	0.04
Two or more races (non- Hispanic)	51,568	1.68	0.09
Hispanic/Latino (White)	96,122	3.14	0.13
Hispanic/Latino (Black/African American)	2,727	0.09	0.02
Hispanic/Latino (two or more races)	4,116	0.14	0.03
Hispanic, other	6,109	0.20	0.03
Graduation year			
Before 1961	85,468	2.79	0.11
1961-1965	106,810	3.49	0.11
1966-1970	161,794	5.28	0.14
1971-1975	258,004	8.42	0.18
1976-1980	349,421	11.41	0.21
1981-1985	362,664	11.84	0.20
1986-1990	318,374	10.39	0.20
1991-1995	420,254	13.72	0.22
1996-2000	396,991	12.96	0.23
2000-2004	289,760	9.46	0.20
After 2004	313,622	10.24	0.20
Employment setting, if employed in nursing			
Hospital	1,601,831	52.29	0.31
Nursing home extended	135,514	4.42	0.14
Nursing education	98,268	3.21	0.11
Public health/community health	262,908	8.58	0.19
School health service	84,418	2.76	0.10
Occupation health	18,840	0.62	0.05
Ambulatory care	270,556	8.83	0.18
Insurance claims/benefits	49,441	1.61	0.08
Other	51,947	1.70	0.08
Not reported	22,875	0.75	0.06
Not employed in nursing	466,564	15.23	0.23

Table B4-1. Standard errors for select estimates (continued)*

Description	RN population estimate	Estimated percentage	S.E. of estimated percentage
Highest nursing education			
Diploma in nursing	426,279	13.92	0.22
Associate degree	1,103,471	36.02	0.33
Bachelor's in nursing	1,068,250	34.87	0.31
Bachelor's in related field	56,915	1.86	0.09
Master's in nursing	290,084	9.47	0.19
Master's in related field	85,709	2.80	0.11
Doctorate in nursing	13,140	0.43	0.04
Doctorate in related field	15,229	0.50	0.04
Not known	4,084	0.13	0.03
Age of nurse			
<25	79,641	2.60	0.11
25 to 29	208,543	6.81	0.14
30 to 34	281,999	9.21	0.13
35 to 39	331,972	10.84	0.14
40 to 44	350,101	11.43	0.22
45 to 49	441,831	14.42	0.20
50 to 54	495,985	16.19	0.24
55 to 59	396,967	12.96	0.21
60 to 64	249,533	8.15	0.16
65 to 69	140,263	4.58	0.12
70 to 74	53,670	1.75	0.08
75+	32,657	1.07	0.06

*Estimated percentages may not add to 100 because of rounding.

Nonsampling Error

Other sources of potential error can arise as part of the survey process. These are not related to the sample design or sample size but rather the implementation of the survey. Thus, nonsampling errors can occur even when a complete enumeration, or census, is undertaken. Potential sources of such error include:

- Unit nonresponse (a sampled RN declines to participate or cannot be found);
- Item nonresponse (a participating RN forgets to or chooses not to answer a question);
- Coding errors; and
- Undercoverage (failure to include some RNs on the sample frame).

Attempts to address these nonsampling errors include:

- Efforts to maximize response rates, including refusal conversion;
- Adjustment of the weights for nonresponse;
- Imputation of omitted data items;
- Careful coding of responses; and
- Highly controlled processing of the survey data.

B.5 Nonresponse Bias Analysis

In any survey that includes sampling or achieves less than a 100 percent response rate there is potential for nonresponse bias. This is to say, respondents to the survey may differ in some ways from nonrespondents, and, to the extent that such differences affect estimates, systematic departures may arise between these estimates and the actual population value (unknown) being estimated. In this section we describe the potential sources of nonresponse bias in the 2008 NSSRN, explain the measures that were taken to reduce that bias, and show two sets of comparisons to help assess the degree to which nonresponse bias may exist in the 2008 NSSRN data.

The sample design and weighting processes for the 2008 NSSRN differed in important ways from those employed in previous implementations of the NSSRN dating back to 1977. Departures from historically utilized methodologies reflected, in part, a concern about undercoverage of racial/ethnic minorities and undercoverage of RNs within particular age groups.

B.5.1 Underrepresentation of Racial and Ethnic Minorities

Most notably from the sample design perspective, independent systematic random samples were selected from each stratum for the 2008 NSSRN, while a nested cluster design (clustering RNs based on last names) had been employed previously. The 2008 approach was expected to reduce sample variances to some extent, particularly for estimates of race/ethnicity since clusters based on last name are highly correlated with racial/ethnic background. There had been concern about possible underrepresentation of some minorities using the original design, and efforts were previously made

to supplement the sample in some States to see if minority representation could be improved. This initiative of the NSSRN sample design achieved little success.

Differential nonresponse for some minorities was another possible reason for lower than expected estimated percentages for minority RNs. Race and ethnicity are not generally available on the NSSRN sample frames that are received from the State boards of nursing, and when available race and ethnicity data have substantial amounts of missing data. In fact, other than date of birth (available on 44 of the State listings for the 2008 NSSRN), the only other information uniformly available on the sample frames that was feasible for nonresponse adjustment purposes was address based. In terms of information actually on the frame this would be ZIP Code.

B.5.2 Underrepresentation of Younger Nurses

In addition to underrepresentation of nurses of minority race and ethnicity in surveys prior to 2008, concern had been expressed that the youngest RNs seemed to be underrepresented in the population. In the 2004 NSSRN, the weights of RNs under the age of 26 were poststratified to control figures that were derived from external data reflecting numbers of people passing nursing licensure exams in the recent past. This age group, however, represents a relatively small percentage of the population of RNs with currently active licenses. Moreover, this apparent underrepresentation of younger RNs could also be due to differential nonresponse, so focusing on a single small class of RNs would not necessarily address the issue of concern. The issue of differential response rates by age among nurses over 25 had never been addressed in previous surveys.

Prior to the 2008 NSSRN, nonresponse adjustment of sample weights was accomplished through poststratification of survey respondents' weights to totals representing frame counts of RNs in a hierarchical ordering of States, essentially from smallest to biggest (the frame counts were adjusted to reflect RNs also licensed in a State appearing higher in the hierarchy and thus already accounted for in the weighting process). This weighting procedure thus did not account for differential nonresponse between subgroups within the RN population.

When data collection for the 2008 NSSRN was completed, the ratio of survey respondents to sampled RNs was computed for specified age groupings for each of the 44 States where date of birth was available, as well as for New York, as described earlier. Examination of these ratios showed that older RNs did indeed respond rates at generally higher than the rates for younger RNs. Thus, as part of the weighting process, adjustment cells were constructed to account for these

differential response rates, helping to ensure that the weights of responding RNs reflect the age distribution of the States in which they were licensed.

B.5.3 Comparative Analyses

Two sets of analyses were undertaken to examine the potential for nonresponse bias in the 2008 NSSRN. The first was a comparison of 2008 NSSRN estimates based on two different sets of nonresponse adjusted weights. The two estimates were computed based on weights devised in an identical fashion except that the second set of weights excluded the ratio adjustment for age. The nonage-adjusted estimates thus simulated the types of estimates that had been developed for prior administrations of NSSRN. Comparison of the two sets of estimates is intended to accomplish two purposes. First, to help data users see what the effect of an improved estimation process is expected to be. Second, to help data users realize that changes seen in the NSSRN estimates may be due, not to changes in the underlying population, but rather to an expected increase in the accuracy of the survey estimates correlated with age.

The second set of analyses compares the 2008 NSSRN estimates of age and race to corresponding estimates obtained from the American Community Survey (ACS) for the population in nursing occupations. With different survey methodologies, the estimates are not perfectly comparable. Nevertheless, such comparisons may help provide some insight into the degree to which the potential for nonresponse bias may or may not have been reduced for NSSRN estimates.

Potential for Reduction in Bias Due to Nonresponse Adjustments by Age Group: National Estimates

There has been concern in earlier implementations of the NSSRN that younger RNs were underrepresented due to undercoverage on State sampling frames. In the 2000 and 2004 NSSRN administrations, poststratification of the weights of the youngest RNs (those under the age of 26) was undertaken, adjusting the weights to correspond to estimated control totals that were derived based on an external data reflecting numbers of people passing nursing licensure exams in the recent past.

While undercoverage of newly licensed RNs may be an issue, another potential source of bias associated with low estimates of younger RNs is differential nonresponse by age. This was examined as part of the 2008 weighting process.

Forty-four States provided date of birth on the sampling frame. Where date of birth was available, six age groups were formed during sample selection for sorting or implicit stratification purposes. Examination of response propensities by age for these groups showed that younger RNs responded at lower rates than older RNs. The weight adjustment processes that had been employed in the past were essentially global in nature. Poststratification was used to achieve consistency between responding RNs associated with a given State of licensure and the corresponding control total, licensed RNs in the State. The control total took into account RNs who were also licensed in what were characterized as higher priority States. Thus, if older RNs had higher response rates in a State as they often did, they would be represented at a disproportionately high rate among the population of RNs licensed in the State. This is a potential source of bias for survey estimates that are correlated with age. In addition to the general age distribution of the RN population, other variables that could be affected include those related to education and employment.

As previously described, the 2008 NSSRN final weights included a poststratification adjustment by age group. Through this process, the sum of the weights of eligible and ineligible respondents was adjusted by age group to corresponding age group totals for each stratum with States where date of birth was available. Poststratification adjustments for New York used the age distribution of the RN population because date of birth was not included on the sample file. This calibration by age served to adjust for both undercoverage and nonresponse. Thus, nonresponse adjustment reflecting differential nonresponse by age was not feasible for only six States.

To assess the extent to which survey estimates may have changed after accounting for differential nonresponse by age group, we developed a separate set of weights using a global approach to nonresponse adjustment. That is, poststratification of all responding eligible and ineligible RNs to a single control total for each stratum within a State. This approach simulated the approach to nonresponse adjustment used in past administrations of NSSRN. This weight is referred to here as the "surrogate" weight.

Table B5-1 provides the estimated percentage population distributions across the variables of interest and the corresponding estimated standard errors for each set of weights. Table B5-1 also presents a ratio designed to serve as a measure of the extent to which there is evidence of practical significance. This ratio is the difference between the two estimates divided by the standard error of the "final weight" estimate. We will refer to it here as the "standardized measure of the difference."

Note that the "final weight" estimate and the "surrogate" weight estimates are highly correlated, and thus one would expect most all the differences to achieve statistical significance, so we are focusing here on differences that appear to be particularly noteworthy. Under these circumstances, we focus here on ratios with an absolute value of 3 or more, taking them to represent evidence of a difference of some consequence.

Consider the variable "initial nursing education" and the estimates based on the final weight and the surrogate weight for those whose initial nursing education was a "diploma," the first line of estimates for Table B5-1. The final weight estimate for those with a diploma is 20.36 percent while the surrogate weight estimate is 21.62 (the ratio of the former to the latter is .94, while the ratio of standard errors is .89). The difference between the final weight estimate and the surrogate weight estimate is -1.26, and the standardize measure of this difference (the ratio of the actual difference to the standard error corresponding to the "Final weight" estimate, a value of 0.23) is -5.43. This standardized difference value, developed for use in assessing evidence of practical significance between the two estimates, is substantially greater than 3. Using the criteria of obtaining an absolute value of 3 or more, a difference this big can reasonably be interpreted as substantial evidence that the difference is of consequence. The expectation is that using the weight incorporating a nonresponse adjustment reflecting differential nonresponse by age results in reduced bias. Other estimates where large standardized differences arise and thus represent evidence of reduced potential include: RNs with a bachelor's degree; RNs employed in nursing; White, non-Hispanic RNs; RNs employed in a hospital setting; and most of the age group and graduation year categories.

It may be of interest to note that the ratio of standard errors varies by analytical variable. For all age groups except those under 25, the ratio was substantially lower than 1, suggesting that using the poststratification cells based on age may have helped reduce the variability of the corresponding estimates. For the education-related variables, generally the ratios were close to 1. For the race and ethnicity categories, almost all of the ratios are greater than 1, suggesting that there may be an interaction between race/ethnicity and age. This could be the result of the larger proportion of older RNs being White, non-Hispanic. The issue of differential nonresponse by race/ethnicity is considered in more detail in the next section.

These findings regarding the effects of nonresponse adjustment by age group should be taken into account when comparing estimates from the 2008 NSSRN to those from previous NSSRNs. Differences between the 2008 NSSRN estimates and those from prior years for estimates correlated with age may be due to an improvement in the weighting process rather than a significant change in the RN population over time.

Table B5-1. Evaluating potential for reduction in bias: Comparing final 2008 estimates with 2008 estimates using a weight that does not account for differential response rates by age*

Description	Final Weight		Surrogate Weight		Ratios		Assessing Differences	
	Estimated Percentage	S.E. of Estimated Percentage	Estimated Percentage	S.E. of Estimated Percentage	Ratio of Estimates: Final to Surrogate	Ratio of SEs: Final to Surrogate	Difference between Estimates: Final minus Surrogate	Ratio: (Difference in Estimates) to (SE of "Final Weight" Estimate)
Initial nursing education								
Diploma	20.36	0.23	21.62	0.26	0.94	0.89	-1.26	-5.43
Associate degree	45.34	0.33	45.18	0.32	1.00	1.04	0.16	0.48
Bachelor's degree	33.63	0.33	32.54	0.32	1.03	1.01	1.09	3.32
Master's degree	0.44	0.05	0.42	0.05	1.05	1.04	0.02	0.42
Doctorate	0.03	0.01	0.03	0.01	1.00	1.00	0.00	0.00
Not reported	0.21	0.03	0.21	0.03	1.00	0.97	0.00	0.00
Employed in Nursing								
Yes	84.77	0.23	84.06	0.25	1.01	0.94	0.71	3.05
No	15.23	0.23	15.94	0.25	0.96	0.94	-0.71	-3.05
Racial/Ethnic background								
White (non-Hispanic)	83.22	0.25	83.74	0.24	0.99	1.03	-0.52	-2.08
Black/African American (non-Hispanic)	5.40	0.16	5.37	0.16	1.01	1.00	0.03	0.19
Asian (non-Hispanic)	5.53	0.16	5.28	0.15	1.05	1.07	0.25	1.54
American Indian/Alaskan Native (non-Hispanic)	0.28	0.03	0.27	0.03	1.04	1.03	0.01	0.33
Native Hawaiian/Pacific Islander (non-Hispanic)	0.31	0.04	0.30	0.04	1.03	1.06	0.01	0.26
Two or more races (non- Hispanic)	1.68	0.09	1.67	0.08	1.01	1.02	0.01	0.12
Hispanic/Latino (White)	3.14	0.13	2.97	0.12	1.06	1.09	0.17	1.27
Hispanic/Latino (Black/African American)	0.09	0.02	0.08	0.02	1.13	1.16	0.01	0.45
Hispanic/Latino (Two or more races)	0.14	0.03	0.13	0.03	1.08	1.08	0.01	0.37
Hispanic, Other	0.20	0.03	0.19	0.03	1.05	1.07	0.01	0.31
Graduation Year								
Before 1961	2.79	0.11	3.08	0.12	0.91	0.89	-0.29	-2.64
1961-1965	3.49	0.11	3.85	0.12	0.91	0.89	-0.36	-3.33
1966-1970	5.28	0.14	5.84	0.16	0.90	0.90	-0.56	-3.97
1971-1975	8.42	0.18	9.32	0.21	0.90	0.89	-0.90	-4.95
1976-1980	11.41	0.21	12.48	0.24	0.91	0.87	-1.07	-5.12
1981-1985	11.84	0.20	12.24	0.21	0.97	0.96	-0.40	-2.00
1986-1990	10.39	0.20	10.52	0.21	0.99	0.96	-0.13	-0.64
1991-1995	13.72	0.22	13.33	0.22	1.03	1.03	0.39	1.74
1996-2000	12.96	0.23	12.00	0.21	1.08	1.06	0.96	4.27
2000-2004	9.46	0.20	8.41	0.19	1.12	1.07	1.05	5.17
After 2004	10.24	0.20	8.92	0.18	1.15	1.10	1.32	6.60

Table B5-1. Evaluating potential for reduction in bias: Comparing final 2008 estimates with 2008 estimates using a weight that does not account for differential response rates by age (continued)*

Description	Final Weight		Surrogate Weight		Ratios		Assessing Differences	
	Estimated Percentage	S.E. of Estimated Percentage	Estimated Percentage	S.E. of Estimated Percentage	Ratio of Estimates: Final to Surrogate	Ratio of SEs: Final to Surrogate	Difference between Estimates: Final minus Surrogate	Ratio: (Difference in Estimates) to (SE of "Final Weight" Estimate)
Employment Setting, if employed in nursing								
Hospital	52.29	0.31	50.90	0.32	1.03	0.98	1.39	4.44
Nursing Home/Extended Care	4.42	0.14	4.52	0.13	0.98	1.02	-0.10	-0.73
Nursing Education	3.21	0.11	3.32	0.12	0.97	0.96	-0.11	-0.99
Public Health/Community Health	8.58	0.19	8.77	0.20	0.98	0.97	-0.19	-1.00
School Health Service	2.76	0.10	2.87	0.10	0.96	0.99	-0.11	-1.12
Occupation Health	0.62	0.05	0.63	0.05	0.98	1.02	-0.01	-0.20
Ambulatory Care	8.83	0.18	8.85	0.19	1.00	0.98	-0.02	-0.11
Insurance Claims/Benefits	1.61	0.08	1.66	0.08	0.97	1.00	-0.05	-0.61
Other	1.70	0.08	1.76	0.08	0.97	0.99	-0.06	-0.74
Not Reported	0.75	0.06	0.76	0.06	0.99	1.00	-0.01	-0.16
Not employed in nursing	15.23	0.23	15.94	0.25	0.96	0.94	-0.71	-3.05
Highest Nursing Education								
Diploma in nursing	13.92	0.22	14.73	0.24	0.95	0.93	-0.81	-3.65
Associate degree in nursing or related field	36.02	0.33	35.64	0.32	1.01	1.04	0.38	1.14
Bachelor's in nursing (or related field for 2008)	34.87	0.31	33.87	0.30	1.03	1.01	1.00	3.25
Bachelor's in related field	1.86	0.09	2.00	0.09	0.93	0.93	-0.14	-1.63
Master's in nursing (or related field 2008)	9.47	0.19	9.66	0.20	0.98	0.98	-0.19	-0.98
Master's in related field	2.80	0.11	2.98	0.12	0.94	0.97	-0.18	-1.59
Doctorate in nursing (or related field 2008)	0.43	0.04	0.46	0.05	0.93	0.93	-0.03	-0.71
Doctorate in related field	0.50	0.04	0.53	0.05	0.94	0.93	-0.03	-0.70
Not reported	0.13	0.03	0.14	0.03	0.93	0.96	-0.01	-0.40

Table B5-1. Evaluating potential for reduction in bias: Comparing final 2008 estimates with 2008 estimates using a weight that does not account for differential response rates by age (continued)*

Description	Final Weight		Surrogate Weight		Ratios		Assessing Differences	
	Estimated Percentage	S.E. of Estimated Percentage	Estimated Percentage	S.E. of Estimated Percentage	Ratio of Estimates: Final to Surrogate	Ratio of SEs: Final to Surrogate	Difference between Estimates: Final minus Surrogate	Ratio: (Difference in Estimates) to (SE of "Final Weight" Estimate)
Age of nurse								
<25	2.60	0.11	2.15	0.09	1.21	1.19	0.45	4.21
25 to 29	6.81	0.14	5.65	0.16	1.21	0.84	1.16	8.47
30 to 34	9.21	0.13	7.93	0.17	1.16	0.77	1.28	10.00
35 to 39	10.84	0.14	9.50	0.21	1.14	0.66	1.34	9.57
40 to 44	11.43	0.22	11.14	0.23	1.03	0.93	0.29	1.34
45 to 49	14.42	0.20	14.12	0.24	1.02	0.82	0.30	1.51
50 to 54	16.19	0.24	17.97	0.30	0.90	0.79	-1.78	-7.54
55 to 59	12.96	0.21	14.34	0.23	0.90	0.89	-1.38	-6.70
60 to 64	8.15	0.16	9.02	0.18	0.90	0.89	-0.87	-5.47
65+ (65-69)	4.58	0.12	5.06	0.14	0.91	0.86	-0.48	-4.00
70 to 74	1.75	0.08	1.94	0.09	0.90	0.93	-0.19	-2.29
75+	1.07	0.06	1.18	0.07	0.91	0.90	-0.11	-1.72

* Estimated percentages may not add to 100 because of rounding.

Comparing 2008 NSSRN and 2008 American Community Survey Estimates

The American Community Survey (ACS) is a sizeable survey of the U.S. population carried out by the U.S. Census Bureau and designed primarily to collect data previously obtained from the Census "Long Form." The ACS data however, are collected continually over the course of each decade rather than once every 10 years. A single household respondent is asked to provide data on each member of the household. The ACS is a mail survey that used telephone and in-person follow-up to help reduce nonresponse. The overall response rate reported for the 2008 ACS was 98 percent.

The ACS collects data about occupation, race/ethnicity, and age. It may be of interest to compare the 2008 NSSRN estimates on race/ethnicity and age to corresponding 2008 ACS estimates for the population with an occupation of registered nurse. In making comparisons between the studies, it should be noted that there are some differences in the way the data have been collected that could affect the quality or comparability of the estimates. For instance, the ACS categorizes occupation as the main type of work a person did if the person worked in the previous 5 years. The NSSRN collects data on RNs with currently active licenses regardless of current or past employment status. For the ACS data there is also question about the accuracy of the occupation reporting since a household respondent may be characterizing another household member inaccurately. Points of possible uncertainty on the part of the ACS household respondent include whether: a member is an RN or an licensed practical nurse (LPN) (not a member of the target population for the NSSRN); a member is actually employed as an RN even if he or she has a license; and/or, whether a household member is currently licensed as an RN in at least one State.

Table B5-2 provides estimates from both the 2008 NSSRN and 2008 ACS data and ratios of these estimates. It should be noted that these estimates do not represent precisely the same populations, as the description of the target populations for the various estimates will make clear. Nevertheless, examining these ratios does seem to provide some insight into the potential for nonresponse bias, albeit with necessary caveats.

Table B5-2 shows the 2008 national NSSRN estimates for both those RNs with currently active licenses (3,063,162) and the subset of those employed as an RN (2,596,599). The 2008 ACS estimate for those employed as an RN some time during the previous 5 years is 3,032,470. Thus, this ACS estimate is closer to the figure obtained for all RNs with currently active licenses obtained using 2008 NSSRN data. The 2008 ACS estimate of the number of RNs who were members of the labor force is 2,752,050, closer to the 2008 NSSRN estimate of those employed in nursing.

Table B5-2. Comparing 2008 NSSRN and 2008 American Community Survey (ACS) estimates on racial/ethnic background, and age group

Racial/ethnic background and age group	2008 NSSRN Estimates					2008 ACS Estimates			
	Total Estimated Number	Total Estimated Percent	Number in Sample Employed in Nursing	Estimated Population Employed in Nursing	Estimated Percent Employed in Nursing	Total Estimated Number Employed in Nursing within Last 5 Years	Total Estimated Percentage	Estimated Number in Labor Force	Estimated Percentage Among those in Labor Force
U.S. Total	3,063,162	100.0	28,554	2,596,599	100.0	3,032,470	100.0	2,752,050	
Racial/ethnic Background									
White (non-Hispanic)	2,549,302	83.2	24,235	2,135,592	82.2	2,324,060	76.6	2,093,358	76.1
Black/African American (non-Hispanic)	165,352	5.4	1,510	146,459	5.6	298,344	9.8	275,717	10.0
Asian (non-Hispanic)	169,454	5.5	1,269	150,938	5.8	230,578	7.6	217,984	7.9
Native Hawaiian/Pacific Islander (non-Hispanic)	9,528	0.3	84	8,792	0.3	1,611	0.1		
American Indian/Alaskan Native (non-Hispanic)	8,571	0.3	122	7,838	0.3	11,434	0.4		
Hispanic/Latino (any Race)	109,387	3.6	832	101,045	3.9	133,055	4.4	123,788	4.5
Two or more races (non-Hispanic)	51,568	1.7	502	45,935	1.8	29,160	1.0		
Other race (Non-Hispanic)						4,228	0.1		
Age group									
Less than 25	79,641	2.6	699	77,041	3.0	105,697	3.5	101,139	3.7
25-29	208,543	6.8	1,868	198,734	7.7	253,508	8.4	241,232	8.8
30-34	281,999	9.2	2,467	257,472	9.9	311,285	10.3	294,137	10.7
35-39	331,972	10.8	2,876	302,520	11.7	367,284	12.1	345,483	12.6
40-44	350,101	11.4	3,293	314,368	12.1	362,726	12.0	344,403	12.5
45-49	441,831	14.4	4,333	397,552	15.3	422,303	13.9	406,798	14.8
50-54	495,985	16.2	5,393	433,848	16.7	458,851	15.1	434,681	15.8
55-59	396,967	13.0	4,209	337,918	13.0	346,692	11.4	317,347	11.5
60-64	249,533	8.1	2,234	176,932	6.8	231,271	7.6	183,088	6.7
65-69	140,263	4.6	809	69,595	2.7	111,668	3.7	58,367	2.1
70-74	53,670	1.8	251	19,752	0.8	38,178	1.3	17,824	0.6
75 and over	32,657	1.1	122	10,867	0.4	23,007	0.8	7,551	0.3

Table B5-2. Comparing 2008 NSSRN and 2008 American Community Survey (ACS) estimates on racial/ethnic background, and age group (continued)

Racial/ethnic background and age group	Ratios: NSSRN to ACS 2008 ACS Estimates					
	Totals: "NSSRN Full Sample" to "ACS Employed in Nursing in past 5 years"	Percentages: "NSSRN Full Sample" to "ACS Employed in Nursing in past 5 years "	Totals: "NSSRN Employed in Nursing" to "ACS Employed in Nursing in past 5 years "	Percentages: "NSSRN Employed in Nursing" to "ACS Employed in Nursing in past 5 years "	Totals: "NSSRN Employed in Nursing" to "ACS Labor Force "	Percentages: "NSSRN Employed in Nursing" to "ACS Labor Force "
U.S. Total	1.01		0.86		0.94	
Racial/ethnic Background						
White (non-Hispanic)	1.05	1.04	0.88	1.03	1.02	1.08
Black/African American (non-Hispanic)	0.55	0.54	0.48	0.56	0.53	0.56
Asian (non-Hispanic)	0.73	0.72	0.65	0.76	0.69	0.73
Native Hawaiian/Pacific Islander (non-Hispanic)						
American Indian/Alaskan Native (non-Hispanic)						
Hispanic/Latino (any Race)	0.82	0.82	0.76	0.89	0.82	0.87
Two or more races (non-Hispanic)						
Other race (Non-Hispanic)						
Age group						
Less than 25	0.75	0.75	0.73	0.86	0.76	0.82
25-29	0.82	0.81	0.78	0.92	0.82	0.88
30-34	0.91	0.90	0.83	0.96	0.88	0.93
35-39	0.90	0.89	0.82	0.97	0.88	0.93
40-44	0.97	0.95	0.87	1.01	0.91	0.97
45-49	1.05	1.03	0.94	1.10	0.98	1.04
50-54	1.08	1.07	0.95	1.10	1.00	1.06
55-59	1.15	1.14	0.97	1.14	1.06	1.13
60-64	1.08	1.06	0.77	0.89	0.97	1.02
65-69	1.26	1.25	0.62	0.73	1.19	1.27
70-74	1.41	1.43	0.52	0.64	1.11	1.24
75 and over	1.42	1.45	0.47	0.53	1.44	1.46

The ratio of the NSSRN national estimate of "RNs with active licenses" to the ACS estimate for "those whose main work within the past 5 years was as an RN" is about 1.01. The ratio of the NSSRN "employed as an RN" estimate to the same ACS figure is 0.86. The ratio of the NSSRN "employed as an RN" estimate to the ACS estimate for those working as an RN in the past 5 years who are still in the labor force is 0.94.

Keeping in mind the methodological differences both in terms of the populations represented and how the data were collected, we examine the ratios for subgroups defined by race/ethnicity and by age for comparison purposes. Here we focus solely on the ratios for Hispanic nurses and for the non-Hispanic component of the racial groups White, Black, and Asian. The other subgroups were left out of this discussion as their numbers were quite small. Most noteworthy is that the various ratios for White are generally slightly more than 1 while the ratios for Black are generally between 0.5 and 0.6, the ratios for Asian are between 0.65 and 0.76, and the ratios for Hispanic are generally between 0.8 and 0.9.

Thus, to the extent that the NSSRN and ACS are comparable, these data suggest that there may be differential nonresponse between race/ethnic groups to the NSSRN with the response rates for minorities somewhat less than that of nurses who are White, non-Hispanic. Differential nonresponse among racial/ethnic groups seems particularly likely for Blacks and Asians. Such differential nonresponse is a potential source of bias.

It should be pointed out that there may be some evidence of the potential for misclassification affecting the identification of Black RNs in the ACS. A November 2004 report done for the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) entitled "Supply, Demand, and Use of Licensed Practical Nurses" provided estimates of the proportion of LPNs classified by race/ethnicity categories based on CPS data from 1984-2001. Blacks represented roughly 20 percent of LPNs over that time period with Hispanics about 5 percent and Asians 2-3 percent. Thus, if ACS respondents were prone to mischaracterizing LPNs as RNs, the minority race/ethnicity group that would seem most likely to be affected is that of Blacks. Such misclassification might have contributed to the low ratios of NSSRN to ACS estimates of Blacks who are RNs.

Examination of the ratios of the NSSRN full sample age group distributions to those of the ACS provides some evidence that the adjustment for differential response rates by age group was effective in reducing bias for estimates correlated with age. For the groups covering the overall age range 30-64, the ratios are roughly from 0.9 to 1.15 with those under 45 having ratios under 1 while

those from 46-64 exceeding 1. The ratios of estimated totals from Table B5-1 indicate that these "age" ratios in Table B5-2 would have been more extreme without the age-based adjustment since the estimates without such an adjustment were lower for the younger age ranges and larger for the older ones.

There do appear to be comparability issues between the NSSRN and the ACS, at least for the three oldest age ranges. For example the ratio of the NSSRN estimate of the proportion of nurses aged 65-69 who were employed in nursing to the ACS estimate of those RNs working in the past 5 years who are still in the labor force was 1.27. The corresponding ratios for 70-74 year olds and for those 75 or older are 1.24 and 1.46. It is not clear why an estimate of those actually working in nursing from one survey would exceed by a considerable margin the estimate from another survey of those remaining in the labor force. The sample sizes for these age groups are relatively small, so the corresponding estimates are somewhat unstable which may be one contributing factor to the relative size of the estimates.

References

Krenzke, T., Judkins, D., and Fan, Z. (2005). *Vector imputation at Westat*. Presented at Statistical Society of Canada Meetings, Saskatoon, Saskatchewan.

Lee, H., Carlson, E., Lo, A., Norman, G., and Lopdell, J. (2006). *Pre-elementary education longitudinal study, final wave3 update to methodology report*. Prepared under contract to the Office of Special Education Programs, U.S. Department of Education. Rockville, MD: Westat.

Little, R.J. (1988). Missing-data adjustments in large surveys. *Journal of Business and Economic Statistics*, 6, 287-296.

Piesse, A., Judkins, D., and Fan, Z. (2005). Item imputation made eEasy. *Proceedings of the American Statistical Association Survey Research Methods Section.*

Lavallée, P. (2007). *Indirect Sampling*. Springer, New York

Lohr, S. (2010). *Sampling: Design and Analysis*. Second edition. Brooks/Cole, Cengage Learning.

Wolter, K.(2007). *Introduction to Variance Estimation*. Second Edition. Springer.

Brick, J.M., and Kalton, G. (1996). Handling missing data in survey research. *Statistical Methods in Medical Research*, 5(3), 215-238.

Sample Survey for the National Survey of Registered Nurses, Technical Report (Volume I), and *Appendices (Volume II)*. Westat Inc. and the American Nurses Association, 1976 (unpublished).

U.S. Department of Health and Human Services, Health Resources and Services Administration (2001). *The Registered Nurse Population: March 2000 Findings from the National Sample Survey of Registered Nurses.*

U.S. Department of Health and Human Services, Health Resources and Services Administration (2006). *The Registered Nurse Population: Findings from the March 2004 National Sample Survey of Registered Nurses.*

U.S. Department of Health and Human Services, Health Resources and Services Administration (2006). *2004 National Sample Survey of Registered Nurses: Technical Report (unpublished).*

Appendix C

NSSRN Questionnaire

2008 National Sample Survey of Registered Nurses

The **2008 *National Sample Survey of Registered Nurses (NSSRN)*** is being conducted by the Health Resources and Services Administration of the U.S. Department of Health and Human Services and is the ninth cycle of the survey.

Instructions

How do I complete the survey electronically?

On your Web browser, log onto www.nssrn.org and type in your unique Access Code and PIN that is printed in the box below. If you complete the survey online, you do not need to return this paper questionnaire.

What if I received more than one questionnaire?

We may not have been able to eliminate all of the duplicates in our list of nurses. **Please complete only one questionnaire but return any extra copies you receive, preferably in the same envelope as your completed survey. Please write "DUPLICATE" at the top of these blank surveys.** By returning extra surveys, we can avoid unnecessary follow-up mailings to you.

What if I have questions about this survey?

If you have any questions about this survey or about how to complete it electronically, please call (toll-free) 1-888-371-9725, or send an e-mail to nssrn2008@westat.com.

Please correct any errors in the name/address information shown below to the right.

Corrections to First Name

Corrections to M.I.

Corrections to Last Name

Corrections to Number and Street

Corrections to City/Town

Corrections to State

Corrections to ZIP Code

If there are <u>any</u> corrections to the "State(s) Where Actively Licensed", please relist <u>ALL</u> of the States where you are actively licensed.

Corrections to the State(s) Where Actively Licensed

First Name M.I. Last Name
Street Address
City, State Zip Code

State(s) Where Actively Licensed:
State 1, State 2, State 3

Web site URL: www.nssrn.org
Access Code: [XXXXXXX]

PIN# [x]

OMB No.: 0915-0276 Expiration Date: 5/31/2011

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0915-0276. The time required to complete this information collection is estimated to average 20 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the HRSA Reports Clearance Officer, 5600 Fishers Lane, Room 10-33, Rockville, Maryland, 20857.

Please mark an [X] in the box corresponding to your answer for each question, or supply the requested information. Use blue or black ink.

EXAMPLE

RIGHT WAY [X] 9 8

WRONG WAY [X] 9 8

Section A. Eligibility and Education

1. On March 10, 2008, were you actively licensed to practice as a registered nurse (RN) in any U.S. State or the District of Columbia (whether or not you were employed in nursing at that time)?

- [ ] Yes ➔ **Go to Question 2**
- [ ] No ➔ *If No, you do not need to complete this questionnaire. Please mark "no" and return this questionnaire so we know you are not eligible.*

2. In what U.S. State were you issued your first RN license?

State: [ ][ ] Year: [ ][ ][ ][ ]

3. Which type of nursing degree or nursing credential qualified you for your first U.S. RN license? *Mark one box only.*

- [ ] Diploma Program
- [ ] Associate Degree
- [ ] Bachelor's Degree
- [ ] Master's Degree
- [ ] Doctorate
- [ ] Other

Specify _____

4. In what month and year did you graduate from this nursing program?

Month: [ ][ ] Year: [ ][ ][ ][ ]

5. In which U.S. State (including the District of Columbia), U.S. Territory, or foreign country was this program located?

State: [ ][ ]

- [ ] Philippines
- [ ] Canada
- [ ] United Kingdom
- [ ] Nigeria
- [ ] Other

Specify _____

6. Please indicate all post-high-school degrees you received before starting your initial RN educational program. *Mark all that apply.*

- [ ] None ➔ **Go to Question 8**

- [ ] Associate Degree
- [ ] Bachelor's Degree
- [ ] Master's Degree
- [ ] Doctorate
- [ ] Other

Specify _____

7. What was the field of study for your highest degree identified in Question 6? *Mark one box only.*

- [ ] Health-related field
  or
  Non-health related field

- [ ] Biological or Physical Science
- [ ] Business or Management
- [ ] Education
- [ ] Liberal Arts, Social Science, or Humanities
- [ ] Law
- [ ] Computer Science
- [ ] Social Work
- [ ] Other non-health related field

Specify _____

8. Have you ever been licensed as a licensed practical nurse (LPN) or licensed vocational nurse (LVN) in the U.S.?

- [ ] Yes
- [ ] No

Continued on next page

9. Were you ever employed in any of the following health-related jobs before completing your initial RN education? *Mark all that apply.*

- ☐ No health-related position before RN education
- ☐ Nursing Aide or Nursing Assistant
- ☐ Home health aide or assistant
- ☐ Licensed Practical or Vocational Nurse
- ☐ Emergency Medical Technician (EMT) or Paramedic
- ☐ Medical assistant
- ☐ Dental assistant
- ☐ Allied Health technician or technologist (radiological technician, laboratory technician)
- ☐ Manager in health care setting
- ☐ Clerk in health care setting
- ☐ Military medical corps
- ☐ Medical doctor
- ☐ Midwife
- ☐ Another type of health-related position

Specify _____

10. How did you finance your initial RN education? *Mark all that apply.*

- ☐ Earnings from your health-care-related employment
- ☐ Earnings from your non-health-care-related employment
- ☐ Earnings from other household members
- ☐ Personal household savings
- ☐ Other family resources (parents or other relatives)
- ☐ Employer tuition reimbursement plan (including Veterans Administration employer tuition plan)
- ☐ Federal traineeship, scholarship, or grant
- ☐ Federally-assisted loan
- ☐ Other type of loan
- ☐ State/local government scholarship or grant
- ☐ Non-government scholarship or grant
- ☐ Other resources

11a. Within the past year, have you received or provided emergency preparedness training, in any of the following areas? *Mark all that apply.*

- ☐ None ➔ **Go to Question 12**

- ☐ Chemical accident or attack
- ☐ Nuclear/radiological accident or attack
- ☐ Infectious disease epidemics
- ☐ Biological accident or attack
- ☐ Natural disaster
- ☐ Other public health emergencies

11b. Please specify the total number of hours spent in the above training(s) within the past year.

(enter 0 if none)

☐☐☐☐ *Hours of training received*

☐☐☐☐ *Hours of training provided*

11c. Thinking about the area in which you are best prepared for an emergency, are you…?

- ☐ Very prepared
- ☐ Adequately prepared
- ☐ Somewhat prepared
- ☐ Not at all prepared

12. How well do you know the disaster/emergency plan at your place of employment?

- ☐ Full understanding
- ☐ Some understanding
- ☐ Little or no understanding
- ☐ No plan exists at my place of employment
- ☐ Do not have a place of employment

Continued on next page

13. Did you earn any additional academic degrees after graduating from your initial registered nurse education program that you described in Question 3? Do not include degrees you are currently working towards.

☐ **Yes ➔ Please complete all columns of the following table for each degree you earned.**
☐ **No ➔ Go to Question 14 on page 5**

Type of Degree	A **Did you receive this degree?** *Mark all that apply.*	B **What was the primary focus of this degree?** *Enter two-digit code from table below.*	C **Has this degree been related to your career in nursing?**	D **In what year did you receive the degree?**	E **In what state or country was this educational program located?**	F **Was this degree program undertaken through a distance-based learning program? (with more than 50% of coursework through correspondence or online)**
Nursing Degrees						
a. Associate degree in nursing	☐	→	→	☐☐☐☐		☐ Yes ☐ No
b. Bachelor's degree in nursing	☐	→	→	☐☐☐☐		☐ Yes ☐ No
c. Master's in nursing	☐	☐☐	→	☐☐☐☐		☐ Yes ☐ No
d. Another Master's in nursing	☐	☐☐	→	☐☐☐☐		☐ Yes ☐ No
e. Doctorate in nursing (PhD, ScD, DNS, ND, DNP)	☐	☐☐	→	☐☐☐☐		☐ Yes ☐ No
Non-nursing Degrees						
f. Associate degree in non-nursing field	☐	☐☐	☐ Yes ☐ No	☐☐☐☐		☐ Yes ☐ No
g. Bachelor's degree in non-nursing field	☐	☐☐	☐ Yes ☐ No	☐☐☐☐		☐ Yes ☐ No
h. Master's in non-nursing field	☐	☐☐	☐ Yes ☐ No	☐☐☐☐		☐ Yes ☐ No
i. Another Master's in non-nursing field	☐	☐☐	☐ Yes ☐ No	☐☐☐☐		☐ Yes ☐ No
j. Doctorate in non-nursing field (PhD, JD, MD, EdD)	☐	☐☐	☐ Yes ☐ No	☐☐☐☐		☐ Yes ☐ No

For Column B, enter the two-digit code for your Bachelor's, Master's, or Doctorate degree above.

Primary Focus of Degree

01 Clinical Practice	07 Humanities, Liberal Arts, or Social Sciences
02 Administration/Business/Management	08 Informatics
03 Education	09 Computer Science
04 Public health/community health	10 Research
05 Law	11 Social Work
06 Biological or Physical Sciences	12 Other health field
	13 Other non-health field

14. Since graduating from the initial nursing program you described in Question 3, have you completed a formal educational program preparing you as a Nurse practitioner, Clinical nurse specialist, Nurse-midwife, or Nurse anesthetist?

- ☐ **Yes ➔ Go to Question 14a**
- ☐ **No ➔ Go to Question 15 on page 6**

Information on preparation and credentials	**A** Nurse Practitioner (NP)	**B** Clinical Nurse Specialist (CNS)	**C** Nurse-Midwife (NM)	**D** Nurse Anesthetist (NA)
14a. Did you receive preparation as a …? *Mark each column if yes.*	☐	☐	☐	☐
14b. What was the length of the program?	*(Mark one)*	*(Mark one)*	*(Mark one)*	*(Mark one)*
1. Less than 8 months	☐	☐	☐	☐
2. 8-12 months	☐	☐	☐	☐
3. 13-36 months	☐	☐	☐	☐
4. 37 months or more	☐	☐	☐	☐
14c. What was the highest credential you received in that program?	*(Mark one)*	*(Mark one)*	*(Mark one)*	*(Mark one)*
1. Certificate/Award	☐	☐	☐	☐
2. Bachelor's degree	☐	☐	☐	☐
3. Master's degree	☐	☐	☐	☐
4. Post-Master's Certificate	☐	☐	☐	☐
5. Doctorate	☐	☐	☐	☐
14d. In what year did you receive this credential?	☐☐☐☐	☐☐☐☐	☐☐☐☐	☐☐☐☐
14e. Do you have certification from a national certifying organization for this specialty?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
IF YES: Is this certification required by your employer for your job?	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
14f. Do you have licensure, certification, or recognition from a State Board of Nursing for this specialty?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
IF YES: Is this license, certification, or recognition required by your employer for your job?	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A

14g. Which specialties were the focus of your NP, CNS, NM, or NA studies? *Mark all that apply.*

- ☐ Acute Care
- ☐ Adult Health
- ☐ Anesthesia
- ☐ Cardiac Care
- ☐ Community Health
- ☐ Critical Care
- ☐ Family Care
- ☐ General Medical Surgical
- ☐ Geriatrics or Gerontology
- ☐ Home Health
- ☐ Maternal-Child Health
- ☐ Neonatal
- ☐ Nurse-Midwifery
- ☐ Obstetrics or Gynecology
- ☐ Occupational Health
- ☐ Oncology
- ☐ Palliative Care
- ☐ Pediatrics
- ☐ Psychiatrics or Mental Health
- ☐ Rehabilitation
- ☐ School Health
- ☐ Women's Health
- ☐ Other *Specify* _____

15. On March 10, 2008, were you enrolled in a formal education program leading to an academic degree or certificate?

- ☐ Yes
- ☐ No ➔ **Go to Section B**

16. Was this formal education program…? *Mark one box only.*

- ☐ In nursing
- ☐ In a non-nursing field to enhance your career/employment in nursing
- ☐ In a non-nursing field to allow you to pursue career/employment opportunities outside of nursing
- ☐ In an area of personal interest without regard to future employment

17a. Were you a full-time or part-time student?

- ☐ Full-time student
- ☐ Part-time student

17b. What percent of your coursework was distance-based (online or correspondence)?

- ☐ 0%
- ☐ 1-25%
- ☐ 26-50%
- ☐ 51-75%
- ☐ 76-100%

18. What type of degree or certificate have you been working toward in this program? *Mark one box only.*

- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctorate
- ☐ Post-Master's Certificate
- ☐ Other Certificate

Section B. Principal Nursing Employment

19. On March 10, 2008, were you employed or self-employed in nursing? (Employed in nursing includes working for pay in nursing, even if on temporary leave.)

- ☐ Yes
- ☐ No ➔ **Go to Section D on page 10**

For all the questions in this section (Questions 20 - 32), your principal nursing position is the nursing position, on March 10, 2008, in which you spent the largest share of your working hours.

20. Are you required to maintain an active RN license in order to hold your principal nursing position?

- ☐ Yes
- ☐ No

21. Where was the location of the principal nursing position you held on March 10, 2008? (If you are not employed in a fixed location, enter the location that best reflects where you practice.)

City/Town: _____

County: _____

State (or country if not U.S.A.) _____

ZIP+4 code ☐☐☐☐☐ - ☐☐☐☐
(if available)

22. In the principal nursing position you held on March 10, 2008, were you…
Mark one box only.

- ☐ An employee of the organization or facility where you were working?
- ☐ Employed through an employment agency, but not as a traveling nurse?
- ☐ Employed through an employment agency as a traveling nurse?
- ☐ Self-employed, per diem, or working as-needed?

23. Which one of the following best describes the employment setting of the principal nursing position you held on March 10, 2008? *Mark one box only.*

Hospital (including all types of care at a hospital location)

Community hospital or medical center, Non-Federal, short stay

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Specialty hospital, Non-Federal (children's, heart, burns, cancer)

- ☐ Inpatient unit
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Long-term hospital, Non-psychiatric, Non-Federal

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Other administrative or functional area

Psychiatric hospital, Non-Federal

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Federal Government hospital (Military, VA, NIH or IHS-supported)

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice located at a hospital
- ☐ Other administrative or functional area

Hospital unit in an institution (infirmary, correctional facility)

- ☐ All types

Other Type of hospital

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Specify _____

Nursing Home/Extended Care Facility

- ☐ Nursing home/extended care facility (not in a hospital)
- ☐ Facility for mentally retarded or developmentally disabled
- ☐ Residential care/assisted living facility
- ☐ Other type of extended care facility

Specify _____

Home Health Setting

- ☐ Visiting nurse service (VNS/VNA)
- ☐ Home health service unit (hospital-based)
- ☐ Home health agency (non-hospital based)
- ☐ Private duty in a home setting
- ☐ Hospice
- ☐ Other home health setting

Academic Education Program

- ☐ Nursing aide and/or home health aide program
- ☐ LPN/LVN program
- ☐ Diploma program (RN)
- ☐ Associate degree RN program
- ☐ Bachelor's and/or higher degree RN program
- ☐ Associate degree RN *and* LPN/LVN program
- ☐ Associate degree RN *and* BSN program
- ☐ Other education program, not patient education

Specify _____

Public or Community Health Setting

- ☐ State Health or Mental Health Agency
- ☐ City or County Health Department
- ☐ Correctional Facility (non-hospital)
- ☐ Community mental-health organization or clinic
- ☐ Substance abuse center/clinic
- ☐ Other community setting

Specify _____

School Health Service

- ☐ School or school system (K-12)
- ☐ College or university
- ☐ Other school health setting

Occupational Health (Employee Health Service)

- ☐ Private industry
- ☐ Government occupational health services
- ☐ Other occupational health setting

Ambulatory Care Setting, not located in a hospital

- ☐ Medical/physician practice
- ☐ Nurse practice
- ☐ In-store or retail clinic
- ☐ Community health center
- ☐ Federal clinic (Military, VA, NIH or IHS-supported)
- ☐ Federally-supported clinic (not a community health center)
- ☐ Hospital-owned *off-site* clinic or surgery center
- ☐ Ambulatory surgical center, not hospital-owned
- ☐ Urgent care
- ☐ Dialysis center or clinic, not in a hospital
- ☐ Other ambulatory setting

Specify _____

Insurance Claims/Benefits/Utilization Review

- ☐ Government insurer/benefits department: federal, state, or local
- ☐ Insurance company or other private claims/benefits/utilization review organization

Other

- ☐ Policy, planning, regulatory, or licensing agency
- ☐ Consulting organization or self-employed
- ☐ Home-based self-employment
- ☐ Telehealth, telenursing, or call center
- ☐ Pharmaceutical/medical device/medical software
- ☐ Other

Specify _____

24. Which one of the following best corresponds to the job title for the principal nursing position you held on March 10, 2008? *Mark one box only.*

- ☐ Staff nurse or direct care nurse
- ☐ Charge nurse or team leader
- ☐ First-line management (head nurse, floor supervisor)
- ☐ Middle management/administration (assistant director, house supervisor, associate dean, department head)
- ☐ Senior management/administration (CEO, vice president, nursing executive, dean)
- ☐ Certified Registered Nurse Anesthetist (CRNA)
- ☐ Clinical Nurse Specialist (CNS)
- ☐ Certified Nurse-Midwife (CNM)
- ☐ Nurse practitioner (NP)
- ☐ School nurse
- ☐ Public health nurse
- ☐ Community health nurse
- ☐ Patient educator
- ☐ Staff educator or instructor in clinical setting
- ☐ Staff development director
- ☐ Instructor/lecturer
- ☐ Professor
- ☐ Patient care coordinator, case manager, discharge planner
- ☐ Quality improvement nurse, utilization review nurse
- ☐ Infection control
- ☐ Advice/triage nurse
- ☐ Informatics nurse
- ☐ Consultant
- ☐ Legal nurse
- ☐ Researcher
- ☐ Surveyor/auditor/regulator
- ☐ No position title
- ☐ Other

Specify _____

25. For the principal nursing position you held on March 10, 2008, did you work…? *Mark one box only.*

- ☐ Full-time (including full-time for an academic year)
- ☐ Part-time (including working only part of the calendar or academic year)

26. For the principal position you held on March 10, 2008, how many months would you normally work per year?

☐☐ *months*

27. For the principal nursing position you held on March 10, 2008, please provide information about the number of hours you work in a typical week.

	Hours (enter 0 if none)
a. Number of hours worked, including all overtime and on-call hours, except on-call hours that were stand-by only	☐☐☐
b. Number of hours you stated above in "a" that were worked from on-call duty. Do not include stand-by hours	☐☐☐
c. Number of hours you stated above in "a" that were paid as overtime	☐☐☐
d. Number of paid overtime hours you stated above in "c" that were mandatory overtime	☐☐☐
e. Number of paid or unpaid on-call hours that were stand-by only	☐☐☐
f. Number of stand-by hours you stated above in "e" that were paid at an on-call stand-by rate	☐☐☐

28. For the principal nursing position you held on March 10, 2008, please estimate the percentage of your time spent in the following activities during a usual workweek. *Do not use decimal places.*

a. Patient care and charting	☐☐☐	%
b. Non-nursing tasks (housekeeping, locating supplies)	☐☐☐	%
c. Consultation with agencies and/or professionals	☐☐☐	%
d. Supervision and management	☐☐☐	%
e. Administration	☐☐☐	%
f. Research	☐☐☐	%
g. Teaching, precepting or orienting students or new hires (include preparation time)	☐☐☐	%
h. Other	☐☐☐	%
The total should equal 100%		**100%**

29a. For the principal nursing position you held on March 10, 2008, in what level of care or type of work did you spend the majority of your time? *Mark one or more boxes.*

- ☐ General or specialty inpatient
- ☐ Critical/intensive care
- ☐ Step-down, transitional, progressive, telemetry
- ☐ Sub-acute care
- ☐ Emergency
- ☐ Urgent care
- ☐ Rehabilitation
- ☐ Long-term care/nursing home
- ☐ Surgery (including ambulatory, pre-operative, post-operative, post-anesthesia)
- ☐ Ambulatory care (including primary care, outpatient settings, except surgical)
- ☐ Ancillary care (radiology, laboratory)
- ☐ Home health
- ☐ Public health/community health
- ☐ Education
- ☐ Business, administration, review, case management
- ☐ Research
- ☐ Other

Specify _____

29b. For the principal nursing position you held on March 10, 2008, with what patient population did you spend at least 50% of your patient care time? *Mark only one box.*

- ☐ No patient care ➔ **Go to Question 30**

- ☐ Adult
- ☐ Geriatric
- ☐ Pre-natal
- ☐ Newborn or neonatal
- ☐ Pediatric and/or Adolescent
- ☐ Multiple age groups (less than 50% time spent with any of the above)

Specify _____

29c. For the principal nursing position you held on March 10, 2008, in what type of clinical specialty did you spend most of your patient care time? *Mark one or more boxes.*

- ☐ No patient care
- ☐ General medical surgical
- ☐ Critical care
- ☐ Cardiac or cardiovascular care
- ☐ Chronic care
- ☐ Dermatology
- ☐ Emergency or trauma care
- ☐ Gastrointestinal
- ☐ Gynecology (women's health)
- ☐ Hospice
- ☐ Infectious/communicable disease
- ☐ Labor and delivery
- ☐ Neurological
- ☐ Obstetrics
- ☐ Occupational health
- ☐ Oncology
- ☐ Primary care
- ☐ Psychiatric or mental health (substance abuse and counseling)
- ☐ Pulmonary/respiratory
- ☐ Radiology (diagnostic or therapeutic)
- ☐ Renal/dialysis
- ☐ No specific area
- ☐ Other specialty for a majority of my time

Specify _____

30. Please estimate your 2008 pre-tax annual earnings from your principal nursing position. Include overtime and bonuses, but exclude sign-on bonuses.

$ ☐ , ☐☐☐ , ☐☐☐ .00 per year

31. Were you represented by a labor union or collective bargaining unit in the principal nursing position you held on March 10, 2008?

- ☐ Yes
- ☐ No

32a. Do you plan to leave or have you left the principal nursing position you held on March 10, 2008?

- ☐ Yes, have left or will leave within the next 12 months
- ☐ Yes, in 1 year to 3 years

- ☐ No plans to leave within next 3 years
- ☐ Undecided

➔ **Go to Question 33 on page 10**

32b. Do you plan to work in nursing after you leave that position?

- ☐ Yes
- ☐ No
- ☐ Unsure

Section C. Secondary Employment in Nursing

33. Aside from the principal nursing position you just described, did you hold any other positions in nursing for pay on March 10, 2008?

- ☐ Yes
- ☐ No → **Go to Section E on page 11**

34. In your other nursing position(s), are you...? *Mark all that apply.*

- ☐ An employee of the organization or facility for which you are working?
- ☐ Employed through an employment agency, but not as a traveling nurse?
- ☐ Employed through an employment agency as a traveling nurse?
- ☐ Self-employed, per diem, or working as needed?

35. What type of work settings best describe where you work for your other nursing position(s)? *Mark all that apply.*

- ☐ Hospital
- ☐ Nursing home/Extended care facility
- ☐ Academic education program
- ☐ Home health setting
- ☐ Public or community health setting
- ☐ School health service
- ☐ Occupational health
- ☐ Ambulatory care setting
- ☐ Insurance claims/benefits
- ☐ Telehealth, telenursing or call center
- ☐ Other

Specify _____

36. In your additional nursing position(s), please indicate how much you work, and where the job is located:

	Weeks per year	Average hours per week, during weeks of work	Locations of where most of work is done (state, or country)
Additional job #1	☐☐	☐☐	
Additional job #2	☐☐	☐☐	
All other jobs	☐☐	☐☐	N/A

37. Please estimate your 2008 pre-tax annual earnings from all your other nursing position(s). Do not include earnings from your principal nursing position.

$ ☐, ☐☐☐, ☐☐☐ .00 per year

All go to Section E on page 11

Section D. Nurses Not Working in Nursing

If you were working for pay in nursing on March 10, 2008, please go to Section E on page 11.

38. What are your intentions regarding paid work in registered nursing? *Mark one box only.*

- ☐ Have returned to nursing since March 10, 2008
  ↳ **Go to Section E on page 11**
- ☐ Actively looking for work in nursing
- ☐ Plan to return to nursing in the future, not looking for work now
  ↳ **Go to Question 41**
- ☐ No future intention to work for pay in nursing
  ↳ **Go to Question 42 on page 11**
- ☐ Undecided at this time
  ↳ **Go to Question 42 on page 11**

39. How long have you been actively looking for paid work in nursing?

- ☐☐ Months (if one or more)
- ☐ Less than one month

40. Are you looking for a position that is …?

- ☐ Full-time
- ☐ Part-time
- ☐ Either

→ **Go to Question 42 on page 11**

41. When do you plan to return to paid work in nursing?

- ☐☐ Years (if one or more)
- ☐ Less than one year

42. How long has it been since you last were employed or self-employed as a registered nurse?

☐☐ Years (if one or more)

☐ Less than one year
☐ Never worked as a Registered Nurse

43. What are the primary reasons you are not working in a nursing position for pay? *Mark all that apply.*

☐ Retired
☐ Taking care of home and family
☐ Burnout
☐ Stressful work environment
☐ Scheduling/inconvenient hours/too many hours
☐ Physical demands of job
☐ Disability
☐ Illness
☐ Inadequate staffing
☐ Salaries too low/better pay elsewhere
☐ Skills are out-of-date
☐ Liability concerns
☐ Lack of collaboration/communication between health care professionals
☐ Inability to practice nursing on a professional level
☐ Lack of advancement opportunities
☐ Lack of good management or leadership
☐ Career change
☐ Difficult to find a nursing position
☐ Travel
☐ Volunteering in nursing
☐ Went back to school
☐ Other

Specify _____

Section E. Employment Outside Nursing

44. On March 10, 2008, were you employed for pay in an occupation other than nursing?

☐ Yes
☐ No ➔ **Go to Section F on page 12**

45. On March 10, 2008, was this non-nursing employment with a health-related organization or in a health-related position?

☐ Yes
☐ No

46a. Please select from the list below the item that best describes the field of your principal position outside of nursing. *Mark one box only.*

☐ Computer services
☐ Consulting organization
☐ Emergency response (ambulance, fire, police)
☐ Financial, accounting, and insurance services
☐ Legal
☐ Education, elementary and secondary
☐ Food services
☐ Government
☐ Health-related services, outside nursing
☐ Pharmaceutical, biotechnology, or medical equipment
☐ Real estate
☐ Retail sales and services
☐ Other

Specify _____

46b. Which of the following best describes your job title for your principal position outside of nursing? *Mark one box only.*

☐ Business owner or proprietor
☐ Management
☐ Sales
☐ Instructor or professor
☐ Administrative or clerical support
☐ Consultant
☐ Other type of employee

Specify _____

47. How many months would you normally work per year in this principal position outside of nursing?

☐☐ months per year

48. What is the average number of hours you work per week in your principal position outside of nursing?

☐☐ hours per week

49. Please estimate your 2008, pre-tax annual earnings from your principal position outside of nursing.

$ ☐, ☐☐☐, ☐☐☐ .00 per year

Section F. Prior Nursing Employment

50. For this question count only the years you worked at least 50% of the calendar year in nursing. Since receiving your first U.S. RN license, how many years have you worked in nursing?

☐☐ Years (if one or more)

☐ Less than one year

51. Have you left work in nursing for one or more years since becoming an RN?

☐ Yes ☐☐ Total years (if one or more)

☐ No

☐ Have not worked in nursing more than one year

52. Were you employed in nursing one year ago (March 10, 2007)?

☐ Yes

☐ No ➔ **Go to Section G on page 14**

53. For the principal nursing position you held on March 10, 2007, did you work…? *Mark one box.*

☐ Full-time (including full-time for an academic year)

☐ Part-time (including working only part of the calendar or academic year)

54. How would you describe the principal nursing position you held on March 10, 2007?

☐ Same position/same employer as principal nursing position on March 10, 2008
↳ **Go to Section G on page 14**

☐ Different position/same employer as current one

☐ Different employer than current one

55. What was the location of the principal nursing position you held on March 10, 2007? (If you were not employed in a fixed location enter the location that best reflects where you practice.)

City/Town: _____

County: _____

State (or country if not U.S.A.) _____

ZIP+4 code ☐☐☐☐☐ - ☐☐☐☐
(if available)

56. Were any of the following the primary reason(s) for your employment change? *Mark all that apply.*

☐ Burnout
☐ Stressful work environment
☐ Interested in another position/job
☐ Lack of advancement opportunities
☐ Lack of collaboration/communication between health care professionals
☐ Lack of good management or leadership
☐ Career advancement/promotion
☐ Inadequate staffing
☐ Interpersonal differences with colleagues or supervisors
☐ Physical demands of job
☐ Opportunity to do the kind of nursing that I like
☐ Pay/benefits better
☐ Scheduling/inconvenient hours/too many hours
☐ Relocated to different geographic area
☐ Reorganization that shifted positions
☐ Laid off/downsizing of staff
☐ Sign-on bonus offered
☐ Personal/family
☐ Went back to school
☐ Retired
☐ Disability
☐ Illness
☐ Other

Specify _____

57. Which one of the following best describes the employment setting of the principal nursing position you held on March 10, 2007? *Mark one box only.*

Hospital (including all types of care at a hospital location)

Community hospital or medical center, Non-Federal, short stay

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Specialty hospital, Non-Federal (children's, heart, burns, cancer)

- ☐ Inpatient unit
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Long-term hospital, Non-psychiatric, Non-Federal

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Other administrative or functional area

Psychiatric hospital, Non-Federal

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Federal Government hospital (Military, VA, NIH or IHS-supported)

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice located at a hospital
- ☐ Other administrative or functional area

Hospital unit in an institution (infirmary, correctional facility)

- ☐ All types

Other Type of hospital

- ☐ Inpatient unit
- ☐ Nursing home unit in hospital
- ☐ Outpatient clinic/medical practice owned by a hospital
- ☐ Outpatient clinic/medical practice located at a hospital but not owned by the hospital
- ☐ Other administrative or functional area

Specify _____

Nursing Home/Extended Care Facility

- ☐ Nursing home/extended care facility (not in a hospital)
- ☐ Facility for mentally retarded or developmentally disabled
- ☐ Residential care/assisted living facility
- ☐ Other type of extended care facility

Specify _____

Home Health Setting

- ☐ Visiting nurse service (VNS/VNA)
- ☐ Home health service unit (hospital-based)
- ☐ Home health agency (non-hospital based)
- ☐ Private duty in a home setting
- ☐ Hospice
- ☐ Other home health setting

Academic Education Program

- ☐ Nursing aide and/or home health aide program
- ☐ LPN/LVN program
- ☐ Diploma program (RN)
- ☐ Associate degree RN program
- ☐ Bachelor's and/or higher degree RN program
- ☐ Associate degree RN *and* LPN/LVN program
- ☐ Associate degree RN *and* BSN program
- ☐ Other education program, not patient education

Specify _____

Public or Community Health Setting

- ☐ State Health or Mental Health Agency
- ☐ City or County Health Department
- ☐ Correctional Facility (non-hospital)
- ☐ Community mental-health organization or clinic
- ☐ Substance abuse center/clinic
- ☐ Other community setting

Specify _____

School Health Service

- ☐ School or school system (K-12)
- ☐ College or university
- ☐ Other school health setting

Occupational Health (Employee Health Service)

- ☐ Private industry
- ☐ Government occupational health services
- ☐ Other occupational health setting

Ambulatory Care Setting, not located in a hospital

- ☐ Medical/physician practice
- ☐ Nurse practice
- ☐ In-store or retail clinic
- ☐ Community health center
- ☐ Federal clinic (Military, VA, NIH or IHS-supported)
- ☐ Federally-supported clinic (not a community health center)
- ☐ Hospital-owned *off-site* clinic or surgery center
- ☐ Ambulatory surgical center, not hospital-owned
- ☐ Urgent care
- ☐ Dialysis center or clinic, not in a hospital
- ☐ Other ambulatory setting

Specify _____

Insurance Claims/Benefits/Utilization Review

- ☐ Government insurer/benefits department: federal, state, or local
- ☐ Insurance company or other private claims/benefits/utilization review organization

Other

- ☐ Policy, planning, regulatory, or licensing agency
- ☐ Consulting organization or self-employed
- ☐ Home-based self-employment
- ☐ Telehealth, telenursing, or call center
- ☐ Pharmaceutical/medical device/medical software
- ☐ Other

Specify _____

Section G. General Information

58. How satisfied are you with your principal job, or most recent job if you are not now working? *Mark one box only.*

- ☐ Extremely satisfied
- ☐ Moderately satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Moderately dissatisfied
- ☐ Extremely dissatisfied
- ☐ Neither currently nor previously employed

59. Where do you currently reside? This information is critical for producing State estimates of the nursing workforce.

City/Town: _____

County: _____

State (or country if not U.S.A.) _____

ZIP+4 code ☐☐☐☐☐ - ☐☐☐☐

(if available)

60. Did you reside in the same city/town a year ago (March 10, 2007)?

- ☐ Yes ➔ **Go to Question 62**
- ☐ No

61. Where did you reside a year ago? This information is critical for producing State estimates.

City/Town: _____

County: _____

State (or country if not U.S.A.) _____

ZIP+4 code ☐☐☐☐☐ - ☐☐☐☐

(if available)

62. What is your gender?

- ☐ Male
- ☐ Female

63. What is your year of birth?

1 9 ☐☐

64a. Are you of Latino or Hispanic ethnicity?

- ☐ Yes
- ☐ No

64b. Which one or more of the following would you use to describe your race? *Please see page 16 for definitions. Mark all that apply.*

- ☐ White
- ☐ Black or African American
- ☐ Asian
- ☐ American Indian or Alaska Native
- ☐ Native Hawaiian or Other Pacific Islander

65. What languages do you speak fluently, other than English? *Mark all that apply.*

- ☐ No other languages
- ☐ Spanish
- ☐ Filipino language (Tagalog, other Filipino dialect)
- ☐ Chinese language (Cantonese, Mandarin, other Chinese language)
- ☐ French
- ☐ German
- ☐ American Sign Language
- ☐ Other _____
- ☐ Other _____
- ☐ Other _____

66. Which best describes your current marital status?

- ☐ Married or in domestic partnership
- ☐ Widowed, divorced, separated
- ☐ Never married

67. Describe the children/parents/dependents who either live at home with you or for whom you provide a significant amount of care. *Mark all that apply.*

- ☐ No children/parents/dependents at home
- ☐ Child(ren) less than 6 years old at home
- ☐ Child(ren) 6 to 18 years old at home
- ☐ Other adults at home (i.e., parents or dependents)
- ☐ Others living elsewhere (i.e., children, parents or dependents)

68. Including employment earnings, investment earnings, and other income of all household members, what is your current, pre-tax annual total household income? *Pick one appropriate category.*

- ☐ $15,000 or less
- ☐ $15,001 to $25,000
- ☐ $25,001 to $35,000
- ☐ $35,001 to $50,000
- ☐ $50,001 to $75,000
- ☐ $75,001 to $100,000
- ☐ $100,001 to $150,000
- ☐ $150,001 to $200,000
- ☐ More than $200,000

Section H. License and Certification Detail

69. Please provide any other names under which you may have held a nursing license.

70a. Do you currently have any National nursing certifications?

- ☐ Yes
- ☐ No ➔ **Go to Section I on page 16**

70b. Which of the following skill-based certifications do you currently have? *Mark all that apply.*

- ☐ No current skill-based certifications
- ☐ Life Support (BLS, ALS, BCLS, and others)
- ☐ Resuscitation (CPR, NRP, and others)
- ☐ Emergency Medicine/Nursing (EMT, ENPC, and others)
- ☐ Trauma Nursing (TNCC, ATCN, ATN, and others)
- ☐ Other

Specify

- ☐ Other

Specify

70c. Which of the following Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist certifications do you currently have? *Mark all that apply.*

- ☐ No current Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist certifications

Nurse Practitioner (NP)

- ☐ Acute Care NP
- ☐ Adult NP
- ☐ Diabetes Management NP
- ☐ Family NP
- ☐ Gerontological NP
- ☐ Hospice and Palliative Care NP
- ☐ Neonatal NP
- ☐ Oncology NP
- ☐ Pediatric NP (CPNP/CPNP-PC/CPNP-AC)
- ☐ Psychiatric & Mental Health NP - Adult
- ☐ Psychiatric & Mental Health NP - Family
- ☐ School NP
- ☐ Urologic NP
- ☐ Women's Health Care NP
- ☐ Other

Specify

Clinical Nurse Specialist (CNS)

- ☐ Acute Care/Critical Care CNS
- ☐ Adult Health CNS
- ☐ Community Health/Public Health CNS
- ☐ Diabetes Management CNS
- ☐ Gerontological CNS
- ☐ Home Health CNS
- ☐ Hospice and Palliative Care CNS
- ☐ Medical-Surgical CNS
- ☐ Oncology CNS
- ☐ Pediatric CNS
- ☐ Psychiatric & Mental Health CNS - Adult
- ☐ Psychiatric & Mental Health CNS - Child/Adolescent
- ☐ Psychiatric & Mental Health CNS - Family
- ☐ Urologic CNS
- ☐ Other

Specify

Nurse Midwife

- ☐ Nurse Midwife (CNM)

Nurse Anesthetist

- ☐ Nurse Anesthetist (CRNA)

70d. Other than those previously listed, what other National nursing certifications do you currently have? *Specify name or acronym and organization below.*

- ☐ No other current National nursing certifications
  ↳ **Go to Section I on page 16**

Certification Name: _____

Certifying Organization: _____

Certification Name: _____

Certifying Organization: _____

Certification Name: _____

Certifying Organization: _____

Continued on next page

Section I. Contact Information/Comments

71. If we need to contact you about any of your responses, please provide your e-mail address and telephone number, as well as the best time of day to reach you.

E-mail address:

Telephone No.: ☐ Home ☐ Work ☐ Cell ( ) -

Area Code **Telephone Number**

Time of day/week best to contact you by phone:

72. Do you have any recommendations for how this survey could be improved? *Please print clearly.*

Thank You.
Please return this survey and any duplicate surveys in the enclosed, postage-paid envelope.

Definitions for Question 64b

White: origins in any of the original peoples of Europe, the Middle East, or North Africa

Black or African American: origins in any of the black racial groups of Africa

Asian: origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam

American Indian or Alaska Native: origins in any original peoples of North, Central or South America and who maintains tribal affiliation or community attachment

Native Hawaiian or Other Pacific Islander: origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

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DEPARTMENT OF HEALTH & HUMAN SERVICES • USA

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration