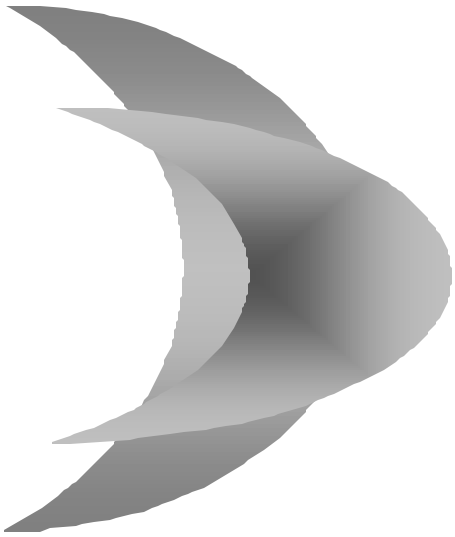

The Registered Nurse Population

March 2000

Findings from the National Sample Survey Of Registered Nurses

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PREFACE

The Health Resources and Services Administration, Bureau off Health Professions, Division of Nursing is the key Federal focus of information regarding nursing education and practice in the U.S. It provides national leadership to assure an adequate supply and distribution of qualified nursing personnel to meet the health needs of the nation. In support of this responsibility, the Division maintains comprehensive data and analysis of current and future nursing personnel resources and requirements. The acquisition and the presentation of data on the registered nurse population and its characteristics are an essential part of the Division's program.

The National Sample Survey of Registered nurses is the Nation's most extensive and comprehensive source of statistics on all those with active licenses to practice in the United States whether or not they are employed in nursing. It provides information on the number of registered nurses, their educational background and specialty areas; their employment settings, position levels, and salaries; their geographic distribution; their personal characteristics including gender, racial/ethnic background, age, family status, and, in this study, satisfaction with their job.

The development of a design for collecting data through national sample surveys of registered nurses originated in July 1975 in a contract with Westat, Inc. Subsequently, the Division of Nursing conducted seven national sample surveys. Reports for six studies, those conducted in September 1977, November 1980 and 1984, and March 1988, 1992, and 1996, have been published and made available to those involved in health care planning and evaluation as well as to the public. This publication is the report of the seventh study, conducted in March 2000.

The data collection for this study was carried out by Research Triangle Institute through a contract. The report was authored by Ms. Ernell Spratley, Dr. Ayah Johnson, Dr. Julie Sochalski, and Mr. Marshall Fritz. Mr. William Spencer programmed and summarized the data into tables. Ms. Lisa Gentry formatted the report for printing. Ms. Dena Saunders provided secretarial assistance and Ms. Carol Jordan provided editorial services. The Division of Nursing is pleased to make this important information on the nation's registered nurse resources available through the report.

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CHAPTER I
INTRODUCTION

Since its inception, the Health Resources and Services Administration, Bureau of Health Professions, Division of Nursing has had primary responsibility for the assessment and examination of the Nation's nursing workforce. This responsibility includes examination of the supply, the composition, and the distribution of nurses nationally and on a State level. The Division of Nursing has worked with other agencies within Federal and State governments, and with various nursing organizations in the development of methods for the study and acquisition of data on the nurse population.

EARLY REGISTERED NURSE WORKFORCE STUDIES

National studies to determine the number and characteristics of the Nation's registered nurses were initiated in 1949 when the American Nurses' Association (ANA) conducted the first Inventory of Registered Nurses[1]. Data were collected through postcard questionnaires mailed by the licensing entity in the States and territories that require renewal of registration to each registrant on record at the time of the study. In Maryland and Ohio, where renewal and registration was not required, questionnaires were distributed through State nurses associations and employing agencies. About 62 percent of all questionnaires sent to nurses by the States were returned. The number of nurses who had licenses to practice in 1949 was estimated by eliminating duplication resulting from nurses having licenses in more than one State, and accounting for those nurses who did not respond to the survey. [2]

The ANA conducted a similar study in 1951, but decided to mail the questionnaires with the license renewal notices to registered nurses (RNs) in each State. About 71 percent of the questionnaires were returned. This change in data collection methodology improved the response rate but lengthened the data collection period because of variation in renewal dates from State to State. The number of nurses who had licenses to practice in 1951 was estimated using the same estimation procedures used in the 1949 inventory: elimination of duplication due to RNs' licensure in more than one State, and accounting for nonrespondents to the inventory.

In the mid-1950s, the ANA promoted the inclusion of a uniform set of questions about RNs' characteristics on each State's licensing application form rather than the use of a postcard or a separate questionnaire. An Inventory of Registered Nurses using this data collection process was initiated in 1956. The length of time it took to include the questions in the licensing process and the limited funds available for compiling and analyzing the data resulted in an extended time frame for both the data collection and its analysis. The actual data summary for the 1956-1958 inventory was published in 1963.[3]

The ANA conducted four subsequent inventories of registered nurses[4,5,6,7]. The Division of Nursing was instrumental in providing Federal financial support to the ANA to defray the costs of obtaining and processing the data for these studies. This support ensured a more centralized approach to data collection and processing as well as greater use of automated procedures to summarize the data.

DEVELOPMENT OF PRESENT STUDY METHODOLOGY

The nursing inventories were based on data collection at the State level using the licensing mechanism as an opportune time for asking registered nurses to complete a questionnaire. This data collection process, although logical and potentially comprehensive, encompassed some serious limitations. The size of the questionnaire had to be limited and follow-up on forms not returned, missing data, or ambiguous data were not part of the data collection process. Moreover, the wide variation in renewal dates from State to State led to a lengthy data collection period. It took as long as three years to present a national picture through analysis of data from all States.

The need for more comprehensive data on the nursing workforce, concerns about the limitations of the nursing inventories and the enactment of Public Law (P.L.) 94-63, were the impetus for the development of the present methodology for collecting data on the nursing workforce. Section 951 of P.L. 94-63 mandates the collection of information on a continuous basis regarding the current and future supply, distribution, and requirements for nurses, nationally and within each State. The data acquisition requirements listed in the law are very specific. For example, the law requires data on the number of nurses with advanced education or graduate degrees by specialty, and data on average rates of compensation by type of employment and location of practice.[8]

In the mid 1970s the Division contracted with Westat Inc., a survey research firm with expertise in complex survey design to develop a comprehensive survey plan. Westat worked with the American Nurses' Association (ANA) and the Division of Nursing to develop a survey plan to implement the data element requirements in section 951 of P.L. 94-63: provide baseline data for the development of estimates and projections regarding the registered nurse population both nationally and for each State, and provide data on nurse characteristics needed for program planning, administration, monitoring, and evaluation by Congress, State legislators, and Federal and State agencies and associations.[9] A complex sample survey was developed using licensure listings from each of the fifty States and the District of Columbia. A single questionnaire was designed; data collection and data follow-up processes also were established. The data collection was to be done by mail with telephone follow-up for nonrespondents.

The first study using this survey methodology was conducted in September 1977 under contract to the ANA with a subcontract to Westat, Inc. During the conduct of that study, the design and data processing procedures were refined.[10] Subsequent studies using the same design were carried out in 1980, 1984, 1988, 1992 and 1996[11,12,13,14,15].

THE 2000 NATIONAL SAMPLE SURVEY OF REGISTERED NURSES (NSSRN)

The sample survey collected data as of March 2000. Research Triangle Institute, under a contract with the Division of Nursing, carried out the sample selection, data collection, and processing of this study. This report summarizes results of the study.

As in previous NSSRN studies, the data collection instrument responds to specific data requirements cited in section 951 of P.L. 94-63 and provides the necessary base data for developing projections of the supply and distribution of and requirements for registered nurses. It also contains some new areas of inquiry designed to provide information on issues of current importance. However, as in prior studies, the survey instrument was designed to ensure that the data collected from study to study provides sufficient continuity so that an evaluation can be made of trends in nursing resources.

In this study series, samples were drawn for each State's list of active licensees, because no single unduplicated list of licensed registered nurses exists in this country. Disproportionate sampling from State to State was used to provide statistically improved estimates of the number of nurses in each State while maintaining the overall sample size within reasonable bounds. Larger proportions of licensees were sampled in the States with fewer registrants than in States with more registrants. In the 2000 study, the sampling methodology included oversampling of minority RNs into the sample. The intent was to increase the sample size for minorities so as to provide more

reliable estimates for this group of the RN population. A weighting procedure was used to account for duplication of licenses from State to State so that estimates could be developed of the number of *individuals* who hold active licenses to practice as RNs regardless of the number of State licenses they hold. Based on March 2000 data, over 3,066,000 licenses to practice as registered nurses in the United States were held by an estimated 2,696,540 nurses.

The initial sample selection for this survey consisted of about 54,000 licenses of which 4,520 were identified at the time of selection or in subsequent data collection as duplicates for nurses licensed in other states or other frame errors. Ninety-seven registered nurses listed as having active licenses were identified as deceased. After taking account of duplications and sample selection errors, the overall response rate was estimated at 72 percent. Responses from a total of 35,579 individual nurses were used to derive the data. This report primarily presents data and analysis of those RNs who, as of March 2000, were employed in nursing in the United States, or, if not employed in nursing, reside in the country—35,358 of the 35,579 respondents fit this definition of location.

To ensure an adequate response to the survey, three mailings were sent out, and these were followed by telephone interviews of those who did not respond. Unlike previous iterations of the RN study, the packages for the third mailing were shipped via Federal Express in an attempt to improve responsiveness. In addition to the efforts to reduce the nonresponse to the survey, careful screening of responses was undertaken to minimize ambiguous responses and nonresponse to individual questions.

Questions on the survey instrument were prioritized as to their importance to the overall registered nurse database, and the degree to which a question might be sensitive in nature. A response rate goal was established for each question. Based on the priority rankings and the response rate goals, respondents were called to clarify the response made or to obtain the missing information. When a call was made concerning a high priority question, the respondent also was queried about any other ambiguous or missing items regardless of their priority order. All respondents to the survey were classified according to whether they were employed in nursing as of March 2000, and also according to State of residence and/or employment.

In addition to the identification and follow-up of missing data, items specified in the "other" categories within the questions were reviewed and reclassified to already stated categories if possible. The remaining ones were reviewed to determine whether there was a sufficient number of a particular response to warrant a separate itemization.

ORGANIZATION OF THE REPORT

The substantial database resulting from the 2000 study may be used for many different types of analyses concerning a variety of subjects. This report presents an overview of the personal, professional, and employment characteristics of the almost 2.7 million registered nurses in the country as of March 2000. A summary of the findings from the study and some comparisons to the findings of prior studies in this series, are presented in the succeeding chapters. Appendix A contains a series of tables summarizing the data. A review of the survey methodology and the statistical techniques used in sample selection, response weighting, and identification of sampling errors are found in Appendix B. The survey instrument is included in Appendix C.

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CHAPTER II

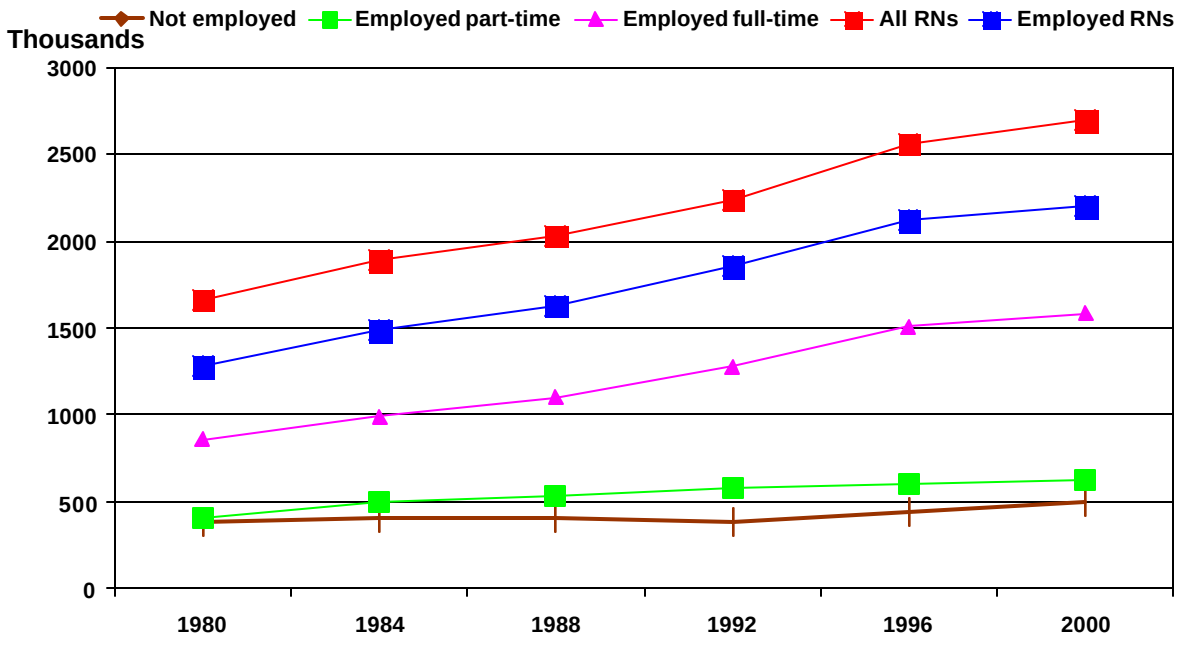
THE REGISTERED NURSE POPULATION 1980 – 2000

REGISTERED NURSES IN THE U.S.

The National Sample Survey of Registered Nurses (NSSRN) 2000 provides information about the current profile of RNs with an active license to practice (the registered nurse population) in one or more of the fifty States and the District of Columbia. This study has been conducted every four years since 1980 and examines trends over time of the Nation's largest health profession.

The registered nurse population increased by more than one million between November 1980 and March of 2000. In March 2000, 2,694,540 persons were estimated to have licenses to practice as RNs in this country, an increase of 62.2 percent since 1980. The years between 1996 and 2000 marked the slowest growth in the RN population over the 20-year period between 1980 and 2000. On average, the RN population grew only about 1.3 percent each year between 1996 and 2000 compared with average annual increases of 2-3 percent in earlier years. This slow down in growth reflects fewer new entrants to the nurse population coupled with a larger volume of losses from

Chart 1. Registered Nurse Population, by Nursing Employment Status, 1980-2000



the nurse population than in earlier years. (See Chart 1).

In the last two decades the number of RNs **employed in nursing** increased 72.9 percent (from 1,272,851 in 1980 to 2,201,813 in 2000). Almost 77 percent of the RN population was employed in nursing in 1980, and that percentage grew to a peak of 82.7 percent in 1996. In 2000 an estimated 81.7 percent of those with active licenses were employed in nursing. Despite this slight drop in the *percentage* of licensed RNs employed in nursing between 1996 and 2000, the total *number* employed in nursing increased by 85,998. During this period, the number of RNs employed in nursing grew by an average annual rate of only one percent, the lowest of any four year interval between surveys.

The number of RNs **employed full time** in nursing increased from slightly less than 1 million to more than 1.5 million between 1984 and 1996. In 2000, this number continued to increase but at a slower rate than in previous years. The sharp increase in the number of RNs employed full time in nursing between 1984 and 1996 was mirrored in an increasing *percentage* of nurses employed full time (from 52 percent to 59 percent). In contrast, while the number of full time nurses increased slightly from 1996 to 2000, the percentage was virtually unchanged.

The number of RNs **not employed in nursing** changed little from 1980 to 1992, although the total number of RNs grew substantially during those years. However, between 1992 and 2000 the number of RNs not employed in nursing increased about 28 percent. Between 1996 and 2000 the proportion of RNs not employed in nursing increased slightly among the total RN population (from 17.3 percent to 18.3 percent).

EDUCATIONAL PREPARATION

One of the most substantial changes in the RN population over the past 2 decades has been in the type of program RNs enter to obtain their basic nursing education. Between 1980 and 2000 the percentage of nurses who received their basic education in diploma programs decreased from 60 percent (1,050,661 nurses) to 30 percent (800,000 nurses) of the RN population. During the same period, the percentage receiving their basic education in associate degree programs increased from 19 percent (308,616 nurses) to

Chart 2. Distribution of RNs According to Basic Nursing Education, 1980-2000

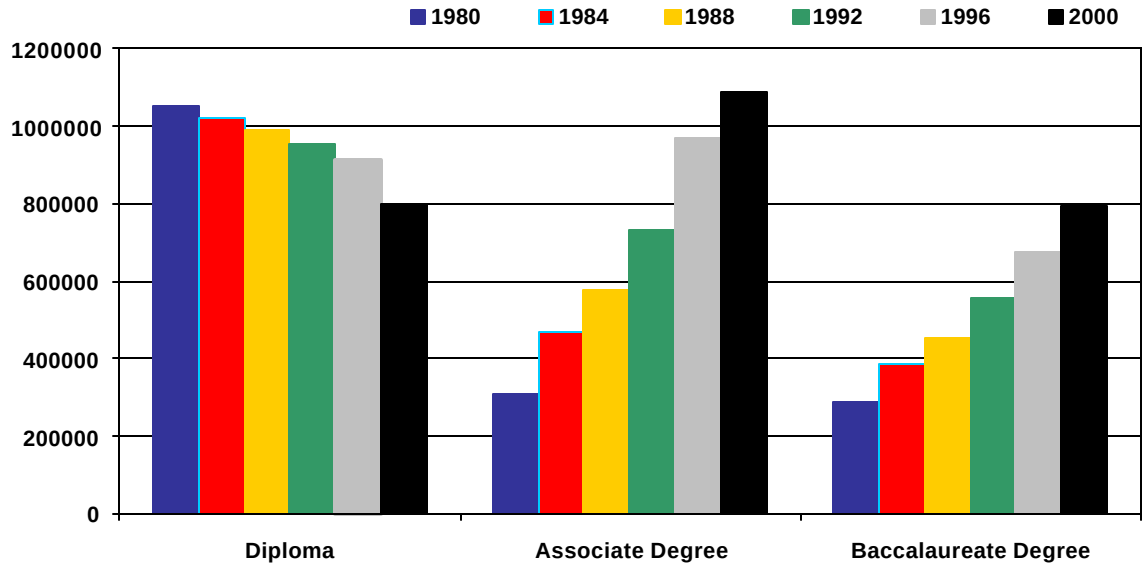
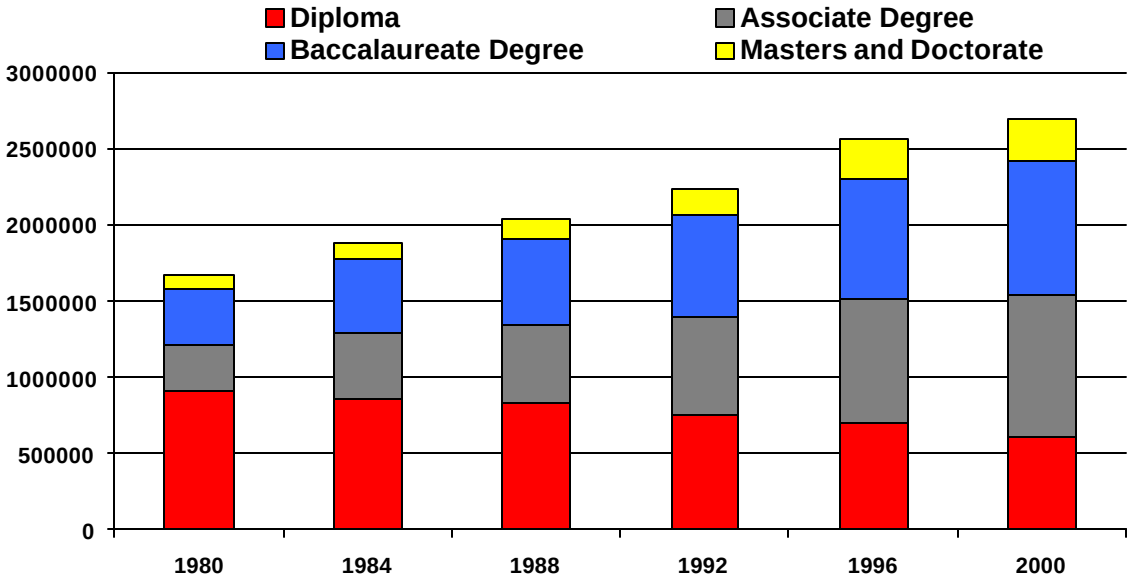


Chart 3. Distribution of the RN Population by Highest Nursing Educational Preparation, 1980-2000



40 percent (1,087,602 nurses) of the RN population; and the percentage receiving basic nursing education in baccalaureate programs increased from 17 percent (287,993 nurses) to 29 percent (791,004 nurses) of the RN population. (See Chart 2).

Between 1996 and 2000 the number of RNs who received their basic education in baccalaureate programs increased at a higher rate than those who received their basic education in associate degree programs (increases of 17 percent and 13 percent, respectively). This was a reversal of the trend for earlier years of the past two decades when the number of nurses educated in associate degree programs increased at a faster rate than those who received their basic education in baccalaureate programs. The number of nurses who received their basic education in diploma programs declined steadily during the period from 1980 to 2000. However the 12-percent decline between 1996 and 2000 was substantially greater than the declines during any of the earlier years.

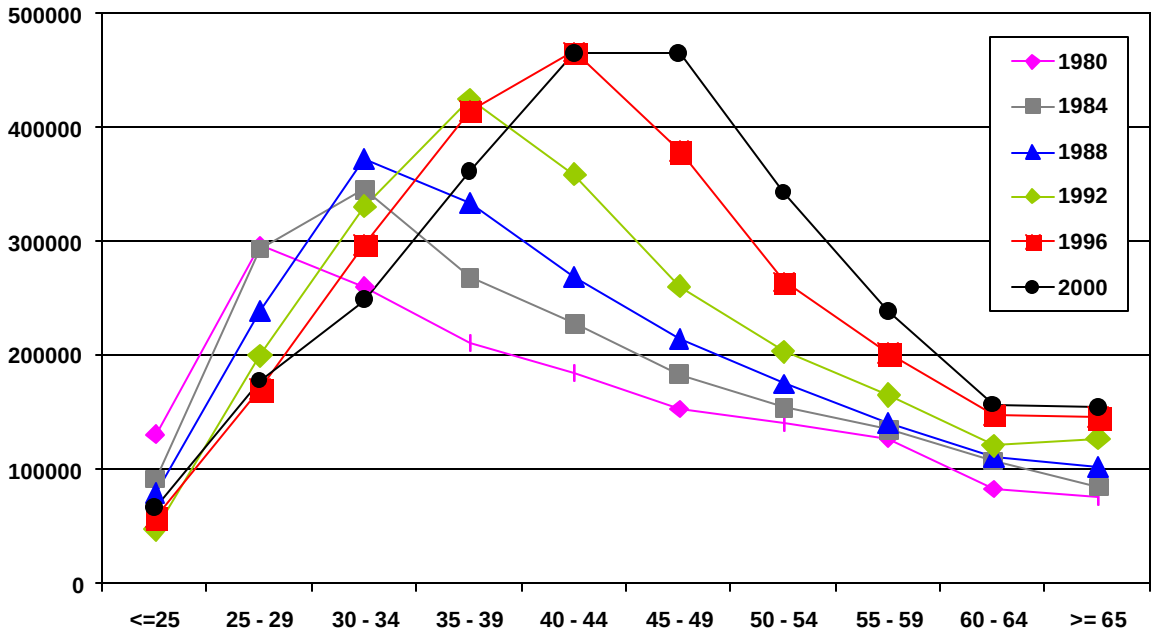
The distribution of RNs according to their highest education level, which incorporates any post-RN degree received, also has changed substantially over the past two decades. In 1980 the diploma was the highest educational level of the majority of nurses. Since 1996 nurses with associate and baccalaureate degrees have had the largest presence among the RN population. In 2000 34.3 percent of nurses reported the associate degree as their highest level of education and 32.7 percent reported the baccalaureate degree as their highest level. (See Chart 3).

The number of RNs whose highest level of preparation was either a masters or a doctorate tripled over the period. In November 1980, RNs with masters or doctorate degrees were estimated at 86,000 or 5 percent of the RN population. In 2000, they numbered 275,068 or 10 percent of the RN population.

AGE

The National Sample Survey of Registered Nurses documents the continuing trend in the aging RN population in 2000. In 1980, the majority (52.9 percent) of the RN population was under the age of 40, while in 2000 less than one-third (31.7 percent) were under 40. The major drop was among those under the age of 30. In 1980, 25.1 percent of RNs were under the age of 30 compared to only 9.1 percent in 2000.

Chart 4. Age Distribution of the Registered Nurse Population, 1980-2000



In 1980, 40.5 percent of RNs were under the age of 35 compared to 18.3 percent in 2000. The average age of the RN population was 45.2 in 2000 compared to 44.3 in 1996.

GENDER

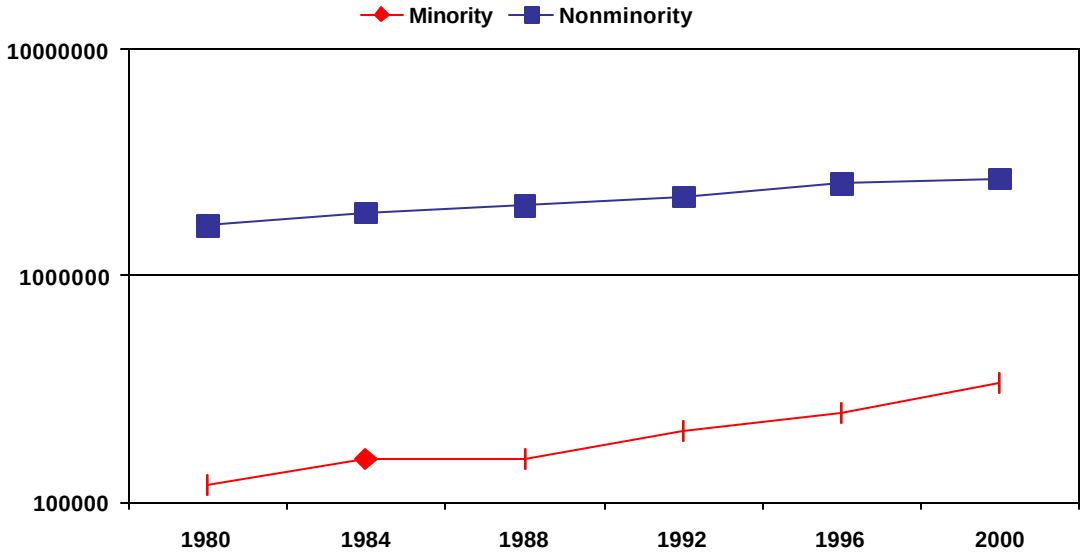
Men still comprise a very small percentage of the total RN population although their numbers have continued to grow. Of the estimated 2,694,540 RNs in the US, 146,902 or 5.4 percent are men. This is a 226 percent increase in the number of male RNs in two decades. In 1980, the number of men in the RN population was estimated at 45,060 or 2.7 percent of the RN population. Each of the surveys indicates that the number of men has grown at a much faster rate than has the total RN population.

RACIAL/ ETHNIC BACKGROUND

Comparisons of the racial/ethnic composition of the RN population in 2000 with previous years should be interpreted with caution. In accordance with Office of Management and Budget (OMB) guidelines, the question regarding racial and ethnic background in the 2000 study was changed from previous surveys. Unlike previous surveys, which included a single question and asked the respondent to choose only one racial/ethnic background, the 2000 survey collected this information in two questions. Respondents were asked to indicate whether their ethnic background was Hispanic/Latino or not and also were asked to identify all races that described them. The 2000 survey information was aggregated to categories similar to those reported in previous years, with one additional category that includes non-Hispanic RNs who reported two or more races. The number of nurses in this new category is estimated to be 32,536 or 1.2 percent of the RN population.

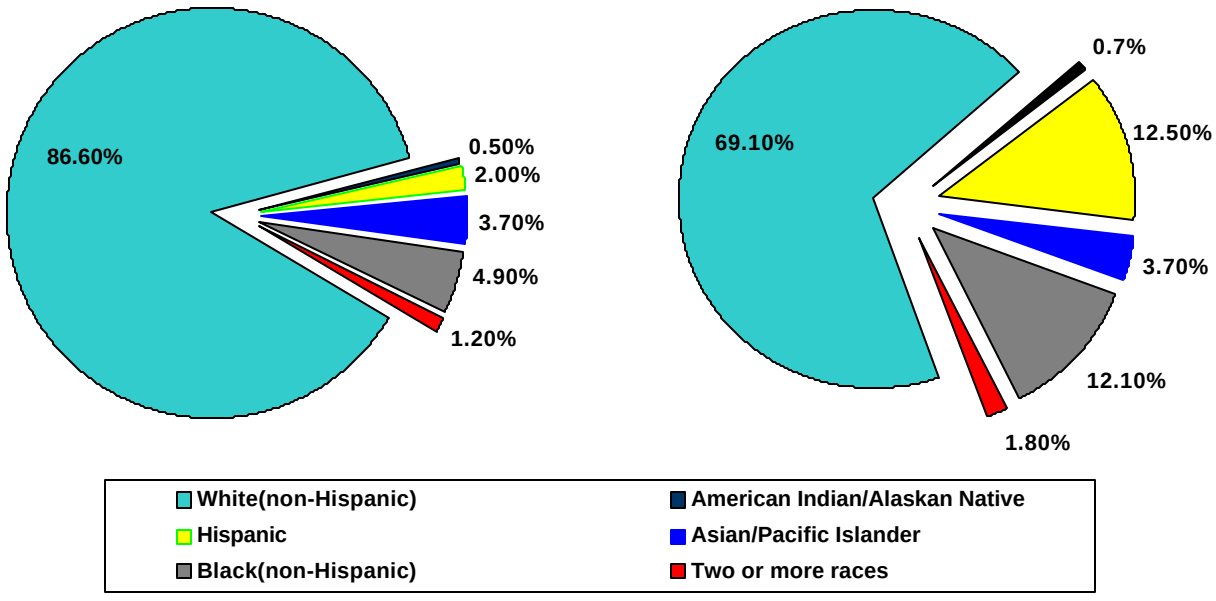
The number of nurses identifying their background as one or more racial minority groups or Hispanic/ Latino numbered 333,368 in 2000. This is nearly triple the number of nurses estimated to be minorities in 1980. Minority RNs grew at a greater rate than non-minority RNs for all of the years from 1980-2000, except the period from 1984-1988. The difference in the growth rates for the two groups of nurses is especially pronounced in the period from 1996 to 2000. During those years the number of minority RNs in-

Chart 5. Trend in the Number of Racial/Ethnic Minority and Non-Minority RNs, 1980-2000



Semilogarithmic scale

Chart 6. Distribution of Registered Nurses by Racial/Ethnic Background, March 2000



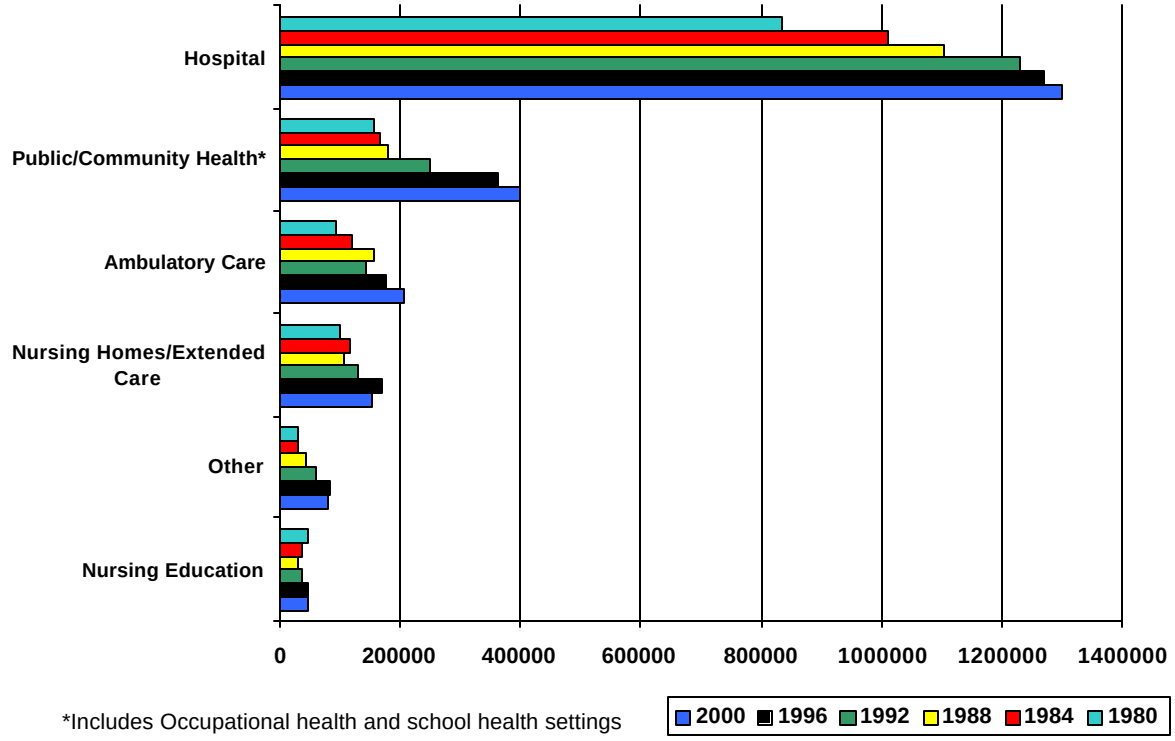
creased about 35 percent while the number of non-minority RNs increased about 2 percent. Most of the increase in the RN population between 1996 and 2000 was a result of the growth in the minority nurse population. However, because the population of non-minority nurses is 7 times larger than the population of minority nurses even small percentage changes in the non-minority nurse population involve a much larger volume of nurses.

The representation of minority nurses among the total nurse population increased from 7 percent in 1980 to 12 percent in 2000. Despite these increases, the diversity of the RN population remains far less than that of the general population where minority representation was more than 30 percent in 2000. (See Chart 6).

The groups comprising the minority RN population differ in the rates at which their numbers have increased over the last two decades. The number of nurses from American Indian/Alaska Native and Asian/Native Hawaiian/Pacific Islander backgrounds showed the highest relative increases over the period from 1980 to 2000, 197 and 207 percent, respectively. Hispanic/Latino nurses increased by 164 percent, while the increase for African American/Black nurses is estimated at 119 percent. Despite these impressive growth rates the actual numbers of minority nurses remain relatively small.

Growth in the number of African American/Black and Hispanic/Latino nurses in the years between 1996 and 2000 was greater than during any other four-year period between 1980 and 2000. The largest relative increase was among Hispanic/Latino nurses, with a 35.3 percent increase followed by African American/Black nurses with an increase of 23.7 percent. Hispanics, despite showing the largest relative increase between 1996 and 2000 remain the most underrepresented group of nurses when compared with the representation of Hispanics in the popula-

Chart 7. Distribution of Registered Nurses by Employment Settings, 1980-2000



*Includes Occupational health and school health settings

tion. Only 2 percent of the RN population are Hispanic nurses although Hispanics comprise 12.5 percent of the general population.

EMPLOYMENT SETTINGS

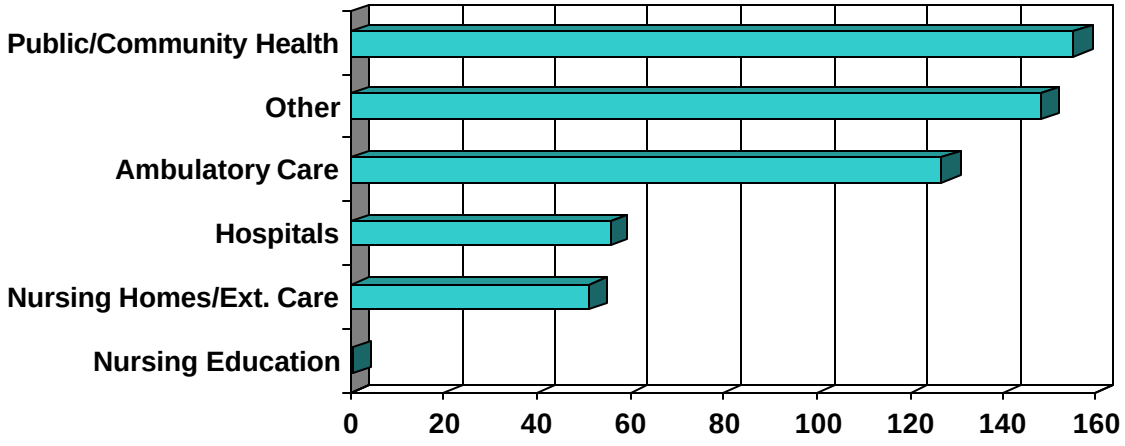
RNs are employed in a variety of facilities, settings and service delivery systems and substantial changes in the health care delivery system over the past two decades have had major effects on the settings in which nurses are employed. Hospitals, public/community health settings, ambulatory care settings, and nursing homes/extended care facilities continue to be the major employment settings for nurses although there have been substantial shifts in the mix since 1980, as Chart 7 illustrates. Each NSSRN survey since 1980 revised the questionnaire and expanded the choices available to nurse respondents for identifying the types of facilities, institutions and service delivery systems in which they were employed. Despite these data collection changes, major employment sectors are sufficiently distinct to allow adjustments in the data in order to analyze trends in the employment settings of nurses over the past two decades.

Hospitals remain the major employer of nurses although the number of nurses employed in other sectors has increased. The number of RNs employed in hospitals increased by nearly one-half million between 1980 and 2000. However, reflecting the growth in nurse employment in other sectors, the *percentage* of the nurse workforce employed in hospitals, after a peak of approximately 68 percent in 1984, declined steadily. In 1980 approximately 66 percent of employed RNs worked in hospitals; by 2000 the proportion had declined to 59 percent.

Public and community health, ambulatory care, and other non-institutional settings had the largest percentage gain in RN employment between November 1980 and March 2000. RNs employed in public health and community health settings increased by 155 percent and those employed in ambulatory care settings increased by 127 percent between 1980 and 2000. (See Chart 8).

The number of nurses employed in nursing homes and other extended care facilities, although 51 percent higher in 2000 than in 1980, decreased between 1996 and 2000 following a substantial increase between 1992 and 1996. This decline in nursing home employment occurred among nurses of all ages except those between 45 and 54 years of age; but was especially sharp for younger nurses. The number of nurses under 45 years of age who were employed in nursing homes and other extended care facilities in 2000 was 18 percent lower than the comparable number in 1996.

Chart 8. Percent Change Between 1980 and 2000 in RNs Employed in Selected Settings



The number of nurses employed in nursing education changed little during the past two decades. This lack of change in the number of nurses in nursing education coupled with an increase in the total number of nurses resulted in a decline in the proportion of employed RNs who are educators. In 1980 3.7 percent of all RNs employed in nursing were in nursing education, in 2000 the comparable percentage was 2.1.

Long-Term Trends in Average Salaries/Earnings

For the purposes of this discussion, the term 'earnings' is used to collectively represent salaries and/or earnings. Actual earnings are those earnings self-reported by survey respondents.

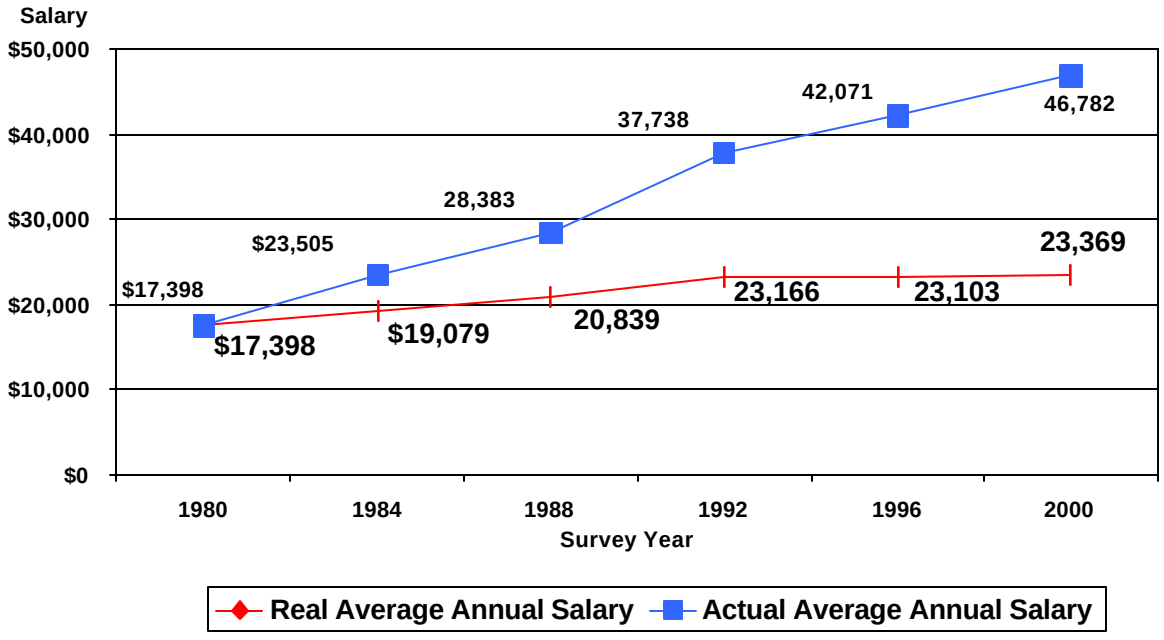
Changes in overall average earnings for RNs between November 1980 and March 2000 are shown using two separate measures. The first measure is the 'actual' average earnings reported by RNs employed full-time, and the second measure uses the consumer price index (CPI) for urban consumers to adjust for the changes in the purchasing power of the dollar against the actual earnings of full-time employment.

In examining the extent to which average RN earnings have increased over the years, and the related economic demand for RNs, it is important to consider how earnings have increased during times of relatively high inflation as well as during times of relative stability in the cost of living. However, inflation is only one of the factors influencing the size of increases in RN earnings over time.

The highest increases in actual annual earnings (35.1 percent) were experienced during the period between November 1980 to 1984, followed by a 33.2 percent increase in average earnings between March 1988 and 1992. These were times of relatively high increases in the cost of living. These were also periods when nurses were being actively sought for employment. There were substantial increases in the supply of RNs in the workforce from 1977 to 1984. There was also a perceived nursing shortage from 1988 to 1992. For these reasons, the substantial increases in actual earnings, far greater than would be expected just from the CPI levels, may reflect economic demand by employers for RNs.

The average actual annual earnings of RNs employed full-time in March 2000 was $46,782, 11.2 percent higher than in March 1996. This is similar to the

Chart 9. Actual and "Real" Average Annual Salaries of Full-Time Registered Nurses, 1980 – 2000



11.5 percent increase between 1992 and 1996. The eight years from 1992 to 2000 were a period of relative stability in the cost of living, where the CPI increased about 10 percent over each 4-year period. Thus, it appears that nearly all of the increases over each of these four-year periods may be due to inflationary factors.

The second measure for assessing trends in average earnings utilizes the consumer price index. Obtaining the trends over time in 'real' increases in RN earnings is possible after accounting for the changes in purchasing power of the dollar from the reported earnings found in each respective Sample Survey. For example, the increase in real earnings that RNs experienced between March 1988 to 1992 (11.2 percent) was large and almost equalled by the increase (9.7 percent) experienced between 1980 to 1984. These increases in earnings also occurred during periods when the supply of employed nurses increased substantially. These combined facts suggest that there was a significant economic demand for RNs over this period.

In contrast to the large real earnings increases from 1980 to 1984 and 1988 to 1992, real earnings were relatively stagnant over the years from 1992 to 2000 (see Chart 9). On an annual basis, the CPI averaged about 2.4 percent annually over the 1996 to 2000 period, or about 10 percent over four years. At the same time, RNs who were employed full time in nursing saw earnings increases of roughly the same magnitude as the CPI; their actual earnings increased annually at an average rate of 2.7 percent. Any changes in earnings since March 2000, which may reflect changes in demand for RNs in the health care marketplace, are not reflected in these figures.

CHAPTER III

THE REGISTERED NURSE POPULATION 2000

In March 2000 an estimated 2,714,671 individuals had current licenses to practice as RNs in the United States. Of these, 2,696,540 were located in this country, 9,831 were located outside the United States and the District of Columbia, and 8,300 who were listed as having an active license to practice were identified as deceased. The data in this report focus on RNs located in the United States. RNs are considered to be located in the U.S. if they were employed in nursing in one of the 50 States and the District of Columbia or, if not employed in nursing, were residents of the U.S. Of the 2,696,540 RNs located in this country, 81.7 percent or 2,201, 813 were employed in nursing (see Appendix A, Table 1).

Age

The average age of the total RN population (including those who are retired and not employed in nursing) was estimated as 45.2 years in March 2000, the highest since the survey series was initiated. Only 9.1 percent of the RN population were under the age of 30, 18.3 percent were under the age of 35 and 31.7 percent were under the age of 40. (See Appendix A, Table 1). Despite the increasing age of RNs, the percent of RNs who are employed in nursing continues to be at a relatively high level.

The aging RN workforce reflects fewer young nurses entering the RN population, large cohorts of the RN population moving into their 50s and 60s, and older graduates from basic nursing education programs who have been entering the RN population.

The average age of an RN who graduated from a basic education program in the five years preceding the March 2000 study, was 30.9 years compared to 23.9 years for those who had graduated 16 or more years before the survey (see Appendix A, Table 5).

The average age of graduates from basic nursing programs varies by type of program. Graduates of associate degree programs tend to be older than diploma graduates, while baccalaureate graduates tend to be the youngest. The average age of graduates from the basic nursing programs during the five-year period preceding the 2000 survey was: 33.2 for associate degree graduates, 30.8 for diploma graduates, and 27.5 for baccalaureate graduates. Data show that, for each type of basic education program, the average age at graduation is higher for those who graduated in 1995 and later than for those who graduated in the years prior to 1995. (See Chart 10).
However, age at graduation has increased less among 1990 and later graduates than it did among those who graduated prior to 1990 (see Appendix A, Table 5).

Gender

As noted in Chapter II (**Gender**), of the estimated 2,694,540 RNs in the US in March 2000, 146,902 or 5.4 percent were men. (See Appendix A, Table 1). Gender differences exist with regard to age, employment status and choice of basic nursing education programs. Male RNs generally are younger than female RNs and more likely to be employed in nursing. Thirty eight percent of male RNs were under 40 years of age compared with 31percent of female RNs, and 21 percent of male RNs were 50 years of age or older compared with 34 percent of female RNs. Approximately 88 percent of male RNs were employed in nursing compared with 81 percent of female RNs.

THE REGISTERED NURSE POPULATION

Chart 10. Average Age at Graduation from Basic Nursing Education Programs

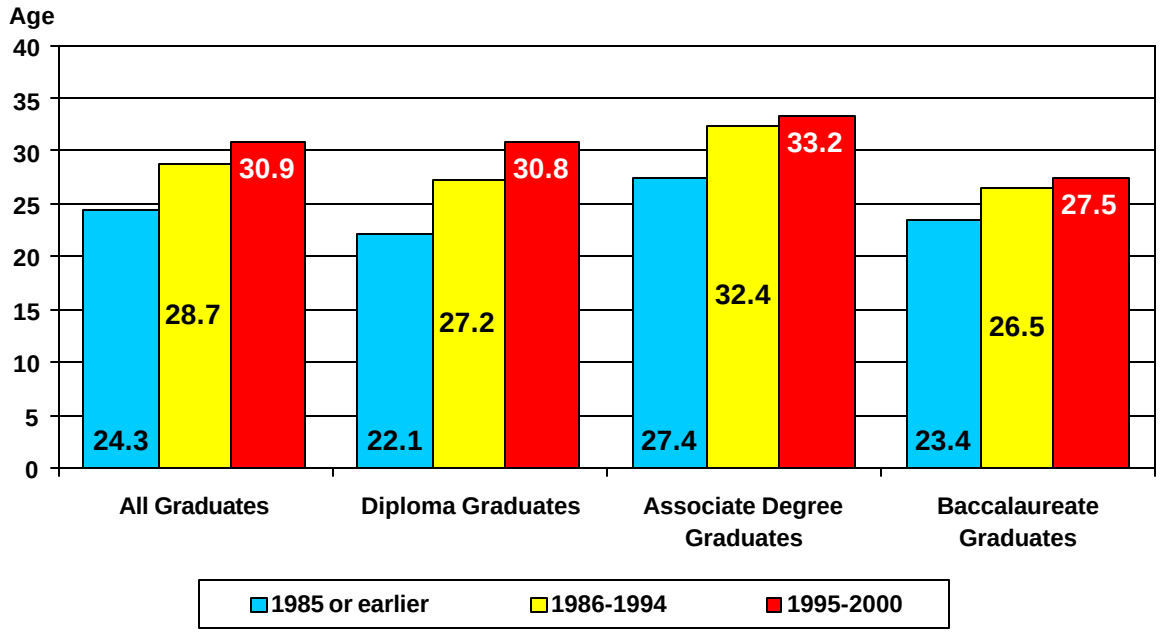
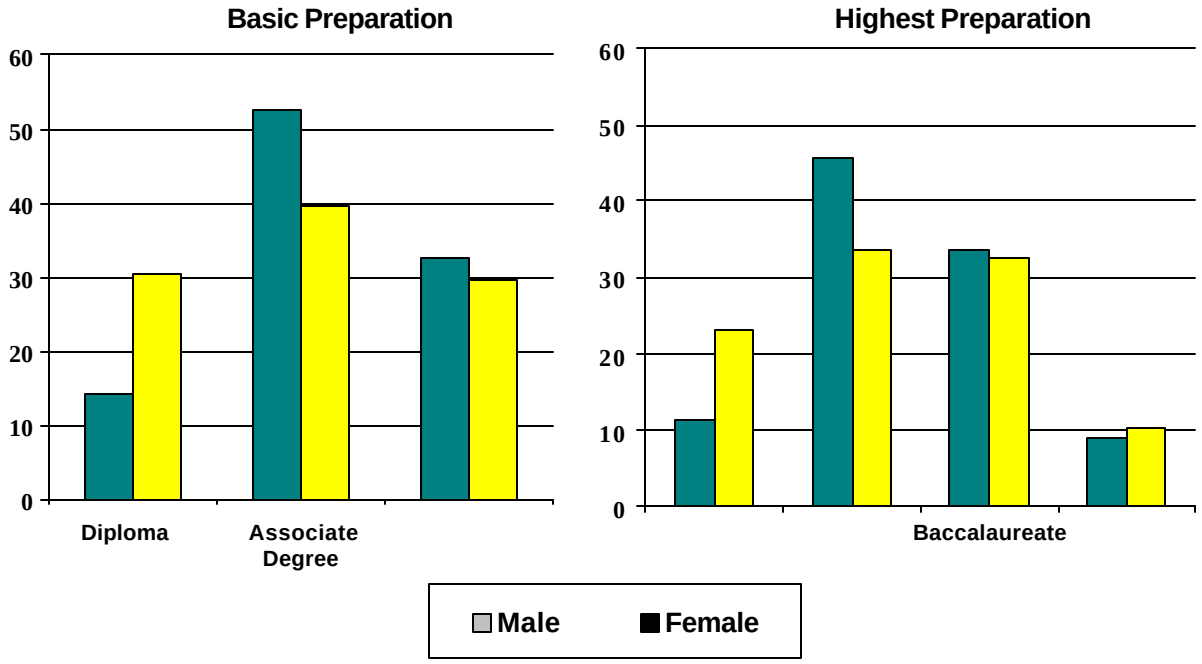


Chart 11. Percent Distribution of Male and Female RNs by Type of Basic and Highest Nursing Education Program, March 2000



With respect to the type of program in which they received their basic nursing education, differences between male and female RNs are found in the proportions graduating with either a diploma or an associate degree. Approximately 15 percent of male RNs graduated from diploma programs, compared with 30 percent of female RNs; and 53 percent of male RNs graduated from associate degree programs, compared with 40 percent of female RNs.

These gender differences can also be observed in the highest educational preparation of RNs. Diploma preparation is more likely to be the highest preparation of female RNs than of male RNs, while males RNs are more likely to have associate degree preparation. Men and women are comparable in the percentages prepared at the baccalaureate and higher levels. (See chart 11).

Racial/ Ethnic Background

An estimated 333,368 RNs, (12 percent) came from racial and ethnic minority backgrounds. Of these RNs, 133,041 were African American/Black (non-Hispanic); 93,415 were Asian; 54,861 were Hispanic/ Latino; and, 13,040 were American Indians/Alaska Natives. For the first time in the survey series, estimates also are available of the number of Native Hawaiian and Other Pacific Islander RNs apart from the Asian total – an estimated 6,475; and of non-Hispanic RNs who reported two or more races – an estimated 32,536.

RNs from minority backgrounds were more likely than non-minority nurses to be employed in nursing and to work full time. Eighty-six percent of minority nurses were employed in nursing compared with 81 percent of non-minority nurses. Minority nurses employed in nursing were also more likely than non-minority nurses to be employed full time. The percentage of the workforce employed full time ranged from 77 percent for Hispanic/Latino RNs to 86 percent for African American/Black, Asian, and Native Hawaiian and Other Pacific Islander RNs. In comparison, 70 percent of employed non-Hispanic White RNs worked full time.

With the exception of RNs from Asian, Native Hawaiian and Pacific Islander backgrounds, most RNs receive their basic nursing preparation in associate degree programs. The proportion of RNs who received basic nursing education in associate degree programs ranged from 40 percent of white nurses to 57 percent of American Indian/Alaska Native nurses. White nurses were more likely than other nurses to have received their basic nursing education in diploma programs. Thirty-one percent of white nurses were prepared for RN licensure in diploma programs compared with 16 to 25 percent of minority nurses. On the other hand, the majority (54.3 percent) of RNs from Asian backgrounds and Native Hawaiian and Pacific Islanders (55.7 percent) received basic nursing education in baccalaureate programs.

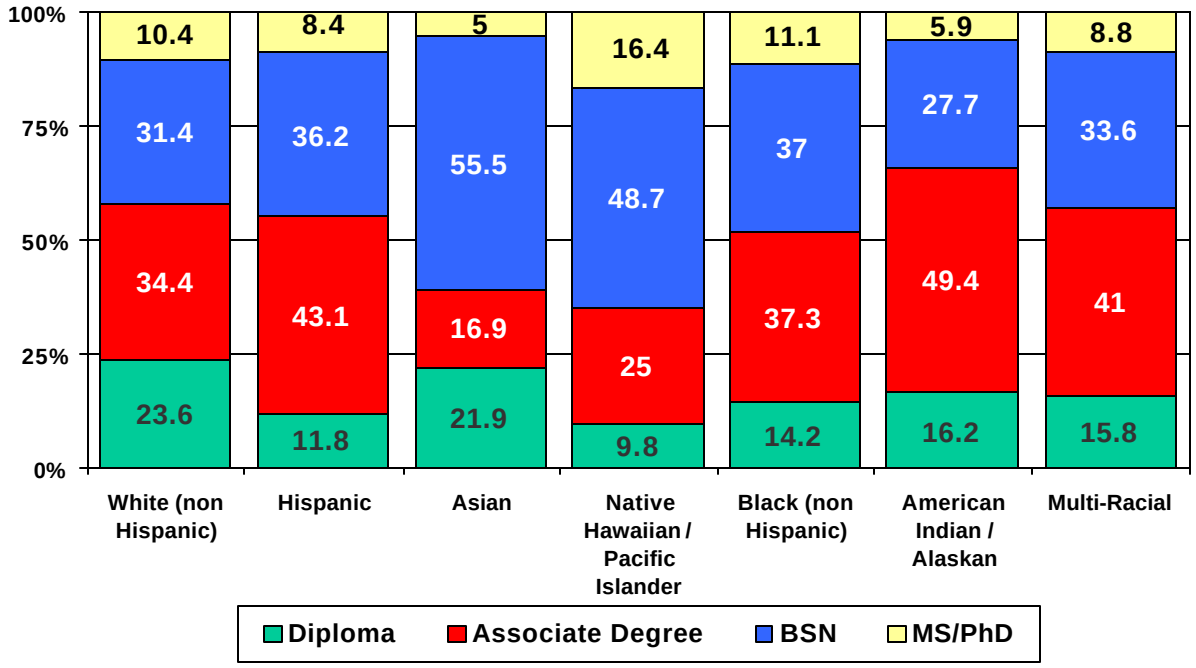
Chart 12 illustrates how racial/ethnic groups compare in terms of highest educational preparation. Asians, Native Hawaiians and Other Pacific Islanders; and African Americans/Blacks were more likely than all other nurses to have at least baccalaureate preparation. Native Hawaiian and Other Pacific Islander, African American/Black, and white nurses were the racial/ethnic groups with the highest percentages of masters or doctoral degrees.

EDUCATION AND EMPLOYMENT PRIOR TO BASIC NURSING EDUCATION

Individuals come into nursing through various pathways. A significant number were employed in other health care occupations or received post high school academic degrees prior to entering a basic nursing education program. Both the number and percentage of nurses with these employment and educational backgrounds increased notably between 1996 and 2000. In March 2000, about 37 percent of RNs (1,006,617 RNs) had worked in a health care occupation immediately prior to attending a basic nursing education program (see Appendix A, Table 2). This compares with 34 percent in 1996. The majority (51 percent) of those coming through the pathway of other health care employment had worked as nursing aides, and another relatively large group, 26 percent, had worked as licensed practical or vocational nurses (LPN/LVN) immediately prior to going into a basic nursing education program to become RNs.

Nurses who had been health occupation workers just

Chart 12. Distribution of Registered Nurses in Each Racial/Ethnic Group by Highest Educational Preparation, March 2000



before entering a basic nursing education program tended to enroll in associate degree programs (56.3 percent) to prepare for RN licensure. This is particularly true of those who worked as LPNs/LVNs. Eighty-two percent of RNs who were employed as LPNs/LVNs immediately prior to beginning their basic education program,selected associate degree programs. In total there were 305,842 RNs who had been LPNs/LVNs sometime prior to becoming registered nurses. It is estimated that 256,730 of these nurses were employed as LPNs/LVNs immediately prior to their basic nursing education.

In 2000 about 13 percent of the RN population, or 358,520 RNs, had post high school academic degrees prior to entering a basic nursing education program (See Appendix A, Table 4). RNs with post-high school academic degrees were less likely to receive their basic education in an associate degree program than those who had been licensed practical/vocational nurses. About 53 percent of these RNs received their basic education in an associate degree program, compared with 80 percent of those who had been LPNs/LVNs sometime before becoming RNs.

There are more RNs who had post high school academic degrees prior to their nursing education than RNs who had been LPNs/LVNs among recent entrants to the RN population. Twenty-five percent of RNs who graduated 5 years or less before the 2000 survey had post high school academic degrees compared with 15 percent who were previously employed as LPNs/LVNs.

Family Status

In March 2000, 71.5 percent of all RNs were married, 17.9 percent were widowed, divorced or separated and 9.9 percent were never married. Fifty two percent had children living at home, and 8 percent had children under 6 years of age. (See Appendix A Table 6)

Family status made a difference in whether nurses were employed full-time or part-time. Employed married nurses with children, particularly those with children under the age of six, were more likely than other employed nurses to be employed on a part-time basis. Approximately 28 percent of the 2,201,813 employed

RNs were working on a part-time basis. Nearly 45 percent of employed married nurses with children under 6 worked part time. Married nurses with children under 6 years of age were 8.1 percent of all employed nurses.

Nursing Educational Preparation

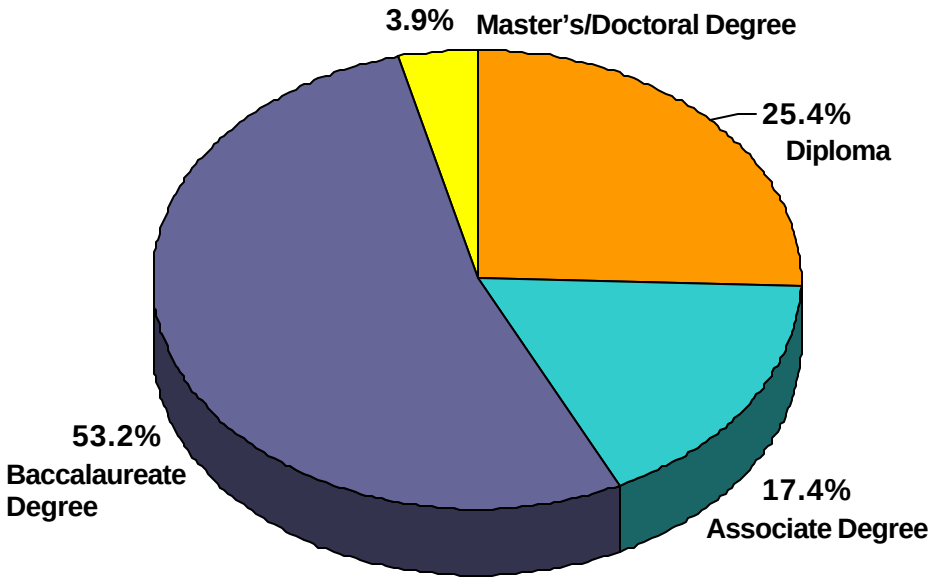
The basic educational preparation for the largest proportion of RNs is the associate degree. Forty percent, or 1,087,602 of the 2,696,540 RNs received their basic nursing education in an associate degree program. Equal proportions (about 30 percent) attended diploma programs and baccalaureate programs. RNs employed in nursing were even more likely to have been initially educated in associate degree programs; 43.3 percent of them came from associate degree programs, 25.7 percent from diploma programs and 30.3 percent from baccalaureate programs. (See Appendix A, Table 8.)

Of those RNs obtaining their initial nursing education in the past 5 years, 55.4 percent graduated from an associate degree program and 38 percent graduated from a baccalaureate program; only six percent graduated from diploma programs. (See Appendix A, Table 5)

Approximately 19 percent of the RN population in 2000 had completed additional academic nursing or nursing related preparation after they graduated from basic nursing education. About 16 percent of those initially prepared in associate degree programs and 24 percent of those prepared in diploma programs had obtained post-RN nursing or nursing related degrees. In most instances, the highest educational level achieved by these nurses was the baccalaureate degree. Among associate degree nurses 71.6 percent of those who had received additional degrees had a baccalaureate as their highest degree. For diploma prepared nurses, the comparable percentage was 59.9 percent. About 19 percent of those prepared initially in a baccalaureate program had obtained post-RN degrees. As illustrated by Chart 13, the majority (53.2 percent) of nurses who earn a master's or a doctoral degree received a baccalaureate degree as their initial preparation.

When all formal education of the RN population in 2000 is taken into account, including initial education preparing individuals for licensure and any education subsequent to licensure, 22.3 percent or 601,704 had a diploma, 34.3 percent or 925,516 had an associate degree**,** and 32.7 percent or 880,997 had

Chart 13. RNs Whose Highest Education was a Master's or Doctoral Degree, by Type of Basic Nursing Education, March 2000



a baccalaureate as their highest educational preparation for nursing. The number of RNs with a masters or doctoral degree is estimated at 257,812 (9.6 percent) and 17,256 (0.6 percent) respectively (see Appendix A, Table 8).

It should be noted that a number of nurses have degrees that are not in nursing but related to their career in nursing. About 21 percent of master's degrees and 51 percent doctoral degrees held by RNs are in nursing related fields.

One-half of the nurses who had post-RN master's degrees in nursing or a nursing-related field chose clinical practice as their field of study (see Appendix A, Table 9). Sixteen percent majored in supervision / administration and 13 percent in education.

Post-RN doctoral degrees were focused primarily on either education or research. The primary field of study for 30 percent of the RNs with such degrees was education while 24 percent focused on research. Clinical practice was the focus of about 13 percent of nurses receiving post-RN doctoral degrees.

In March 2000, 6.7 percent of the country's RNs, or 180,765 of the 2,696,540 population, were enrolled in formal education programs leading to a nursing or nursing related-degree**.** Those enrolled in academic programs tended to be part-time students (76 percent) and to be employed in nursing on a full-time basis (72 percent) (see Appendix A, Table 10.)

Approximately 53 percent of the 180,765 nurses pursuing formal education were enrolled in programs leading to a baccalaureate degree, 36.4 percent were enrolled in programs leading to a master's degree and almost 4 percent were enrolled in doctoral programs (see Appendix A, Table 11).

RNs attending school relied on multiple resources to pay for some portion of education expenses. The two primary sources were personal resources and employer reimbursement plans. An estimated 73 percent of students used some personal resources such as earnings, savings and/or family assistance to pay for tuition and fees; 41 percent obtained assistance from employer reimbursement plans. Federal sources of support in the form of traineeships, scholarships or grants were a resource for six percent of RNs, and Federally assisted loans were a resource for about 12 percent of RNs attending school. Federal resources were more likely to be used to support master's and doctoral degree students than baccalaureate students. About 28 percent of master's degree students and 26 percent of doctoral degree students had obtained some type of Federal support compared to about 12 percent of baccalaureate students (see Appendix A, Table 11).

Advanced Practice Nurses

Increased interest in expanding the access and availability of health care services led to particular emphasis on advanced practice nurses. Advanced practice nurses include clinical nurse specialists, nurse anesthetists, nurse midwives and nurse practitioners. Responses to multiple areas of the questionnaire were combined to determine appropriate classification of nurses for each category of advanced practice nurses. In total, an estimated 196,279 RNs, or 7.3 percent of the RN population, were prepared to practice in at least one of these advanced practice roles (see Appendix A, Table 12).

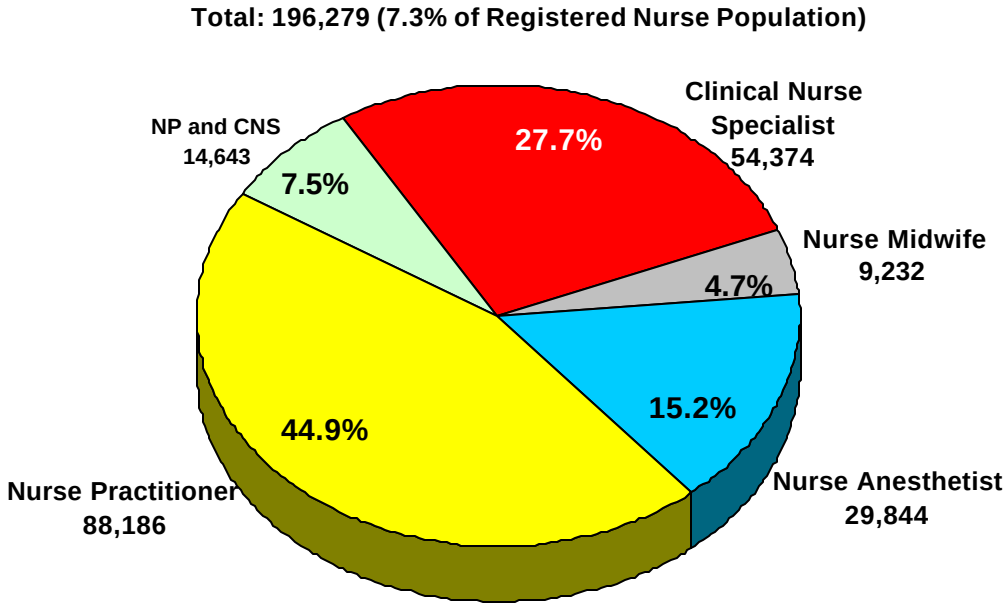
As shown in Chart 14, the largest group among advanced practice nurses were nurse practitioners (88,186) followed by clinical nurse specialists (54,374). These two groups together, including those with dual preparation of nurse practitioner and clinical nurse specialist (14,643) make up an estimated 80 percent of all advanced practice nurses.

Nurse Practitioners

The nurse practitioner (NP) group included all RNs prepared beyond basic nursing education in a formal nurse practitioner program of at least three months. In March 2000, there were an estimated 102,829 NPs; 14,643 of these NPs also were prepared as clinical nurse specialists (CNS).

The data show that increasingly the education of NPs takes place primarily in master's degree programs. In March 2000, it was estimated that about 62 percent of NPs completed a master's degree program, compared with about 46 percent of NPs in 1996.

Chart 14. Registered Nurses Prepared for Advanced Practice, March 2000



The number of RNs educated as NPs increased by 44.8 percent between March 1996 and March 2000. In 1996 there were an estimated 70,993 NPs which included 7,802 nurse practitioners that also were prepared as clinical nurse specialists. By March 2000 these numbers had increased to 102,829, which included 14, 643 with both nurse practitioner and clinical nurse specialist training.

Eighty-nine percent, or 91,591 of 102,829 NPs were employed in nursing, although not necessarily with the position title of Nurse Practitioner. It was estimated that 58,512 or 64 percent of those trained as NPs and employed in nursing had the title of nurse practitioner.

An estimated 74 percent or 75,650 of the 102,829 RNs with formal preparation as nurse practitioners, also had national nurse practitioner certification as an advanced practice nurse or nurse practitioner. The number with State Board of Nursing recognition was 67,490. (See Appendix A, Table 12)

Clinical Nurse Specialists

There were an estimated 69,017 RNs prepared to practice as clinical nurse specialists in March 2000, including the 14,643 who were both nurse practitioners and clinical nurse specialists. Between 1996 and 2000, the number of CNS increased 12 percent. In March 1996, there were 61,601 clinical nurse specialists. By March 2000 that number had risen to 69,017 almost entirely as a result of increases in those RNs with both nurse practitioner and clinical nurse specialist preparation.

Because the 2000 survey shows that RNs who are prepared as both clinical nurse specialists and nurse practitioners are more likely to function in the nurse practitioner role, the following data refer only to the 54,374 RNs identified as having formal preparation as clinical nurse specialists but not also as nurse practitioners.

Eighty-seven percent, or 47,225 of the 54,374 were employed in nursing, however, only 11,309 (24 percent) were practicing with the position title of clinical nurse specialist.

A total of 19,864 had national certification and 11,347 had State Board of Nursing recognition as an advanced practice nurse or as a clinical nurse special-

the position title of clinical nurse specialist were more likely than those without the title to have national certification or State recognition.

Nurse Anesthetists

Nurse anesthetists are the third largest group of advanced practice nurses. Included in the nurse anesist. Nurses employed with thetist category were all those with formal preparation beyond basic nursing education in which the specialty of anesthesia was studied. Using this definition, there were 29,844 nurses who were nurse anesthetists, 85.7 percent of whom were employed in nursing. Most of those who were employed in nursing, 22,794 of the 25,575 employed in nursing, were in positions where the job title was that of nurse anesthetist. Virtually all of those employed in nursing with the position title of nurse anesthetist had national certification and two-thirds had State Board of Nursing recognition.

Nurse Midwives

Among the advanced practice nurses there are fewer nurse midwives than there are members of the other three groups. To assure that nurse midwives were appropriately classified, several screening steps were taken via responses to the survey questionnaire. The formal education beyond basic nursing education had to be at least 9-months in length. A second screen was needed for the relatively large proportion of RNs in the sample who indicated they had formal preparation as nurse midwives and were initially foreign educated. Such nurses usually need additional education to qualify for certification in this country.

Therefore, in addition to the nine-month educational requirement, anyone who was foreign educated had to be nationally certified as a nurse midwife in order to fit the definition. Based on these criteria there were 9,232 nurses formally prepared as nurse midwives, 85.7 percent of whom were employed in nursing. Of the 7,914 nurse midwives employed in nursing, 4,773 had the position title of nurse midwife. Virtually all of those employed in nursing with the position title of nurse midwife had national certification as nurse midwives and two-thirds had State Board of Nursing recognition.

Minority Advanced Practice Nurses

Nearly 10 percent of advanced practice nurses were from racial/ethnic minority backgrounds. Minority nurses were more likely to be found among nurse practitioners than among other advanced practice nurses. Approximately 11 percent of nurse practitioners were minority nurses compared with 8 to10 percent of other advanced practice groups.

RNs in the Workforce

In March 2000, 81.7 percent of the RN population, or 2,201,813 RNs were employed in nursing. Although RNs can be found in all sectors of the health care system, the predominant employment setting remains the hospital. Of the 2,201,813 RNs employed in nursing, 1,300,323 or 59.1 percent, worked in hospitals. The next largest group, 402,282, or 18.2 percent, worked in public/community health settings including State or local health departments, community based home-health agencies, various types of community health centers, student health services, and occupational health services. An estimated 9.5 percent or 209,324 RNs were in ambulatory care settings, including physician-based practices; nurse based practices, and health maintenance organizations. A total of 152,894 (6.9 percent) of all RNs employed in nursing, worked in nursing homes and extended care facilities. The remaining group of those employed in nursing were working in such settings as nursing education, federal administrative agencies, State boards of nursing or other health associations, health planning agencies, prisons/jails, or insurance companies (see Appendix A, Table 13).

The percent of RNs employed in hospitals did not change substantially between 1996 and 2000, declining from 60.1 percent to 59.1 percent. The number of RNs employed in hospitals increased by 2 percent compared with a 4 percent increase in the total number of RNs employed in nursing.

Nearly three-fourths of RNs employed in hospitals reported spending more than 50 percent of their time in direct patient care, as illustrated in Chart 15. However, approximately 90 percent of RNs employed in hospitals spent some portion of their time in direct

patient care. As shown in Chart 16 in both 1996 and 2000, inpatient bed units were by far the work site where hospital nurses spent the majority of their direct patient care time. The data for 2000 indicate the number of nurses who provided care in these units decreased five percent between 1996 and 2000, in contrast to the two percent increase in hospital nurses overall. Also, RNs working in outpatient departments decreased by 10 percent from 77,437 in 1996 to 69,707 in 2000. Among nurses who provided direct patient care services in 2000 and reported the type of work unit, 58 percent worked in intensive care bed units, step down/transitional bed units, and general/specialty bed units (see Appendix A, Table 14). In 1996, 59 percent of hospital RNs providing direct patient care worked in these units. Changes between 1996 and 2000 in the number of nurses providing direct patient care in specific types of units in the hospital should be interpreted with caution because of the significant increase in the number of nurses in 2000 who did not report the type of unit in which they spent the majority of their patient care time. Eight percent of hospital employed RNs who provided direct patient care in 2000 did not report the type of work unit in which they spent the majority of their time. In 1996 virtually all nurses reported this.

As might be expected, nurses worked predominantly with medical/surgical patients in both inpatient bed units and outpatient departments. In 2000, an estimated 32 percent of the nurses primarily cared for such patients (see Appendix A, Table 15). The next single largest percentage of RNs (18 percent) reported that they worked predominately with coronary care patients.

Characteristics within Employment Setting

An estimated 28.4 percent or 625,139 of the 2,201,813 RNs employed in nursing, were working on a part-time basis in March 2000. The percentage employed part-time varied according to the employment setting. The highest percentage of part-time employees was found among RNs working in ambulatory care settings. The lowest percentages of part time workers were found among those working in

Chart 15. Distribution of RNs Employed in Hospitals by Dominant Function, March 2000

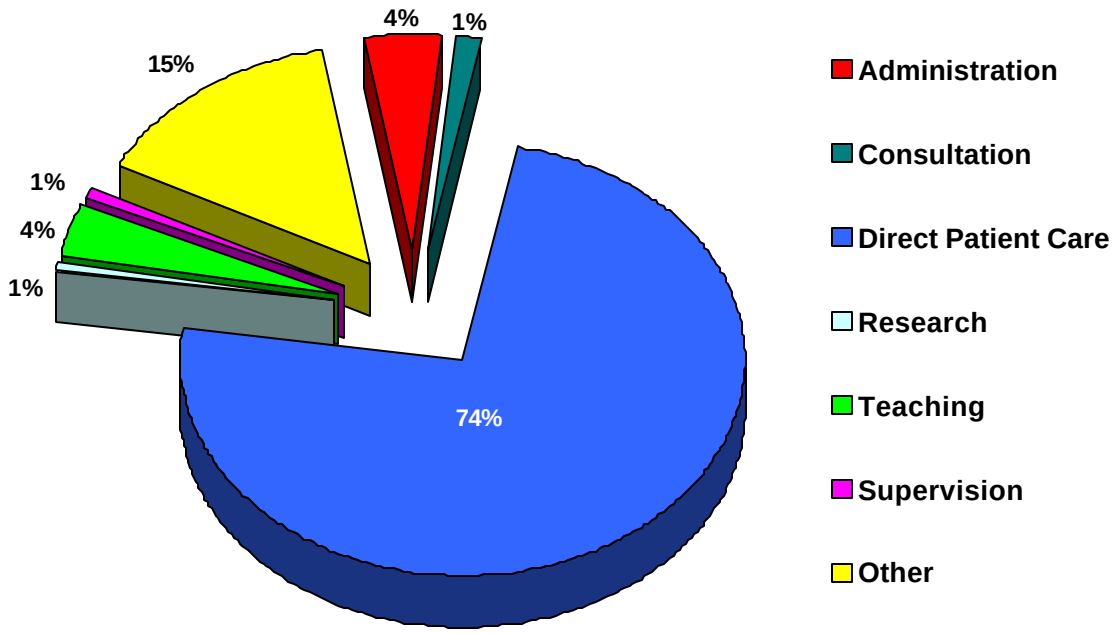
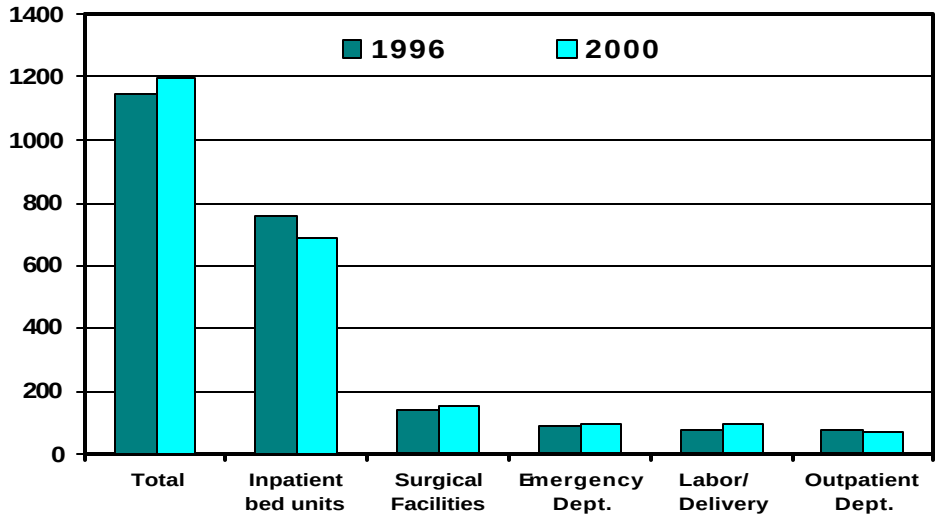


Chart 16. Work Units of Hospital Registered Nurses

Selected hospital work units for RNs providing some direct patient care 1996 and 2000



nursing homes and other extended care facilities and occupational health settings, 23 and 24 percent, respectively. (See Appendix A, Table 16)

The average scheduled work hours per year for full-time principal nursing positions, including paid vacations, holidays and sick leave was estimated to be 1,996 hours; for part-timers it was 1,102 hours. A comparison of the number of scheduled hours per week and the actual number of hours worked showed that for the week of March 22, 2000, nurses in all employment settings tended to work more hours than they were scheduled. During that week, full-time nurses averaged 42.4 actual hours in contrast to average scheduled hours of 39.5. The difference between scheduled and actual hours worked was less for part time employees—24.7 actual hours worked compared with 23.1 hours scheduled (see Appendix A, Table 17).

As indicated in earlier surveys, younger nurses are more likely than older nurses to be employed in hospitals. In March 2000, the average age of the hospital nurse was 41.8, almost two years less than the average age of 43.3 for all employed RNs. Nurses in student health services, nursing education, and planning or licensing agencies had the highest average ages (see Chart 17). Nearly three-fourths of all employed nurses under the age of 30 worked in the hospital. In contrast, less than half of nurses who were 50 years of age or older worked in hospitals (see Appendix A, Table 18).

In most employment settings the majority of nurses had an associate or baccalaureate degree as their highest nursing educational preparation (see Chart 18). Seventy-four percent of the nurses working in hospitals had an associate or baccalaureate degree; 57 percent had less than a baccalaureate. Nursing homes and extended care facilities were less likely than other patient care service settings to have nurses with a baccalaureate and higher degrees. Nursing homes drew 73 percent of their nurses from among those whose highest preparation was that of a diploma or associate degree. As would be expected, the majority of those in nursing education (64 percent) had a master's or doctoral degree (see Appendix A, Table 19).

Base of Employment

Most nurses were employees of the facility in which

Chart 17. Average Age of RNs in Each Type of Employment Setting, March 2000

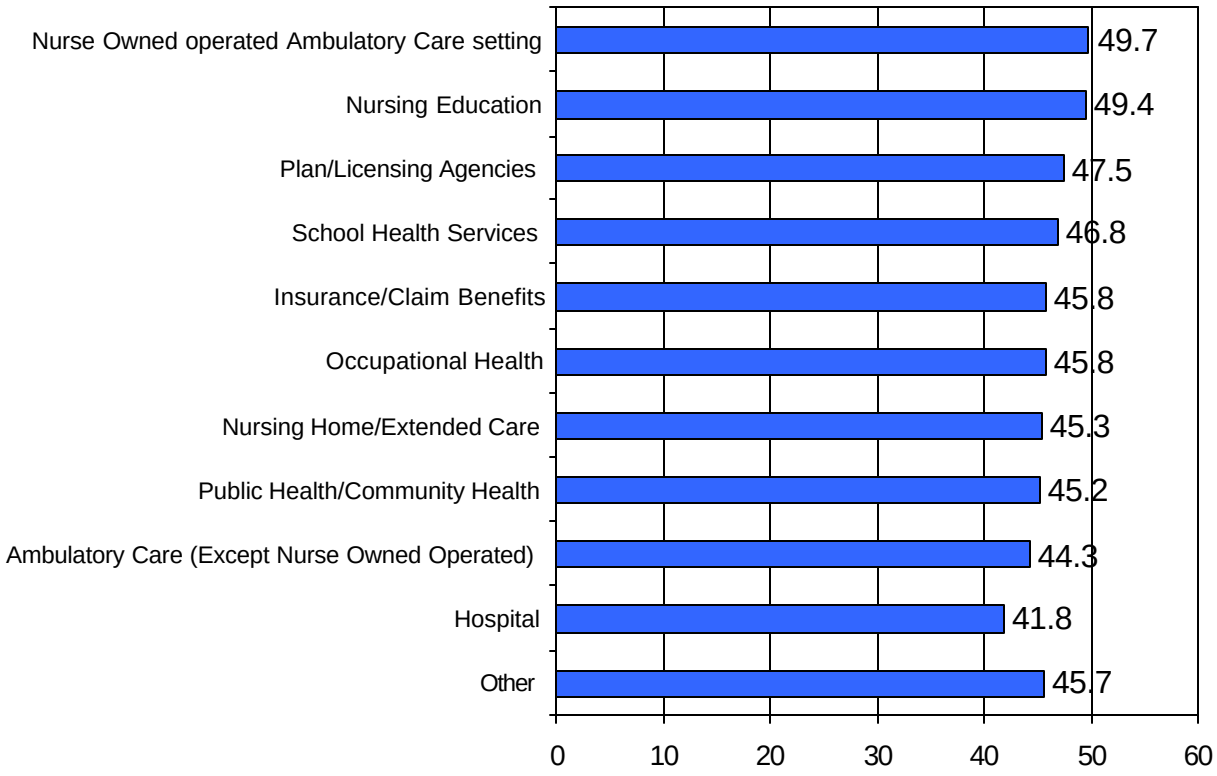
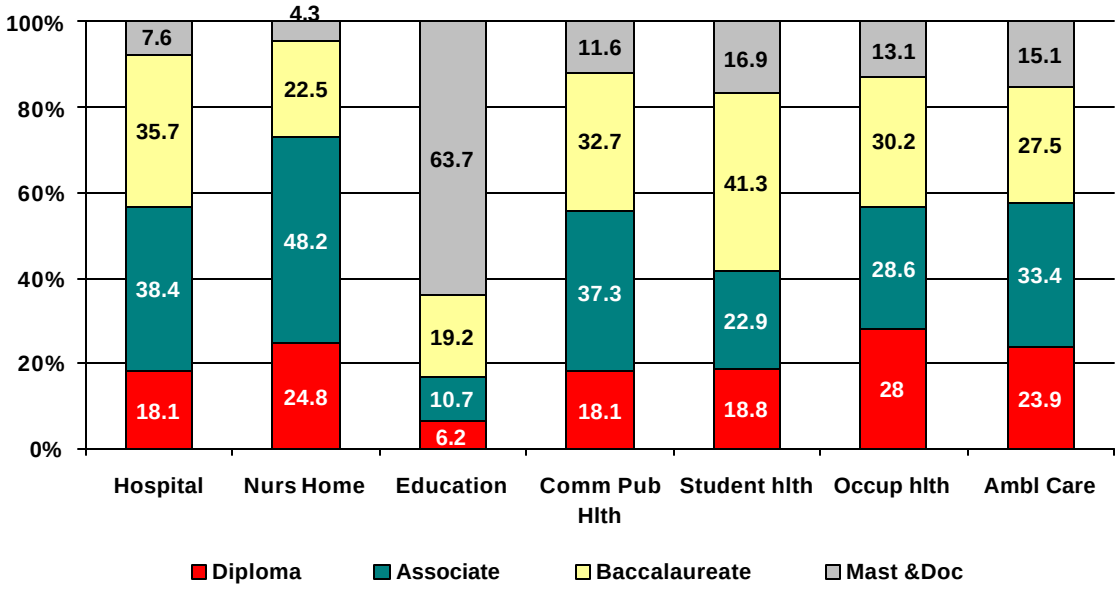


Chart 18. Distribution of Employed RNs by Highest Educational Preparation for Selected Employment Settings, March 2000



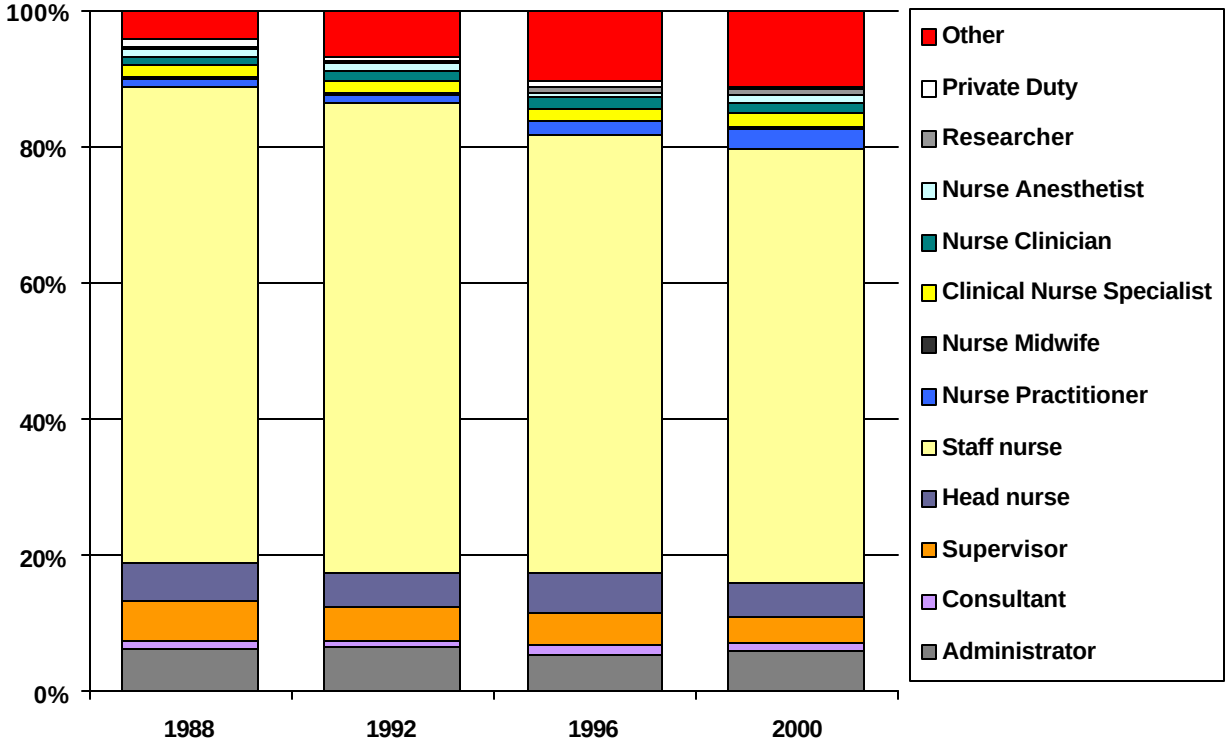
they worked. About 2 percent of RNs were self-employed, and 2 percent worked in their principal nursing position through a temporary employment service (Appendix A, Table 20).

Nearly 40,000 nurses were employed in their principal position through a temporary employment service in 2000. This number is 36 percent higher than the comparable number in 1996 (28,971) and reverses a declining trend observed between 1988 and 1996. An additional 71,490 nurses were not employed in their principal positions through a temporary employment service, but had additional positions through temporary agencies. Considered together, the total number of nurses employed through temporary employment services in 2000 was 110,994 an increase of 65.6 percent from the 1996 estimate of 67,016, and considerably higher than the 84,414 estimate in 1992 and the 88,444 estimate in 1988.

Position Levels

More than 60 percent or 1,357,349 of the 2,201,813 employed nurses in 2000 were in staff-level positions. (See Appendix A, Tables 21 and 22). Although the number of staff nurses has increased, their proportion of the total nurse workforce has declined from 67 percent in 1988 to 62 percent in 2000. A total of 184,098, or 8.4 percent of RNs were in head nurse or supervisory positions in 2000 and 124,461 or 5.7 percent were in administrative positions. Chart 19 illustrates the shifts that have occurred in the distribution of RNs by selected position titles since the late 1980s. In addition to the decline in the percentage of employed nurses who are staff nurses there has been a notable decline in the percentage of those with the position title of supervisor (from 5.6 percent to 3.6 percent during the period from 1988 to 2000). At the same time, significant increases have occurred in the percentage of those with the position title of nurse practitioner — they grew from 1.3 percent of employed RNs in 1988 to 2.8 percent in 2000. It should be noted that the survey respondents' use of the position title "nurse practitioner" as well as the position title for other advanced practice nurses (i.e. clinical nurse specialist, nurse midwife and nurse anesthetist) is not restricted to those who had formal educational preparation in programs to prepare them as such.

Chart 19. Distribution of RNs by Selected Position Titles, 1988-2000



The variation in educational preparation according to position title can be seen from Chart 20 and Table 23 in Appendix A. Those data show that 60 percent or more of those with the position titles of supervisor, staff nurse, and private duty nurse have less than baccalaureate preparation. Whereas more than one-half of nurses employed with other position titles (except head nurse) had baccalaureate preparation or higher. Head nurses were nearly evenly divided between those with less than and those with at least baccalaureate preparation.

Functions During Usual Workweek

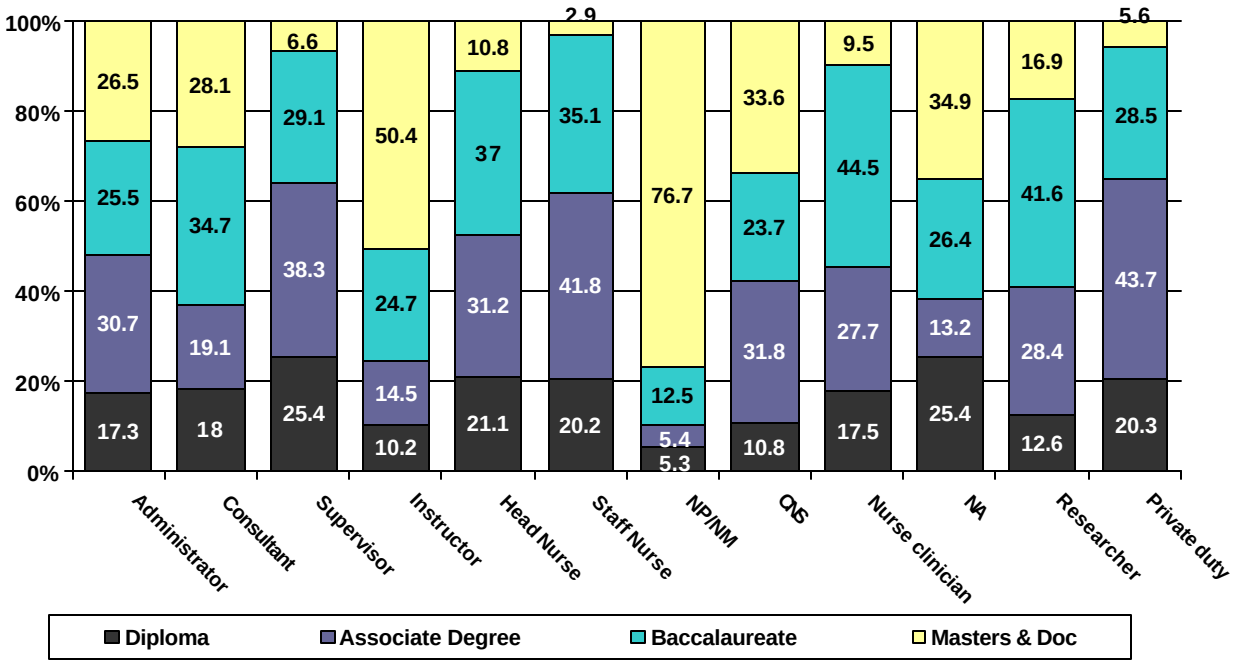
In 2000, an estimated 69 percent of RNs employed in nursing spent at least 50 percent of their usual workweek in direct patient care activities; up slightly from the 1996 estimate of 67 percent. More than half of RNs employed in nursing, 53.9 percent, spent at least 75 percent of their time in such activities (See Appendix A, Table 24). The proportion of nurses who spent at least half their time in direct patient care activities tended to increase from the 1977 study to the 1988 study. The 1992 and the 1996 studies, however, showed a decreasing percent of nurses who spent more than half their time in direct patient care.

Overall, the average percent of time RNs spent in direct patient care was about 63 percent in 2000 (See Chart 21). Nurses with less than a master's degree averaged 63-66 percent of their usual workweek in direct patient care activities (See Appendix A, Table 25). Nurses with master's degrees averaged 43.9 percent of their time in direct patient care, 19.8 percent of their time in administration, and 12.4 percent in teaching. Nurses with doctorates averaged 31.6 percent of their time in teaching and 29.2 percent in administration. Doctoral-prepared nurses were the only group that spent significant time in research. In 2000, they averaged 11.4 percent of their usual workweek in research, higher than the 1996 average of 9.5 percent, but lower than the 13 percent in 1992 and the 16 percent shown in the 1988 study.

Recent Indices of Annual Salaries/Earnings Trends

In March 2000, the average annual earnings of full-time employed registered nurses in their principal nursing positions was $46,782 (See Appendix A, Table 26). As indicated below and in the respective Appendix A Tables, annual earnings vary by level of nurs-

Chart 20. Distribution of RNs With Selected Position Titles by Highest Educational Preparation, March 2000



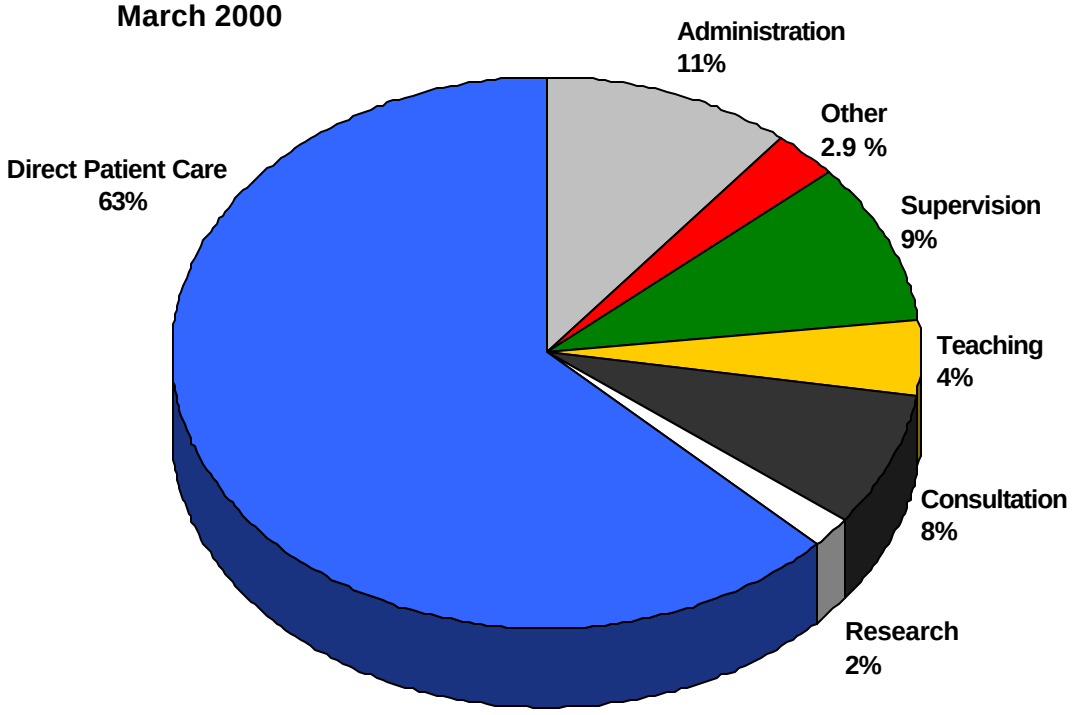
ing education, position, employment setting, and geographic location.

Average annual earnings varied according to the highest level of nursing educational preparation. (See Appendix A, Table 27). The pattern of earnings is predictable in many instances, nurses with advanced degrees achieved higher earnings. For almost all positions where master's-trained RNs were employed in significant numbers, their average earnings were higher than those with diploma, associate, or baccalaureate degrees. The earnings of master's prepared nurses averaged $61,262. Holders of doctoral degrees, numerically much smaller, averaged slightly higher at $63,522.

In those categories where the educational preparation did not reach the master's level, the average earnings are noticeably lower. The overall average earnings for those whose highest nursing educational preparation was a diploma was $46,624, while it was $46,570 for those whose highest nursing education was a baccalaureate degree. Earnings for those with baccalaureate degrees and diplomas as their highest nursing educational preparation are about 10 percent higher than the average earnings for those with associate degrees ($42,676) as the highest nursing education. Earnings/education patterns appear to be more complex than simply assuming that higher levels of education automatically translate to higher earnings. Larger proportions of diploma nurses in the workforce have more years of experience than do those with baccalaureate or associate degrees. They also comprise a large percentage of those RNs in administrative positions (see Chart 20). These circumstances of the workforce may possibly explain why diploma earnings appear to be competitive with baccalaureate earnings.

Comparisons of nurses' earnings from 1996 and 2000 were made among each of the levels of nursing education, to determine whether the increases were consistent across degree of highest preparation. There was a wide range in the rate of earnings increases across the levels of highest nursing educational preparation. Those with master's degrees in nursing received annual earnings increases of 3.8 percent, while those with baccalaureate degrees as their highest nurs-

Chart 21. Average Percent of Time in Work Week Spent by RNs in Each Function, March 2000



ing education only averaged salary rate increases of 2.2 percent, a rate slightly less than the CPI. Nurses whose highest nursing education were either diploma or associate degrees, experienced increases of 2.8 percent and 2.7 percent, respectively.

There are large variations in actual earnings by position type. Staff nurses, the largest group of employed nurses, had average earnings of $42,133. The staff nurse earnings level is about 10 percent below the overall average earnings for all RNs with full-time employment in nursing. To some extent, higher earnings can be attributed to highest education level at the masters degree and above which prevail in some positions. Those RNs in advanced practice nurse (APN) positions had earnings that were higher than average, overall. Certified registered nurse anesthetists had the highest average earnings, $93,787, among RNs in all employment settings and position types. Nurse practitioners had average earnings of $60,126. Nurse midwives had average earnings of $64,940. Clinical nurse specialists had average earnings of $50,800.

Growth in actual earnings from 1996 and 2000 were compared for selected positions. While the average reported earnings for all full-time nurses increased by 2.7 percent on an annual basis between the 1996 and 2000 Sample Survey, there was a broad range to the level of increase across positions. Categories of nursing positions that experienced annual rate increases which were higher than the average rate of increase include: administrators (3.7 percent), instructors (3.4 percent), supervisors (3.3 percent), and head nurses (3.3 percent).

However, staff nurse earnings only increased on average by 2.2 percent annually. Furthermore, staff nurse earnings in hospitals only increased by 2.0 percent. This lower increase contrasts to the earnings increases of staff nurses in nursing homes, where the latter reported increases of 3.6 percent annually. It appears that demand for a high level of skills in staff nurse hospital service is not being compensated at a rate that meets even the CPI. Nevertheless, the larger rate of increases in earnings for nursing home staff RN services may begin to raise basic compensation levels for nursing home staff RNs who have been difficult to recruit and whose earnings have been historically-lower than comparative earnings in hospitals.

Among those working as advanced practice nurses, earnings of the nurse practitioner/nurse midwife group increased by 2.8 percent annually while clinical nurse specialists and certified nurse anesthetists experienced average annual earnings increases of 1.9 and 2.1 percent, respectively, between 1996 and 2000. Over this period, the number of nurse practitioners entrants grew sharply. It appears that these newly-trained nurse practitioners are in demand and are finding professional employment, since the number of RN's working as nurse practitioners has increased by more than 50 percent over this period.

Annual earnings varied according to the setting in which the RN was employed. At $47,759, the average annual earnings for those working full time in the hospital setting were higher than the overall full time earnings average across all types of settings. Those settings where RNs earned less than the overall average included ambulatory care, at $45,256 public health settings, at $45,150; nursing homes, at $43,779; and student health services, with the lowest average annual earnings of $38,204.

The hospital setting earnings average of $47,759 in 2000 and the 1996 average of $43,496, both reflect the CPI annual increase of 2.4 percent. Of note, the information in Table 26 indicates that hospital-based RNs of each position type generally average higher earnings than their position counterparts in other employment settings such as public health nursing, nursing homes, ambulatory care, occupational health services, and student health services.

Looking at the full-time earnings of staff nurses working in the hospital setting across the country, it was found that those with associate degrees as the highest nursing education had average earnings of $41,863. For those whose highest education was a diploma, the average earnings were $45,807. For the baccalaureate-prepared hospital staff nurse, the average earnings were $43,934. It is important to note that these numbers do not discriminate by years of experience in nursing, an important factor to be considered when conducting an analysis of earnings and differences in education.

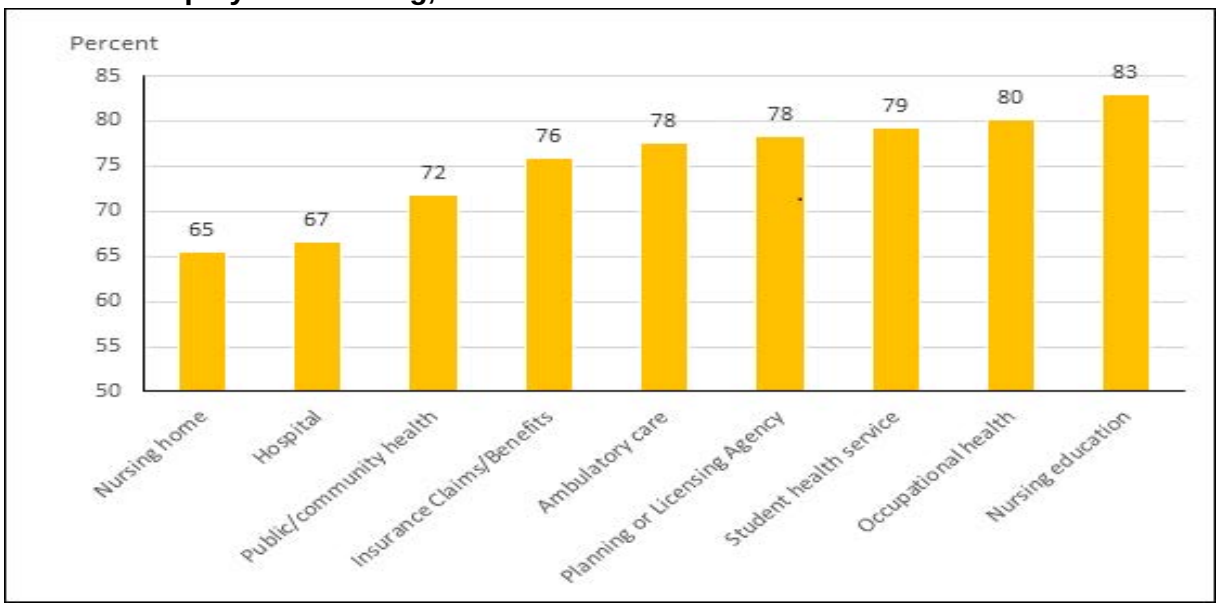
A significant percent of employed nurses work either part-time in their principal job or work more than one job in nursing. Fifteen percent of all the employed nurses held other paid nursing positions in addition to their principal nursing position. As would be expected, the average actual annual earnings of the latter group were higher than the average annual earnings of nurses with only one nursing position. For all RNs employed in nursing, regardless if they had more than one position and if they worked full-time or part-time in their principal position, the average annual earnings were $42,475. If they had more than one nursing position the average earnings were $49,769. Those with only one full-time or part-time position in nursing averaged $41,298 (See Appendix A, Table 28). The increase in earnings for those with additional part-time employment in nursing is substantial, adding an average of approximately 20 percent to their nursing earnings.

JOB SATISFACTION

For the first time in the seven national surveys of RNs conducted by the Division of Nursing, the March 2000 survey asked respondents working in nursing to assess their level of job satisfaction. The level of job satisfaction provides a window into the working conditions that nurses face, and the relationship between these conditions and nurses' expectations regarding their work. There is a wealth of empirical literature linking job satisfaction and other important workplace features, such as turnover rates while the body of work linking job satisfaction with quality of patient care is just emerging. The growing reports of nursing shortages across the country, declining enrollments in nursing schools and the aging of the nursing workforce all provide ample reason to examine job satisfaction and what it may reveal regarding the retention of the current nursing workforce.

Across the entire sample, just over two-thirds of nurses (69.5 percent) report being satisfied in their current position. This general level of satisfaction is markedly lower than levels seen in the employed general population. Data from the General Social Survey of the National Opinion Research Center indicate that, from 1986 through 1996, 85 percent of workers in general and 90 percent of professional workers expressed satisfaction with their job.[1]

Chart 22. Percent of RNs Who Reported Being Satisfied in Their Job by Employment Setting, March 2000



[1]/National Opinion Research Center, "General Social Survey, Data Information and Retrieval System," 15 March 1999, <www.icpsr.umich.edu/GSS99> (17 November 2000).

Aggregate levels of job satisfaction vary by the setting where nurses work (see Chart 22). Nurses working in nursing homes and hospitals report the lowest levels of overall job satisfaction, at 65 percent and 67 percent, respectively, while 83 percent of those working in nursing education are satisfied with their job. Even at 83 percent, the job satisfaction level among those in nursing education only approaches the level of job satisfaction in the general population.

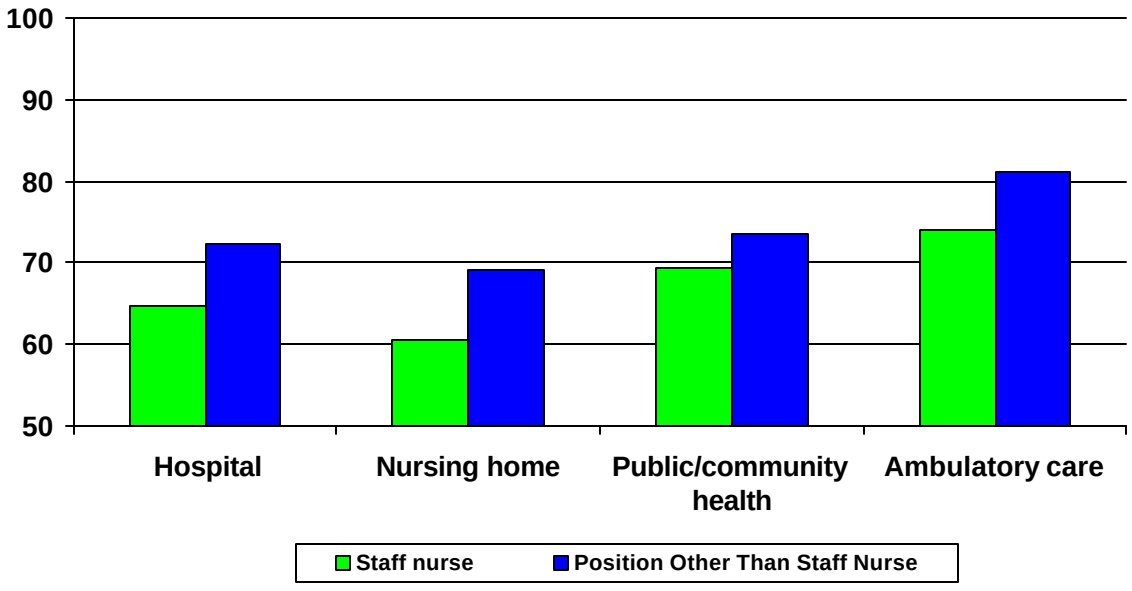
Across employment settings, two factors appear to play powerful roles in level of job satisfaction: age and position, specifically, whether the respondent is a staff nurse. In the four settings that employ 88 percent of all nurses, and substantial numbers of staff nurses, we find that staff nurses in each setting report lower levels of job satisfaction when compared to those in the same settings who are not staff nurses (see Chart 23). In each instance these differences are noteworthy.

The lower job satisfaction among staff nurses endures across other comparisons. For example, job satisfaction varies by level of nursing education, with diploma nurses reporting the lowest overall level of job satisfaction and doctoral-prepared nurses reporting the highest level.

In each educational group, staff nurses report lower levels of job satisfaction compared to their counterparts who are not staff nurses. Furthermore, position appears to be a greater factor regarding job satisfaction than function. Non-staff nurses who spend more than 50 percent of their time in direct patient care report higher job satisfaction than staff nurses spending similar amounts of time with patients. This suggests that it is the structure of the job, rather than the composition of the work, that is influencing satisfaction.

Furthermore, with the exception of ambulatory care, job satisfaction levels decline with age among staff nurses in each setting. The contrast between ambulatory care and the other sites suggests that working conditions in ambulatory care settings may accommodate older workers better than other settings, with

Chart 23. Percent of RNs Who Reported Being Satisfied With Their Job, By Employment Setting and Position, March 2000



regards to physical demands as well as other job features.

Data indicate that job satisfaction declines with age and does not seem to return to the higher levels seen earlier in nurses' careers. However, the higher satisfaction levels early in the careers of nurses suggests that attention to working conditions could improve job satisfaction and help retain a well-trained and experienced workforce.

REGISTERED NURSES NOT EMPLOYED IN NURSING

In March 2000, of the 2,696,540 individuals with current licenses to practice as registered nurses, 494,727, or 18.3 percent, were not employed in nursing. Twenty-seven percent of the 494,727 RNs were working in non-nursing positions. About seven percent (35,968) of those not employed in nursing were actively seeking nursing employment (See Appendix A, Table 30).

In 2000, 263,856 nurses who were not employed in nursing at the time of the survey had been employed as nurses within the 5-year period preceding the survey. These nurses who recently became unemployed in nursing accounted for somewhat more than one-half (53 percent) of all RNs who were not employed in nursing. The number of nurses recently unemployed in nursing in 2000 is lower than the comparable number in 1996, which was 311,583. Moreover, they comprise a much smaller proportion of the total pool of those not employed in nursing than in 1996—53 percent compared with 70 percent in 1996. The percent of RNs who never worked in nursing dropped from 1.9 percent in 1996 to 1.4 percent in 2000.

RNs who had most recently become unemployed in nursing were the most likely to be actively seeking nursing positions. Approximately 18 percent of those who had become unemployed in nursing within 1 year of the 2000 survey were actively seeking nursing employment compared with only seven percent of all inactive nurses. The average age of nurses who had recently become unemployed in nursing was 51.7 years compared to 53.6 years for all those not employed in nursing.

Nurses Seeking Nursing Employment

The 35,968 registered nurses not employed in nursing in March 2000 but actively seeking nursing employment, represented 1.4 percent of the 2.7 million RNs in the country. This percentage is about the same as in 1996.

RNs not employed in nursing but actively seeking nursing employment were likely to have been employed in nursing more recently than other RNs not working in nursing. Seventy-eight percent of the job seekers had been employed in nursing less than five years prior to the study with most (47.5 percent) having been employed less than a year before. Only 8.8 percent of the nearly 7,000 nurses who had never worked in nursing were seeking employment in nursing. (See Appendix A, Table 30) This is in contrast to 41 percent of more than 8,000 nurses in 1996 who had never been employed in nursing and were actively seeking nursing employment.

Nearly one-half (49 percent) of the RNs who were looking for nursing positions sought part-time employment. Over one half (53 percent) had been looking for nursing employment for less than 5 weeks prior to the study. Another 18 percent had been looking for at least 15 weeks (See Appendix A, Table 31).

Nurses Employed in Non-Nursing Occupations

The 135,696 RNs who were employed in non-nursing occupations in March 2000 represented a 15.2 percent increase over the 117,820 such nurses in 1996 and a 35.8 percent increase over the estimated number of 99,955 in 1992. The 135,696 RNs employed in non-nursing occupations include 7,707 RNs seeking nursing employment. Those who were employed in non-nursing occupations and were not looking for nursing positions were 4.7 percent of the total 2.7 million RN population, a slightly higher proportion than the 4.2 percent observed in 1996 and 1992.

Fifty-four percent of those employed in non-nursing positions were in non-health-related occupations; almost 44 percent held health-related positions. Sixty percent of the nurses in non-nursing occupations were full-time workers. However, the nurses in health-related occupations were somewhat more likely to be

full-time workers (74 percent) than those in non health related occupations (52 percent) (See Appendix A, Table 32).

Similar to the 1996 study, the predominant reasons that RNs in 2000 cited for working in non-nursing positions were: the other positions' scheduled hours were more convenient, better salaries, greater safety than in the health care environment, more professionally rewarding, and taking care of home and family. The survey reported the following information: Forty six percent of nurses indicated convenience of hours, 44.9 percent indicated that the non nursing occupation was professionally more rewarding, 35.4 percent noted better salaries, 24.9 percent were taking care of home and family and 19.8 percent indicated concerns about safety in the health care environment (See Appendix A, Table 33).

Inactive Registered Nurses

The largest segment of the nurses who were not employed in nursing were neither looking for nursing positions nor employed in a non-nursing occupation. This inactive segment numbered 322,453, and similar to what was found in the 1996 survey, represented 65 percent of all unemployed RNs and 12 percent of the RN population.

Most of the 322,453 inactive nurses were older nurses. Slightly less than half of these nurses (48.7 percent) were at least 60 years old. Only about 15 percent were under the age of 40. Seventy percent of this group under 40 were married and had preschool age children at home. An additional 15 percent of them were married with children older than preschoolers (See Appendix A, Table 34).

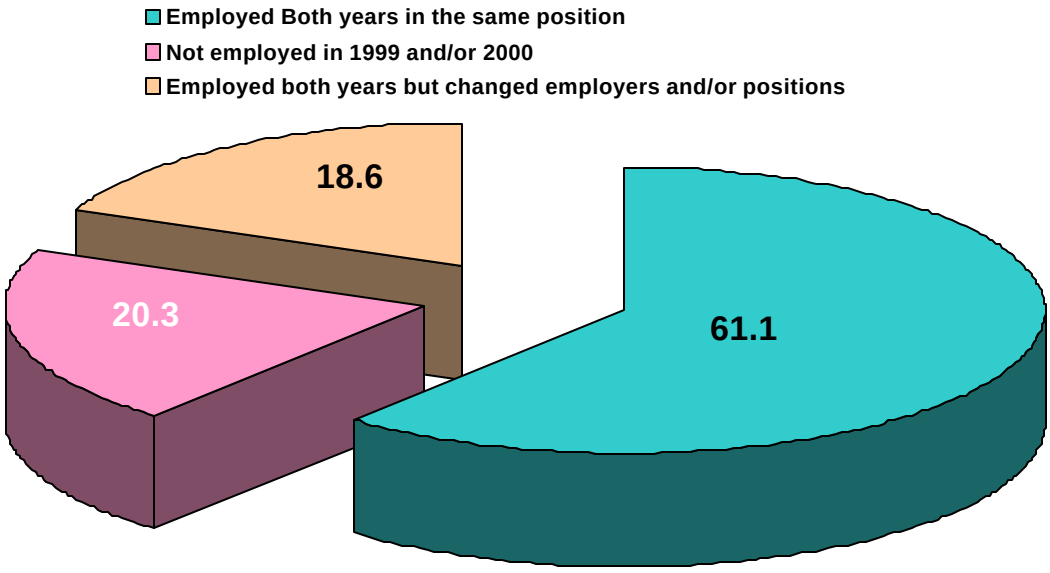
GEOGRAPHIC AND EMPLOYMENT MOBILITY

The survey instrument provided for the exploration of a number of changes that registered nurses might experience during the course of their careers in nursing, and the reasons for such changes. Among these were geographic relocations, movement in or out of work status, and changes in employment setting.

Location of Basic Nursing Education

About 4 percent, or 99,456 out of the 2,696,540 registered nurses, received their basic nursing education outside of the 50 States and the District of Columbia. The racial/ethnic background of the RNs had particular relevance to whether or not they had received their initial nursing educational preparation outside

Chart 24. Changes in Employment of RNs Between 1999 and 2000



the United States. Only an estimated 1.3 percent of white (non-Hispanic) nurses graduated from such programs. However, the majority of Asians, 55.4 percent, and 30.7 percent of Native Hawaiian or Pacific Islanders had received their basic nursing education outside the United States. Almost 7 percent of Hispanic nurses and about 6 percent of the African American/Black (non-Hispanic/Latino) nurses were in that category.

Thirty-five percent of those with current licenses to practice in March 2000 had received their basic nursing education outside the United States or in a State different from the State in which they were located at the time of the survey. As would be expected, the longer the time lapse between graduation from the basic nursing education program and March 2000, the more likely that the nurse was in a different location. Forty-three percent of the nurses who had graduated more than 15 years prior to the survey were in a different location compared to 22 percent of those who had graduated no more than 5 years before.

There were noticeable differences among the graduates from the different types of basic nursing educational programs. Associate degree graduates were most likely to be located in the State where they received their basic nursing education (about three-fourths). Fifty eight percent and 59 percent of diploma and baccalaureate graduates, respectively, were located in the same State (See Appendix A, Table 35)

Residence in March 1999 and 2000

Most nurses with current licenses to practice in March 2000 were residents of the same State in which they lived in March 1999. About three percent had changed their residential State between 2000 and 1999. As was true in the past studies, younger nurses were far more likely than older ones to have moved their State of residence. Almost 13 percent of the nurses who were less than 25 years old and 7 percent of those in the 25-29 year bracket had changed their resident State of residence. Among the older age groups, the proportion that had done so declined with age. About 2 percent of those in the 50 years of age or older group had changed their State of residence between 1999 and 2000 (See Appendix A, Table 36).

Employment Status in March 1999 and 2000

Taking into account all the registered nurses located in this country and licensed to practice as of March 2000, most had the same employment status in March 1999 and March 2000. Only 13 percent of them had shifted their employment status (See Appendix A, Table 37). Those who were employed on a full-time basis in March 1999 were most likely (91.5 percent) to be so employed in March 2000. Only 8.5 percent of these nurses had shifted their employment status between 1999 and 2000. Among the RNs who were not employed in nursing in March 1999, about 21 percent were employed in nursing in March 2000. However, if those who were newly licensed in 1999 or 2000 are excluded, only 13.2 percent of the RNs not employed in 1999 had become employed in 2000.

Employment Setting Changes

Ninety two percent of registered nurses that were working in a hospital in 1999 were working in a hospital in 2000. Nurses were less likely to be employed in the same type of setting if it was not a hospital. Nevertheless, the vast majority of nurses in the other settings had also been employed in the same type of employment setting in each of those years (See Appendix A, Table 38).

In order to get more data on job market conditions for registered nurses, the 2000 survey asked the nurses whether they had changed employers or positions between 1999 and 2000 and if so, why. As Chart 24 shows, 61 percent of those in the RN population in March 2000 were employed both years in the same position. Nineteen percent of nurses were employed both years but changed employers and/or positions. The major reasons noted by registered nurses for the shift in positions were promotion (24.6 percent), employer shifted position (11 percent), and interested in a different job (23.3 percent).

GEOGRAPHIC DISTRIBUTION OF THE REGISTERED NURSE POPULATION

In March 2000, as was true in the prior surveys in this series, the New England region of the country had the highest concentration of employed nurses in relation to the area's population, 1,075 employed RNs

per 100,000 population. The West South Central region, which has typically had one of the lowest concentrations, had 650 RNs per 100,000 population. However, in March 2000, the Pacific area had 596 employed RNs per 100,000 population, a lower ratio than the West South Central. This ratio for the Pacific area is lower than the 621 per 100,000 estimated for the 1996 study and largely reflects the comparatively low ratio in California. Comparison of the ratios for each of the nine geographic regions or areas of the country shows that New England with a ratio of 1,075 per 100,000 population had 80 percent more employed nurses per 100,000 population than did the Pacific area. In general, the southern part of the country and the upper plains experienced greater gains than did other areas. The Middle Atlantic area, the largest among the nine geographic areas in the country in terms of numbers of nurses, showed an increase of nearly 2 percent in the RN population between 1996 and 2000. However, the number of employed nurses in that area declined by slightly more than 1 percent compared with a 4 percent increase for the country as a whole. The decline in the number of employed nurses in this area largely reflects the 3 percent decline in New York, the State with the second largest number of nurses. The distribution of the State-by-State ratios of employed nurses per 100,000 population is shown in Appendix A, Table 39. Table 39 shows that nursing resources vary across the country. This is also true for the personal and professional characteristics of the RN population.

Distribution by State

The RN population in each State varied from about 4,500 in Wyoming to over 226,000 in California. Eight States had nurse populations of over 100,000 while 7 States had less than 10,000 nurses (See Appendix A, Table 39). States with more than 100,000 nurses include New York, Pennsylvania, Texas, Florida, Michigan, Illinois, Ohio, and California. States with less than 10,000 nurses include Wyoming, Delaware, North Dakota and South Dakota, Montana, Alaska, and Vermont. The RN population increased in all but nine States between March 1996 and March 2000. The nine States are Delaware, Virginia, Alaska, New Hampshire, Hawaii, New Jersey, New York, Connecticut and Illinois. Pennsylvania, the State with the third largest RN population and part of the Middle Atlantic area, increased its RN population only by 0.9 percent in 2000. California, the State with the largest RN population, and part of the Pacific area, showed a 2.2 percent increase in RN population.

The country as a whole had a decrease in the ratio of employed RNs to population ratio from 798 per 100,000 in 1996 to 782 per 100,000 in 2000. The number of employed nurses per 100,000 varied by State in 2000 from a low of 544 (California) to a high of 1675 (District of Columbia). On a State-by-State basis, the proportion of the RN population employed in nursing in 2000 ranged from a low of 75 percent in Pennsylvania to a high of 93 percent in the District of Columbia.

As shown in Table 40 of Appendix A, the proportion of employed nurses who worked on a part-time basis also varied considerably from State to State. The percentage of nurses employed on a part time basis varied from a low of 15 percent in the District of Columbia and Louisiana to a high of 46 percent in Washington State.

Metropolitan Areas

As was true in previous studies, the overwhelming majority of RNs (82 percent) were in metropolitan areas. This proportion varied across geographic areas of the country as would be expected given the distribution of metropolitan areas in the country. The highest concentrations of metropolitan areas were found in the Middle Atlantic and Pacific regions and the lowest in the West North Central (See Appendix A, Table 43). As Table 43 further illustrates, RNs who were located in metropolitan areas were generally more likely than those in non-metropolitan areas to be employed in nursing.

Racial/Ethnic Background

The Pacific area had the highest proportion of minority nurses—21 percent. The predominant group of minority nurses in the Pacific area were those with Asian background, 9.9 percent of the nurse population. In addition to the Pacific area, Asian nurses were also more likely to be a part of the nurse population in the Middle Atlantic and West South Central areas (4.6 percent) than in other parts of the country. African

American/Black (non-Hispanic) nurses were more prevalent among the nurse populations in the South Atlantic (8.6 percent), West South Central (8.2 percent), and East South Central areas than elsewhere. Hispanic/Latino nurses, although a relatively small part of any area's nurse population, were more likely to be found among the nurses in the West South Central (4.7 percent), Pacific (4.1 percent), and Mountain areas (3.2 percent) (See Appendix A, Table 44).

Age Distribution

Nurses in the East South Central area of the country were more likely to be younger than were those in other parts of the country. About 41 percent of those nurses were less than 40 years old compared with 25 to 35 percent of nurses in other areas of the country. Pacific area nurses were the least likely to be in this younger age group, only 25.2 percent were less than 40 years old. (See Appendix A, Table 45).

Employment Settings

As expected, the predominant employment setting for the nurses in each area was the hospital. The proportion of the nurse supply working in hospitals in each area ranged from 54 percent in New England to 62 percent in the East and West South Central. The West North Central and New England areas were more likely than the other areas to have higher proportions of their nurses employed in nursing homes or other extended care facilities with 10.3 percent respectively. New England, the Middle and South Atlantic, and the East South Central areas each had over 13 percent of nurses employed in community/public health facilities, proportionately more than other areas. New England had the highest percentage, 15.5 percent, of nurses employed in public/community health settings. The East and West North Central areas as well as the Mountain and Pacific areas had more than 10 percent of their registered nurses employed in ambulatory care settings (See Appendix A, Table 46).

Changes in Employers and/or Positions

About 19 percent of the RN population were employed in both March 1999 and 2000 but changed employers and/or positions between those dates. Nurses in the Southern and Mountain sections of the country were more likely to have done so than those in other parts of the country.

Eighteen percent of the 494,800 nurses who changed employers and/or positions did so because of their interest in another position. This is one of the top three reasons cited by nurses for changing positions or employers. The other main reasons listed by nurses irrespective of the Census division were : changes in the organization made work more stressful, and the nurse relocated to a different geographic area. (See Appendix A, Table 47).

Average Earnings within Geographic Area

The average annual earnings of full-time staff nurses in each of the nine geographic regions were examined to get some indication of variations in earnings around the country. The average earnings for full-time staff nurses in their principal positions ranged from $36,958 in the West North Central area to $49,825 in the Pacific area (see Appendix A, Table 48). The areas where earnings reached above the national average for full time staff nurses ($42,133) included the Middle Atlantic, New England, and Pacific regions.

There were some geographic variations in the rate at which earnings increased among the nine regions. Earnings of staff nurses in the Pacific, Mountain, South Atlantic, and East North Central Regions increased at a higher rate than those in New England, Mid-Atlantic, East South Central, West South Central, and West North Central Regions.

APPENDIX A
TABLES

Table 1. Registered nurse population by employment status, gender, racial/ethnic background, and age group: March 2000

Gender, racial/ethnic background and age group	Total			Employed in nursing			Not employed in nursing		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	35,358	2,696,540	100.0	29,394	2,201,813	100.0	5,964	494,727	100.0
Gender									
Male	2,050	146,902	5.4	1,837	129,118	5.9	213	17,784	3.6
Female	33,308	2,549,638	94.6	27,557	2,072,695	94.1	5,751	476,943	96.4
Racial/ethnic background									
White (non-hispanic)	30,190	2,333,896	86.6	24,919	1,890,708	85.9	5,271	443,189	89.6
Black/African American (non-hispanic)	1,868	133,041	4.9	1,609	113,362	5.1	259	19,679	4.0
Asian (non-hispanic)	1,317	93,415	3.5	1,171	82,716	3.8	146	10,699	2.2
Native Hawaiian/Pacific Islander	96	6,475	0.2	84	5,725	0.3	12	750	0.2
American Indian/Alaskan Native	214	13,040	0.5	192	11,356	0.5	22	1,684	0.3
Hispanic/Latino (any race)	817	54,861	2.0	715	47,763	2.2	102	7,098	1.4
Two or more races (non-hispanic)	479	32,536	1.2	404	26,998	1.2	75	5,538	1.1
Not known	377	29,276	1.1	300	23,185	1.1	77	6,091	1.2
Age group									
Less than 25	646	66,462	2.5	627	64,715	2.9	19	1,747	0.4
25-29	2,398	176,777	6.6	2,254	165,842	7.5	144	10,935	2.2
30-34	3,288	248,375	9.2	2,987	224,748	10.2	301	23,627	4.8
35-39	4,726	360,030	13.4	4,205	316,430	14.4	521	43,600	8.8
40-44	6,175	464,425	17.2	5,514	409,098	18.6	661	55,326	11.2
45-49	6,303	464,539	17.2	5,586	406,413	18.5	717	58,126	11.7
50-54	4,545	342,415	12.7	3,870	287,697	13.1	675	54,719	11.1
55-59	3,093	238,129	8.8	2,384	179,731	8.2	709	58,399	11.8
60-64	2,009	156,061	5.8	1,164	87,249	4.0	845	68,812	13.9
65 and over	1,847	154,467	5.7	550	41,297	1.9	1,297	113,170	22.9
Not known	328	24,861	0.9	253	18,594	0.8	75	6,267	1.3

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 2. Distribution of registered nurses who were employed in a health occupation before basic nursing education, by previous health occupation and basic nursing education: March 2000

Health occupation prior to basic nursing education	Number in sample	Total Estimated Number	Total Estimated Percent	Type of Basic Nursing Education: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate and higher degree Number	Baccalaureate and higher degree Percent
Total	13,629	1,006,617[1]	100.0	183,598	18.2	566,550	56.3	253,840	25.2
Nursing aide	6,904	509,640	100.0	124,666	24.5	223,172	43.8	160,594	31.5
Licensed practical/vocational nurse	3,547	256,730	100.0	21,601	8.4	210,749	82.1	24,190	9.4
Allied health	1,561	116,509	100.0	13,655	11.7	72,838	62.5	29,452	25.3
Other health	849	64,872	100.0	14,233	21.9	24,753	38.2	25,403	39.2
Managerial/clerical in health care setting	575	43,703	100.0	6,402	14.6	26,223	60.0	11,078	25.3
Not known	193	15,164	100.0	3,041	20.1	8,814	58.1	3,124	20.6

[1]/ Includes nurses whose basic education was unknown.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 3. Registered nurses who were licensed practical/vocational nurses before entering basic nursing education program, by type of basic nursing education: March 2000

Year of graduation from basic nursing education	Number in sample	Total[1] Estimated Number	Total[1] Estimated Percent	Type of Basic Nursing Education: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate and higher degree Number	Baccalaureate and higher degree Percent
Total	4,254	305,842	100.0	26,135	100.0	245,252	100.0	33,854	100.0
Year of graduation from basic nursing education									
1995 or later	815	59,341	19.4	2,808	10.7	49,748	20.3	6,553	19.4
1990 - 1994	1,019	69,561	22.7	3,145	12.0	60,069	24.5	6,227	18.4
1985 - 1989	888	63,746	20.8	4,161	15.9	51,499	21.0	8,085	23.9
1984 or earlier	1,503	110,998	36.3	15,927	60.9	82,158	33.5	12,663	37.4
Not known	29	2,197	0.7	94	0.4	1,777	0.7	327	1.0
Average age at graduation by year of graduation									
1995 or later		36.5		35.1		36.7		36.1	
1990 - 1994		35.8		36.4		35.8		35.6	
1985 - 1989		33.5		31.1		34.0		31.5	
1984 or earlier		30.1		28.5		30.8		27.8	

[1]/ Includes 50,679 nurses who are also included in Table 4, and an estimated 600 nurses for whom type basic education was not reported.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 4. Characteristics of registered nurses with post-high school academic degree before entering basic nursing education, by type of basic nursing education: March 2000

Characteristics of nurses with prior degrees	Number in sample	Total Estimated Number	Total Estimated Percent	Type of Basic Nursing Education: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate and higher degree Number	Baccalaureate and higher degree Percent
Total	4,816	358,520[1]	100.0	37,444	100.0	190,117	100.0	129,664	100.0
Degree obtained before basic nursing education									
Associate degree	1,890	142,200	39.7	13,193	35.2	83,225	43.8	45,165	34.8
Baccalaureate	2,306	171,125	47.7	19,773	52.8	77,764	40.9	73,155	56.4
Master's degree	207	15,175	4.2	878	2.3	7,473	3.9	6,824	5.3
Doctorate	15	1,059	0.3	0	0	903	0.5	156	0.1
Not known	398	28,961	8.1	3,600	9.6	20,752	10.9	4,363	3.4
Major field of study Before basic nursing education									
Biological/physical science	715	51,672	14.4	5,553	14.8	20,967	11.0	24,805	19.1
Business/management	509	37,544	10.5	3,739	10.0	21,879	11.5	11,822	9.1
Education	382	29,307	8.2	3,457	9.2	18,435	9.7	7,145	5.5
Liberal art	935	72,724	20.3	7,877	21.0	39,564	20.8	25,189	19.4
Social science	483	35,564	9.9	3,961	10.6	18,698	9.8	12,905	10.0
Health related	1,336	97,812	27.3	9,569	25.6	51,365	27.0	36,617	28.2
Other	303	22,353	6.2	2,468	6.6	12,237	6.4	7,499	5.8
Not known	97	7,350	2.1	253	0.7	4,388	2.3	2,709	2.1
Year of graduation from basic nursing education									
1995 or later	1,341	100,673	28.1	4,868	13.0	54,265	28.5	41,328	31.9
1990 - 1994	1,221	87,801	24.5	7,080	18.9	50,619	26.6	29,754	22.9
1985 - 1989	727	54,834	15.3	5,874	15.7	29,977	15.8	18,983	14.6
1984 or earlier	1,507	113,617	31.7	19,573	52.3	54,336	28.6	39,065	30.1
Not known	20	1,594	0.4	48	0.1	921	0.5	533	0.4
Average age at graduation by year of graduation									
1995 or later		33.9		33.1		35.6		31.8	
1990 - 1994		34.1		34.6		34.9		32.5	
1985 - 1989		32.0		30.1		33.2		30.7	
1984 or earlier		28.7		27.0		30.1		27.5	

[1]/ Includes 1,295 RNs for whom type of basic nursing education was not reported.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 5. Year of graduation from basic nursing education and the average age at graduation for the registered nurse population by type of basic nurse education: March 2000

Year of graduation	Number in sample	Estimated Total[1] Number	Estimated Total[1] Percent	Type of Basic Nursing Education: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate and higher degree Number	Baccalaureate and higher degree Percent
Total	35,358	2,696,540	100.0	799,354	100.0	1,087,602	100.0	791,004	100.0
Year of graduation from basic nursing education									
1995 or later	5,242	404,458	15.0	22,931	2.9	224,088	20.6	153,852	19.5
1990 - 1994	5,390	393,919	14.6	34,786	4.4	241,820	22.2	113,969	14.4
1985 - 1989	4,495	342,110	12.7	44,022	5.5	177,708	16.3	118,780	15.0
1984 or earlier	20,123	1,547,231	57.4	696,340	87.1	439,485	40.4	402,693	50.9
Not known	108	8,823	0.3	1,276	0.2	4,501	0.4	1,710	0.2
Average age at graduation by year of graduation									
1995 or later		30.9		30.8		33.2		27.5	
1990 - 1994		31.1		28.6		33.1		27.5	
1985 - 1989		28.3		25.4		30.9		25.3	
1984 or earlier		23.9		22.0		27.1		23.5	

1/ Includes 10,282 nurses whose basic nursing education was in a master's degree program, 525 in a doctoral program, and 7,773 for whose basic nursing education was not known.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 6. Registered nurse population by marital and employment status: March 2000

Marital status	Total			Employed in nursing full-time			Employed in nursing part-time			Not employed in nursing		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	35,358	2,696,540	100.0	21,115	1,576,675	100.0	8,279	625,139	100.0	5,964	494,727	100.0
Married	25,352	1,928,484	71.5	14,079	1,044,725	66.3	6,851	518,308	82.9	4,422	365,451	73.9
With children under 6 only	2,707	206,078	7.6	1,316	99,082	6.3	1,029	79,367	12.7	362	27,629	5.6
With children 6 and over only	10,347	783,573	29.1	6,235	463,921	29.4	2,885	217,567	34.8	1,227	102,086	20.6
With children both age groups	2,654	204,053	7.6	1,245	91,954	5.8	996	76,681	12.3	413	35,417	7.2
No children at home	9,452	720,077	26.7	5,179	381,549	24.2	1,891	141,159	22.6	2,382	197,369	39.9
No information on children	192	14,703	0.5	104	8,220	0.5	50	3,534	0.6	38	2,950	0.6
Widowed/divorced separated	6,423	482,895	17.9	4,321	316,137	20.1	965	71,857	11.5	1,137	94,901	19.2
With children under 6 only	161	11,973	0.4	121	9,143	0.6	30	2,082	0.3	10	748	0.2
With children 6 and over only	2,354	176,743	6.6	1,806	132,566	8.4	312	23,923	3.8	236	20,255	4.1
With children both age groups	274	19,281	0.7	213	14,751	0.9	46	3,436	0.5	15	1,094	0.2
No children at home	3,578	271,170	10.1	2,157	157,944	10.0	561	41,437	6.6	860	71,789	14.5
No information on children	56	3,728	0.1	24	1,732	0.1	16	980	0.2	16	1,016	0.2
Never married	3,356	267,481	9.9	2,574	205,258	13.0	421	32,038	5.1	361	30,185	6.1
Not Reported	227	17,680	0.7	141	10,554	0.7	42	2,936	0.5	44	4,191	0.8

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 7. Distribution of registered nurses according to total family income expected in 2000, by marital and employment status: March 2000

Marital status and family income	Total			Employed in nursing				Not employed in nursing	
	Number in sample	Estimated Number	Percent	Total Number	Percent	full-time Number	Percent	part-time Number	Percent	Estimated Number	Percent
Total	35,358	2,696,540	100.0	2,201,813	100.0	1,576,675	100.0	625,139	100.0	494,727	100.0
$ 15,000 or less	515	40,869	1.5	10,159	0.5	1,848	0.1	8,311	1.3	30,710	6.2
$ 15,001 - $ 25,000	932	71,578	2.7	33,028	1.5	10,688	0.7	22,340	3.6	38,550	7.8
$ 25,001 - $ 35,000	2,272	166,819	6.2	120,363	5.5	79,097	5.0	41,266	6.6	46,456	9.4
$ 35,001 - $ 50,000	6,549	479,536	17.8	409,006	18.6	317,834	20.2	91,172	14.6	70,530	14.3
$ 50,001 - $ 75,000	9,434	701,838	26.0	625,287	28.4	471,196	29.9	154,091	24.6	76,551	15.5
$ 75,001 - $100,000	6,658	517,173	19.2	461,653	21.0	334,201	21.2	127,452	20.4	55,520	11.2
$100,001 - $150,000	4,110	328,656	12.2	281,426	12.8	203,676	12.9	77,750	12.4	47,230	9.5
More than $150,000	1,749	142,573	5.3	91,150	4.1	54,781	3.5	36,368	5.8	51,423	10.4
Not Reported	3,139	247,499	9.2	169,742	7.7	103,353	6.6	66,389	10.6	77,757	15.7
Married	25,352	1,928,484	71.5	1,563,033	71.0	1,044,725	66.3	518,308	82.9	365,451	73.9
$ 15,000 or less	120	8,655	0.3	2,231	0.1	500	0	1,731	0.3	6,424	1.3
$ 15,001 - $ 25,000	291	22,956	0.9	9,205	0.4	2,781	0.2	6,423	1.0	13,752	2.8
$ 25,001 - $ 35,000	789	55,448	2.1	29,428	1.3	13,753	0.9	15,675	2.5	26,019	5.3
$ 35,001 - $ 50,000	2,979	210,882	7.8	158,120	7.2	98,915	6.3	59,205	9.5	52,762	10.7
$ 50,001 - $ 75,000	6,963	510,032	18.9	445,671	20.2	305,217	19.4	140,454	22.5	64,360	13.0
$ 75,001 - $100,000	6,187	479,229	17.8	428,807	19.5	304,036	19.3	124,771	20.0	50,422	10.2
$100,001 - $150,000	3,948	315,151	11.7	270,778	12.3	194,252	12.3	76,526	12.2	44,373	9.0
More than $150,000	1,690	137,646	5.1	88,560	4.0	52,724	3.3	35,836	5.7	49,085	9.9
Not Reported	2,385	188,485	7.0	130,231	5.9	72,546	4.6	57,686	9.2	58,254	11.8

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 8. Registered nurse population by basic and highest nursing-related education: March 2000

Highest nursing-related education	Total[1]			Basic nursing education: Diploma			Basic nursing education: Associate degree			Basic nursing education: Baccalaureate		
	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent
Total	35,358	2,696,540	100.0	9,992	799,354	100.0	14,447	1,087,602	100.0	10,691	791,004	100.0
Diploma	7,506	601,704	22.3	7,506	601,704	75.3	0	0	0	0	0	0
Associate degree	12,266	925,516	34.3	84	6,567	0.8	12,181	918,855	84.5	0	0	0
Baccalaureate in nursing	11,133	828,301	30.7	974	77,681	9.7	1,406	104,571	9.6	8,737	644,775	81.5
Baccalaureate in related field	637	52,696	2.0	435	36,280	4.5	201	16,320	1.5	0	0	0
Masters in nursing	2,689	202,639	7.5	599	46,453	5.8	479	34,539	3.2	1,478	111,018	14.0
Masters in related field	739	55,173	2.0	232	18,224	2.3	156	11,425	1.1	351	25,524	3.2
Doctorate in nursing	107	8,435	0.3	32	2,401	0.3	12	978	0.1	57	4,530	0.6
Doctorate in related field	117	8,821	0.3	37	2,753	0.3	12	913	0.1	68	5,156	0.7
Not known	164	13,255	0.5	93	7,290	0.9	0	0	0	0	0	0
Total employed in nursing	29,394	2,201,813	100.0	7,287	566,820	100.0	12,799	953,780	100.0	9,125	666,507	100.0
Diploma	5,393	418,608	19.0	5,393	418,608	73.9	0	0	0	0	0	0
Associate degree	10,878	812,856	36.9	63	4,798	0.8	10,815	808,058	84.7	0	0	0
Baccalaureate in nursing	9,470	693,560	31.5	744	58,494	10.3	1,249	91,217	9.6	7,465	542,823	81.4
Baccalaureate in related field	465	37,594	1.7	304	24,442	4.3	161	13,152	1.4	0	0	0
Masters in nursing	2,312	173,360	7.9	487	37,685	6.6	435	31,243	3.3	1,278	95,677	14.4
Masters in related field	568	41,622	1.9	169	13,020	2.3	120	8,554	0.9	279	20,048	3.0
Doctorate in nursing	95	7,545	0.3	29	2,181	0.4	10	838	0.1	51	4,069	0.6
Doctorate in related field	88	6,660	0.3	27	2,052	0.4	9	717	0.1	52	3,890	0.6
Not known	125	10,009	0.5	71	5,540	1.0	0	0	0	0	0	0
Total not employed in nursing	5,964	494,727	100.0	2,705	232,535	100.0	1,648	133,822	100.0	1,566	124,497	100.0
Diploma	2,113	183,097	37.0	2,113	183,097	78.7	0	0	0	0	0	0
Associate degree	1,388	112,660	22.8	21	1,769	0.8	1,366	110,797	82.8	0	0	0
Baccalaureate in nursing	1,663	134,741	27.2	230	19,188	8.3	157	13,355	10.0	1,272	101,952	81.9
Baccalaureate in related field	172	15,102	3.1	131	11,838	5.1	40	3,169	2.4	0	0	0
Masters in nursing	377	29,278	5.9	112	8,768	3.8	44	3,296	2.5	200	15,342	12.3
Masters in related field	171	13,551	2.7	63	5,205	2.2	36	2,871	2.1	72	5,476	4.4
Doctorate in nursing	12	890	0.2	3	220	0.1	2	140	0.1	6	462	0.4
Doctorate in related field	29	2,162	0.4	10	700	0.3	3	195	0.1	16	1,266	1.0
Not known	39	3,246	0.7	22	1,750	0.8	0	0	0	0	0	0.0

1/ Includes 10,282 nurses whose basic nursing education was in a master's degree, 525 in a doctoral degree program, and 7,773 nurses whose basic nursing education was not known.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 9. Primary focus of post-RN master's and doctoral degree[1]: March 2000

Primary Focus	Master's degree			Doctoral degree		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	3,201	240,900	100.0	218	16,731	100.0
Clinical practice	1,616	120,963	50.2	25	2,207	13.2
Education	417	32,291	13.4	65	5,057	30.2
Supervision/administration	494	37,984	15.8	16	1,223	7.3
Research	15	1,568	0.6	57	4,087	24.4
Law	2	199	0.0	7	818	4.9
Informatics	8	445	0.2	1	39	0.2
Management/Business Admin	81	6,699	2.8	0	0	0.0
Public Health	235	16,046	6.7	9	511	3.1
Other	108	7,361	3.1	27	2,101	12.6
Not known	225	17,344	7.2	11	688	4.1

'/ Includes degrees in nursing or nursing-related areas

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 10. Current enrollment of registered nurses in nursing-related academic degree educational programs by employment status and student status: March 2000

Employment and student status	Number in sample	Estimated Number	Percent
Total	2,347	180,765	100.0
Employed in nursing full-time			
Total	1,695	130,123	72.0
Full-time student	332	23,724	13.1
Part-time student	1,337	104,107	57.6
Student status not known	26	2,291	1.3
Employed in nursing part-time			
Total	486	37,939	21.0
Full-time student	151	11,176	6.2
Part-time student	325	25,966	14.4
Student status not known	10	797	0.4
Not employed in nursing			
Total	166	12,702	7.0
Full-time student	77	5,261	2.9
Part-time student	79	6,646	3.7
Student status not known	10	796	0.4

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 11. Financial resources used for tuition and fees by registered nurses currently enrolled in nursing related academic degree education program by type of degree for which studying: March 2000

Source of funding	Total[1]			Baccalaureate			Master's			Doctorate		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	2,347	180,765[2]	100.0	1,198	95,300	100.0	895	65,807	100.0	94	6,999	100.0
Personal and/or family resources	1,718	130,932	72.4	889	69,962	73.4	651	47,651	72.4	75	5,313	75.9
Employer tuition reimbursement plan	926	74,262	41.1	523	42,938	45.1	335	25,748	39.1	29	2,439	34.8
Federal traineeship, scholarship or grant	151	10,799	6.0	50	3,546	3.7	87	6,244	9.5	10	660	9.4
Federally assisted loan	300	21,023	11.6	108	7,398	7.8	171	11,984	18.2	15	1,170	16.7
State or local government loan or scholarship	99	7,126	3.9	36	2,912	3.1	55	3,740	5.7	7	446	6.4
Non-government scholarship, loan or grant	122	9,219	5.1	48	3,825	4.0	58	4,032	6.1	14	1,158	16.6
University teaching or or research scholarship	29	2,188	1.2	3	331	0.3	13	897	1.4	12	803	11.5
Other sources	9	545	0.3	3	139	0.1	5	248	0.4	0	0	0
Unknown sources	47	4,020	2.2	5	581	0.6	3	401	0.6	0	0	0

[1]/ Source of fundings may add to more than the total because more than one source may be named.

[2]/ Includes 1,133 nurses who were studying for an associate degree and 7,396 who were studying in some other type of educational program, and 4,128 for whom the degree was not known.

Table 12. Distribution of advanced practice nurses by national certification, state recognition and employment status: March 2000

Type of advanced practice nurse and employment status	Total		National Certification		State Board of Nursing Recognition	
	Number	Percent	Number	Percent	Number	Percent
Clinical nurse specialists						
Total	54,374	100.0	19,864	100.0	11,347	100.0
Employed in nursing	47,225	86.9	18,277	92.0	10,152	83.5
With position title	11,309	20.8	6,713	33.8	4,168	36.7
Without position title	35,916	66.0	11,565	58.2	5,985	52.7
Not employed in nursing	7,149	13.2	1,587	8.0	1,195	10.5
Nurse practitioners						
Total	88,186	100.0	63,801	100.0	57,974	100.0
Employed in nursing	77,584	88.0	57,994	90.9	52,927	91.3
With position title	49,876	56.6	42,668	66.9	40,724	70.2
Without position title	27,708	31.4	15,326	24.0	12,203	21.0
Not employed in nursing	10,602	12.0	5,807	9.1	5,047	8.7
Clinical nurse specialists and nurse practitioners						
Total	14,643	100.0	11,849	100.0	9,516	100.0
Employed in nursing	14,007	95.7	11,579	97.7	9,377	98.5
With position title[1]	9,367	64.0	8,702	73.4	6,537	68.7
Without position title	4,639	31.7	2,877	24.3	2,840	29.8
Not employed in nursing	637	4.3	269	2.3	139	1.5
Nurse anesthetists						
Total	29,844	100.0	26,813	100.0	17,666	100.0
Employed in nursing	25,575	85.7	24,296	90.6	16,210	91.8
With position title	22,794	76.4	22,634	84.4	15,238	86.2
Without position title	2,781	9.3	1,662	6.2	972	5.5
Not employed in nursing	4,269	14.3	2,518	9.4	1,456	8.2
Nurse midwives						
Total	9,232	100.0	8,085	100.0	5,212	100.0
Employed in nursing	7,914	85.7	7,144	88.4	4,787	91.8
With position title	4,773	51.7	4,753	58.8	3,172	60.9
Without position title	3,142	34.0	2,390	29.6	1,615	31.0
Not employed in nursing	1,317	14.3	942	11.6	425	8.2

[1]/ 8,636 nurses had the nurse practitioner position title and 731, the clinical nurse specialist position title.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 13. Employment setting of primary positions of registered nurses employed in nursing: March 2000

Employment setting	Number in Sample	Estimated Total	Estimated Percent
Total	29,394	2,201,813	100.0
Hospital	17,217	1,300,323	59.1
Non-federal short term hospital	14,182	1,078,359	49.0
Non-federal long term hospital	1,014	78,684	3.6
Non-federal psychiatric hospital	477	33,891	1.5
Federal government hospital	937	63,451	2.9
Other type of hospital	607	45,938	2.1
Nursing home/extended care facility	2,101	152,894	6.9
Nursing home unit in hospital	187	12,026	0.6
Other nursing home	1,617	118,952	5.4
Facility for mentally retarted	89	7,322	0.3
Assisted living/continuing care	89	5,838	0.3
Other extended care facility	119	8,757	0.4
Nursing education	652	46,655	2.1
LPN/LVN Program	70	5,033	0.2
Diploma program	30	1,721	0.1
Associate degree program	150	10,049	0.5
Baccalaureate or higher degree program	327	24,225	1.1
Other nursing education program	75	5,627	0.3
Community/public health setting	3,783	282,618	12.8
State health department	384	26,227	1.2
State mental health agency	46	3,260	0.2
City or county health department	537	40,321	1.8
Combination nursing service	6	450	0
Visiting nursing service	278	21,309	1.0
Home health service unit (hosp based)	474	34,346	1.6
Oth. home health agency(non-hosp based)	939	73,207	3.3
Community mental health facility	148	10,773	0.5
Substance abuse center/clinic	51	3,950	0.2
Community/neighborhood health center	287	21,444	1.0
Planned parenthood/family planning ctr	41	2,837	0.1
Day care center	30	2,411	0.1
Rural health care center	82	4,639	0.2
Retirement community center	30	2,305	0.1
Hospice	241	19,175	0.9
Other public health setting	209	15,962	0.7
Student health service	1,106	83,269	3.8
Board of Education (Public schools)	745	56,239	2.6
Private or parochial schools	66	5,132	0.2
College or university	219	16,379	0.7
Other school health service	72	5,519	0.2
Occupational health	456	36,395	1.7
Private industry	300	24,446	1.1
Government	50	3,658	0.2
Other occupational health	106	8,291	0.4
Ambulatory care setting	2,899	209,324	9.5
Solo practice (physicians)	327	23,736	1.1
Solo practice (nurses)	48	3,194	0.2
Partnership (physicians)	316	23,427	1.1
Partnership (nurses)	3	47	0.0
Group practice (physicians)	682	51,576	2.3
Group practice (nurses)	22	1,596	0.1
Partnership mixed professional group	375	24,348	1.1
Free-standing clinic (physicians)	117	7,059	0.3
Free-standing clinic (nurses)	16	1,140	0
Amb. surg. center (non-hospital based)	368	25,512	1.2
Dialysis unit	198	15,193	0.7
Dental practice	9	769	0
Health maintenance organization	153	11,123	0.5
Other ambulatory care setting	265	20,603	0.9
Insurance/claims/benefits	680	51,667	2.3
Government	120	8,070	0.4
State or local agencies	34	2,561	0.1
Insurance company	338	27,528	1.3
Private industry/organization	188	13,508	0.6
Planning or licensing agency	137	11,005	0.5
Central or regional federal agency	39	2,878	0.1
State board of nursing	9	657	0
Nursing or health association	5	322	0
Health planning agency (non-federal)	73	6,021	0.3
Other	12	1,127	0
Other	247	18,033	0.8
Prison or jail	231	16,781	0.8
Other	16	1,252	0.1
Unknown	115	9,631	0.4

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 14. Type of hospital work unit where hospital-employed registered nurses spent more than half their direct patient care time, by employment status: March 2000

Type of work unit	Total		Employment status			
			Full-time		Part-time	
	Number	Percent	Number	Percent	Number	Percent
Total	1,196,538	100.0	844,811	100.0	351,727	100.0
Intensive care bed unit	201,833	16.9	145,517	17.2	56,316	16.0
Step-down, transitional bed unit	70,241	5.9	50,287	6.0	19,954	5.7
General/speciality bed unit	369,832	30.9	255,098	30.2	114,734	32.6
Outpatient department	69,707	5.8	47,151	5.6	22,557	6.4
Operating room	107,583	9.0	83,729	9.9	23,854	6.8
Post anesthesia recovery room	36,541	3.1	23,826	2.8	12,715	3.6
Labor/delivery room	97,932	8.2	62,611	7.4	35,321	10.0
Emergency department	94,912	7.9	70,876	8.4	24,036	6.8
Other specific area	26,528	2.2	19,436	2.3	7,093	2.0
No specific area	21,806	1.8	14,496	1.7	7,112	2.0
Home health care	2,541	0.2	2,101	0.2	441	0.1
Hospice unit	1,746	0.1	1,186	0.1	560	0.2
Not known	95,533	8.0	68,498	8.1	27,034	7.7

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 15. Type of patient treated in hospital inpatient unit and outpatient department where registered nurses spent more than half their direct patient care time, by employment status: March 2000

Type of patient treated	Total		Employment status			
			Full-time		Part-time	
	Number	Percent	Number	Percent	Number	Percent
Total	711,613	100.0	500,204	100.0	211,410	100.0
Chronic care	27,508	4.1	20,181	4.0	7,327	3.5
Coronary care	124,325	18.3	91,284	18.2	33,041	15.6
Neurological	13,568	2.0	9,756	2.0	3,812	1.8
Newborn	34,284	5.1	21,700	4.3	12,585	6.0
Obstetrics/gynecology	18,420	2.7	12,105	2.4	6,315	3.0
Orthopedic	19,788	2.9	13,838	2.8	5,951	2.8
Pediatrics	44,949	6.6	30,139	6.0	14,810	7.0
Psychiatric	28,417	4.2	20,949	4.2	7,468	3.5
Rehabilitation	15,309	2.3	10,940	2.2	4,369	2.1
Medical/surgical/unspecified specialty area	230,496	32.4	161,625	32.3	68,871	32.6
Multiple units	27,183	4.0	18,465	3.7	8,719	4.1
Not known	127,364	18.8	89,222	17.8	38,142	18.0

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 16. Registered nurses employed in each employment setting by employment status and average annual hours scheduled: March 2000

Employment Setting	Estimated total			Employed full-time			Employed part-time		
	Estimated number	Percent	Average annual hours scheduled	Estimated number	Percent	Average annual hours scheduled	Estimated nurses	Percent	Average annual hours scheduled
Total	2,201,813[1]	100.0	1,747	1,576,675	71.6	1,996	625,139	28.4	1,102
Hospital	1,300,323	100.0	1,766	933,360	71.8	1,998	366,962	28.2	1,163
Nursing home, extended care facility	152,894	100.0	1,817	117,035	76.6	2,054	35,859	23.4	1,033
Nursing education	46,655	100.0	1,570	34,600	74.2	1,839	12,056	25.8	775
Community, public health	282,618	100.0	1,759	201,408	71.3	2,034	81,210	28.7	1,059
Student health service	83,269	100.0	1,372	55,378	66.5	1,620	27,891	33.5	844
Occupational health	36,395	100.0	1,845	27,765	76.3	2,114	8,630	23.7	939
Ambulatory care setting	209,324	100.0	1,679	133,127	63.6	2,026	76,196	36.4	1,061
Other	90,335	100.0	1,855	74,001	81.9	2,034	16,334	18.1	1,004

[1]/ Includes 9,631 nurses for whom employment setting was not known.

Note: Estimated numbers may not add up to totals because of rounding.

Table 17. Comparison between average scheduled hours per week of employed registered nurses in their principal position and average actual hours worked during the week beginning March 23, 2000 by employment setting

Employment setting	Employed full-time		Employed part-time	
	Scheduled hours/week	Actual hours/week	Scheduled hours/week	Actual hours/week
Total	39.5	42.4	23.1	24.7
Hospital	39.3	42.2	21.7	25.6
Nursing home, extended care facility	40.5	44.6	20.0	23.9
Nursing education	41.0	43.8	21.0	22.1
Community, public health	39.8	42.6	21.8	23.3
Student health service	37.3	39.4	21.5	22.9
Occupational health	41.5	44.1	20.3	21.6
Ambulatory care	39.6	41.9	21.6	23.2
Other/Unknown	40.0	43.0	22.2	24.6

Table 18. Employed registered nurses by employment setting and age group: March 2000

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 and over
Total	29,394	2,201,813[1]	64,715	165,842	224,748	316,430	409,098	406,413	287,697	179,731	87,249	41,297
Hospital	17,217	1,300,323	52,891	119,420	150,528	202,385	251,335	228,225	145,450	87,824	41,369	11,206
Nursing home, extended care facility	2,101	152,894	3,733	12,082	13,710	18,431	22,584	26,527	21,579	16,530	8,361	7,964
Nursing education	652	46,655	0	730	1,462	3,824	6,958	9,407	10,318	8,016	4,307	1,235
Community, public health	3,783	282,618	3,351	15,933	24,585	38,830	48,497	55,612	42,415	28,493	14,239	7,955
Student health service	1,106	83,269	424	2,058	6,313	9,133	16,321	16,989	14,150	8,384	4,933	3,663
Occupational health	456	36,395	868	1,744	3,161	3,060	7,350	7,309	5,230	3,302	2,034	1,819
Ambulatory care setting	2,899	209,324	3,080	11,052	18,999	29,742	39,465	43,616	32,655	16,888	8,001	4,167
Other	1,180	90,335	368	2,823	5,991	11,026	16,589	18,728	15,899	10,294	4,004	3,289

[1]/ Includes 18,594 nurses for whom age was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 19. Employment setting and highest nursing-related educational preparation of registered nurses employed in nursing: March 2000

Employment Setting	Number in sample	Estimated total Number	Estimated total Percent	Highest nursing-related educational preparation: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate Number	Baccalaureate Percent	Master's Number	Master's Percent	Doctorate Number	Doctorate Percent
Total	29,394	2,201,813[1]	100.0	424,539	19.3	812,856	36.9	731,153	33.2	214,983	9.8	14,205	0.6
Hospital	17,217	1,300,323	100.0	235,744	18.1	499,130	38.4	464,711	35.7	97,227	7.5	1,732	0.1
Nursing home, extended care facility	2,101	152,894	100.0	38,051	24.9	73,715	48.2	34,308	22.4	6,066	4.0	424	0.3
Nursing education	652	46,655	100.0	2,885	6.2	4,979	10.7	8,963	19.2	21,003	45.0	8,722	18.7
Community public health	3,783	282,606	100.0	51,217	18.1	105,391	37.3	92,284	32.6	31,821	11.3	929	0.3
Student health service	1,106	83,269	100.0	15,665	18.8	19,037	22.9	34,421	41.3	13,948	16.8	122	0.1
Occupational health	456	36,395	100.0	10,180	28.0	10,413	28.6	11,007	30.2	4,516	12.4	242	0.7
Ambulatory care setting	2,899	209,324	100.0	50,100	23.9	69,848	33.4	57,492	27.5	30,507	14.6	1,070	0.5
Other	1,180	90,335	100.0	20,696	22.9	30,344	33.6	27,967	31.0	9,894	11.0	962	1.0

[1]/ Includes an estimated 4,077 nurses whose highest nursing-related educational preparation was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 20. Employment setting of registered nurses by work basis: March 2000

Employment Setting	Total			Work basis: Employee of organization			Work basis: Temporary agency			Work basis: Self employed		
	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent
Total	29,394	2,201,813[1]	100.0	28,161	2,114,388	96.0	560	39,505	1.8	555	38,838	1.8
Hospital	17,217	1,300,323	100.0	16,651	1,262,719	97.1	391	26,215	2.0	120	7,392	0.6
Nursing home, extended care facility	2,101	152,894	100.0	2,030	148,210	97.0	22	1,488	1.0	43	2,934	1.9
Nursing education	652	46,655	100.0	627	44,884	96.2	3	213	0.5	18	1,283	2.8
Community/public health	3,783	282,618	100.0	3,574	266,364	94.2	62	5,040	1.8	132	9,917	3.5
Student health service	1,106	83,269	100.0	1,071	80,688	96.9	10	592	0.7	13	1,058	1.3
Occupational health	456	36,395	100.0	393	31,033	85.3	35	3,335	9.2	27	1,934	5.3
Ambulatory care setting	2,899	209,324	100.0	2,747	198,862	95.0	14	876	0.4	127	8,395	4.0
Other	1,180	90,355	100.0	1,068	81,629	90.4	23	1,745	1.9	75	5,925	6.6

[1]/ Includes an estimated 9,631 nurses for whom employment setting was not known.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 21. Position titles in primary nursing jobs for registered nurses employed in nursing: March 2000

Position title	Number in sample	Estimated Number	Percent
Total	29,394	2,201,813	100.0
Administration	1,684	124,461	5.7
Administrator/assistant facility/agency	512	37,789	1.7
Administrator/assistant nursing	1,041	77,577	3.5
Dean/director or assistant/ associate director nursing education	131	9,095	0.4
Certified nurse anesthetist	359	24,314	1.1
Clinical nurse specialist	539	40,833	1.9
Consultant	315	24,712	1.1
Head nurse or assistant	1,381	105,803	4.8
Head nurse or assistant head nurse	443	34,344	1.6
Nurse manager	938	71,459	3.2
Instruction	842	61,641	2.8
In-service education director	134	10,086	0.5
In-service Instructor	541	39,493	1.8
Professor, assistant/associate professor	167	12,062	0.5
Nurse clinician	426	32,364	1.5
Nurse practitioner/midwife	960	67,882	3.1
Nurse midwife	88	5,509	0.3
Nurse practitioner	872	62,373	2.8
Private duty nurse	121	10,592	0.5
Researcher	201	16,118	0.7
Staff nurse	18,167	1,357,349	61.6
Charge nurse	2,338	166,797	7.6
Public health nurse	418	28,587	1.3
School nurse	779	57,954	2.6
Staff nurse	14,072	1,063,195	48.3
Team leader	262	18,930	0.9
No position title	298	21,885	1.0
Supervisor or assistant	1,010	78,295	3.6
Other	3,070	232,701	10.6
Case manager	1,286	97,600	4.4
Discharge planner	41	3,073	0.1
Infection control nurse	92	6,877	0.3
Informatics nurse	109	8,406	0.4
Insurance reviewer	112	8,360	0.4
Nurse co-ordinator	637	46,753	2.1
Outcomes manager	9	809	0
Patient care co-ordinator	253	20,266	0.9
Quality assurance nurse	248	18,697	0.8
Other	283	21,860	1.0
Not known	319	24,747	1.1

Note: Estimated number and percents may not add to totals because of rounding.

Table 22. Employment setting and type of position of employed registered nurses: March 2000

Employment Setting	Total	Administrator or assistant	Cert. nurse anesthetist	Clinical nurse specialist	Consultant	Head nurse or assistant	Instruction
Total	2,201,813[1]	124,461	24,314	40,833	24,712	105,803	61,641
Hospital	1,300,323	33,042	20,916	24,920	3,938	58,517	14,508
Nursing home, extended care facility	152,894	33,836	17	832	2,540	10,091	4,338
Nursing education	46,655	5,911	40	249	868	166	33,511
Community/public health	282,618	28,008	553	5,419	5,139	10,871	2,485
Student health service	83,269	2,707	213	1,033	589	1,240	3,505
Occupational health	36,395	3,083	0	1,205	2,316	3,083	465
Ambulatory care setting	209,324	10,639	2,451	6,295	1,501	17,571	1,795
Other	90,335	7,237	124	882	7,822	4,264	1,034

Employment Setting	Nurse clinician	Nurse practitioner/midwife	Private duty nurse	Researcher	Staff nurse	Supervisor or assistant	Other
Total	32,364	67,882	10,592	16,118	1,357,349	78,295	232,701
Hospital	17,525	19,938	604	5,900	971,401	31,166	83,336
Nursing home, extended care facility	336	1,305	139	209	63,493	17,416	16,735
Nursing education	22	355	0	654	2,552	370	1,604
Community/public health	5,197	10,791	9,199	610	117,171	16,788	66,705
Student health service	333	4,035	93	673	64,871	410	2,884
Occupational health	852	1,342	0	4,655	11,456	903	6,835
Ambulatory care setting	7,481	28,076	556	2,379	106,672	4,829	17,425
Other	619	2,040	0	1,036	19,674	6,413	37,178

[1]/ Includes an estimated 24,747 nurses for whom type of position was not known.

Note: Estimated numbers may not add up to totals because of rounding.

Table 23. Type of position and highest nursing-related educational preparation of registered nurses employed in nursing: March 2000

Type of position	Number in sample	Estimated total Number	Estimated total percent	Highest nursing-related educational preparation: Diploma Number	Diploma Percent	Associate degree Number	Associate degree Percent	Baccalaureate Number	Baccalaureate Percent	Master's Number	Master's Percent	Doctorate Number	Doctorate Percent
Total	29,394	2,201,813[1]	100.0	424,539	19.3	812,856	36.9	731,153	33.2	214,983	9.8	14,205	0.6
Administrator or assistant	1,684	124,461	100.0	21,476	17.3	38,220	30.7	31,749	25.5	28,580	23.0	4,402	3.5
Consultant	315	24,712	100.0	4,437	18.0	4,721	19.1	8,582	34.7	6,333	25.6	626	2.5
Supervisor or assistant	1,010	78,295	100.0	19,880	25.4	29,981	38.3	22,769	29.1	5,140	6.6	0	0.0
Instructor	842	61,641	100.0	6,283	10.2	8,927	14.5	15,233	24.7	24,921	40.4	6,184	10.0
Head nurse or assistant	1,381	105,803	100.0	22,303	21.1	32,958	31.2	39,098	37.0	11,122	10.5	322	0.3
Staff/general duty nurse	18,167	1,357,349	100.0	273,587	20.2	566,971	41.8	476,266	35.1	37,703	2.8	714	0.1
Nurse practitioner/midwife	960	67,882	100.0	3,610	5.3	3,681	5.4	8,498	12.5	51,360	75.7	707	1.0
Clinical nurse specialist	539	40,833	100.0	4,427	10.8	12,981	31.8	9,666	23.7	13,549	33.2	173	0.4
Nurse clinician	426	32,364	100.0	5,663	17.5	8,967	27.7	14,398	44.5	3,034	9.4	40	0.1
Cert nurse anesthetist	359	24,314	100.0	6,186	25.4	3,210	13.2	6,428	26.4	8,490	34.9	0	0
Researcher	201	16,118	100.0	2,024	12.6	4,570	28.4	6,713	41.6	2,079	12.9	641	4.0
Private duty nurse	121	10,592	100.0	2,149	20.3	4,633	43.7	3,020	28.5	434	4.1	159	1.5
Other	3,070	232,701	100.0	47,671	20.5	82,633	35.5	80,909	34.8	20,691	8.9	236	0.1
Not known	319	24,747	100.0	4,841	19.6	10,405	42.0	7,824	31.6	1,547	6.3	0	0

[1]/ Includes an estimated 4,077 nurses whose highest nursing-related educational preparation was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 24. Distribution of employed registered nurses by percentage of time spent during usual work week in each functional area: March 2000

Percentage of time	Administration			Consultation			Direct patient care		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	29,394	2,201,813	100.0	29,394	2,201,813	100.0	29,394	2,201,813	100.0
None	19,096	1,438,358	65.3	17,328	1,300,850	59.1	4,246	328,392	14.9
1-24	5,298	387,406	17.6	8,876	658,488	29.9	2,558	188,293	8.6
25-49	1,984	146,998	6.7	1,730	129,185	5.9	2,060	152,756	6.9
50-74	1,501	114,246	5.2	634	48,752	2.2	4,353	323,869	14.7
75-100	1,248	93,694	4.3	559	43,427	2.0	15,910	1,187,391	53.9
Not known	267	21,111	1.0	267	21,111	1.0	267	21,111	1.0

Percentage of time	Research			Supervision			Teaching		
	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent	Number in sample	Estimated Number	Percent
Total	29,394	2,201,813	100.0	29,394	2,201,813	100.0	29,394	2,201,813	100.0
None	25,602	1,916,738	87.0	18,151	1,366,144	62.0	22,917	1,719,619	78.1
1-24	2,978	220,809	10.0	6,820	502,552	22.8	4,729	350,633	15.9
25-49	217	16,618	0.8	2,087	155,028	7.0	558	41,717	1.9
50-74	154	12,086	0.5	1,273	95,610	4.3	396	29,916	1.4
75-100	176	14,451	0.7	796	61,367	2.8	527	38,817	1.8
Not known	267	21,111	1.0	267	21,111	1.0	267	21,111	1.0

Note: Numbers and percents may not add up to totals because of rounding.

Table 25. Average percent of time in work week spent by employed registered nurses in each function by highest educational preparation: March 2000

Highest educational preparation	Average time spent in Administration	Consultation	Direct patient care
Total	10.6	7.8	62.1
Diploma	9.7	7.5	62.9
Associate degree	8.6	6.9	66.4
Baccalaureate	10.3	8.2	63.2
Masters	19.8	10.4	43.9
Doctorate	29.2	6.4	14.2
Not known	11.8	5.7	63.2

Highest educational preparation	Average time spent in Research	Supervision	Teaching
Total	1.9	9.4	4.3
Diploma	1.6	10.3	2.9
Associate degree	1.6	10.1	2.8
Baccalaureate	1.9	8.9	3.9
Masters	3.0	7.7	12.4
Doctorate	11.4	5.4	31.6
Not known	2.9	7.7	1.9

Table 26. Annual average earnings of registered nurses employed full time in their principal nursing position by field of employment and type of position, March 2000

Employment setting	Total	Administrator or assistant	Consultant	Supervisor or assistant	Instructor	Head nurse	Staff duty nurse
Total	$46,782	$60,340	$56,756	$47,732	$48,378	$52,573	$42,133
Hospital	47,759	72,463	64,506	50,759	52,373	56,222	43,476
Nursing home, extended care facility	43,779	50,182	1	43,011	45,409	44,024	38,237
Nursing education	50,706	67,276	1	1	47,865	1	1
Community/public health	45,150	56,488	49,925	45,321	1	48,982	40,667
Student health service	38,204	57,604	1	1	44,720	1	35,360
Occupational health	50,365	65,985	1	1	1	54,806	41,689
Ambulatory care setting	45,256	56,815	1	46,465	1	45,960	36,521
Other	49,979	1	58,910	52,814	1	56,783	1

Employment setting	Nurse practi-tioner/midwife	Clinical nurse Specialist	Nurse clinician	Cert murse Anesthetist	Researcher	Private duty Nurse	Other
Total	$60,543	$50,800	$46,255	$93,787	$50,243	$41,194	$55,674
Hospital	1	52,383	48,237	93,706	51,886	1	57,709
Nursing home, extended care facility	1	1	1	1	1	1	1
Nursing education	1	1	1	1	1	1	1
Community/public health	53,626	47,302	44,130	1	1	41,780	1
Student health service	51,029	1	1	1	1	1	1
Occupational health	1	1	1	1	52,561	1	1
Ambulatory care setting	60,060	47,813	41,231	1	1	1	1
Other	1	1	1	1	1	1	1

Note: Estimated numbers may not add to totals because of rounding.

1/ Too few to compute salaries.

Table 27. Average annual earnings of nurses employed full time by type of position and highest educational preparation: March 2000

Type of position	Total	Highest nursing-related educational preparation				
		Diploma	Associate Degree	Bacca-laureate	Master's	Doctorate
Total	$46,782	$46,624	$42,676	$46,570	$61,262	$63,522
Administration	60,340	57,659	50,244	57,289	76,294	77,700
Consultant	56,756	[1]	59,177	51,928	62,149	[1]
Supervisor or assistant	47,732	47,830	44,417	49,144	62,144	[1]
Instruction	48,378	46,880	43,467	45,348	49,594	55,703
Head nurse or assistant	52,573	50,402	47,661	54,978	61,682	[1]
Staff or general duty nurse	42,133	43,422	40,543	42,972	48,929	[1]
Nurse practitioner/midwife	60,534	57,593	64,383	58,714	60,862	[1]
Clinical nurse specialist	50,800	48,261	45,492	48,009	58,457	[1]
Nurse clinician	46,255	46,045	42,344	47,321	[1]	[1]
Certified nurse anesthetist	93,787	88,436	98,550	98,202	92,281	[1]
Researcher	50,243	[1]	50,184	49,048	[1]	[1]
Private duty nurse	41,194	[1]	38,784	[1]	[1]	[1]
Other	55,674	[1]	[1]	51,580	[1]	[1]

Note: Estimated numbers may not add to totals because of rounding.

[1]/ Too few cases to compute salaries.

Table 28. Distribution of employed registered nurses with added positions by employment status in their principal position and average total earnings: March 2000

Positions held	Total				Employment status in principal position: Full-time			Part-time		
	Number in sample	Estimated Number	Percent	Average total earnings	Estimated Number	Percent	Average total earnings	Estimated Number	Percent	Average total earnings
Total	29,394	2,201,813[1]	100.0	$42,475	1,576,675	100.0	$48,054	625,139	100.0	$27,619
Principal and secondary positions	4,587	330,353	15.0	$49,769	221,288	14.0	$56,088	109,065	17.4	$36,248
Principal positions only	24,746	1,866,988	84.8	$41,298	1,352,377	85.8	$46,846	514,612	82.3	$25,959

[1]/ Includes 4,471 nurses for whom number of positions held was not known.

Table 29. RNs Employed in Nursing: Job Satisfaction by Position Title: March 2000

Level of Job Satisfaction	Total	Administrator or assistant	Cert. nurse anesthetist	Clinical nurse specialist	Consultant	Head nurse or assistant	Instruction
Total	2,201,813[1]	124,461	24,314	40,833	24,712	105,803	61,641
Extremely Satisfied	467,980	37,617	9,942	11,220	10,298	21,129	19,942
Moderately Satisfied	1,051,833	57,497	10,151	17,161	8,874	53,276	28,823
Neither Satisfied or Dissatisfied	230,162	7,676	1,751	3,675	2,204	8,622	3,865
Moderately Dissatisfied	336,132	16,035	2,066	6,079	1,664	17,183	6,956
Extremely Dissatisfied	100,496	4,619	138	2,347	1,123	5,252	1,624
Not known	15,210	1,016	266	351	549	342	432

Level of Job Satisfaction	Nurse clinician	Nurse practi-tioner/midwife	Private duty nurse	Researcher	Staff nurse	Supervisor or assistant	Other
Total	32,364	67,882	10,592	16,118	1,357,349	78,295	232,701
Extremely Satisfied	8,291	25,221	3,985	4,343	239,445	16,835	54,815
Moderately Satisfied	15,157	31,767	3,674	8,395	657,480	34,989	112,622
Neither Satisfied or Dissatisfied	3,302	3,657	1,226	1,545	157,152	8,890	23,550
Moderately Dissatisfied	4,219	6,308	1,193	1,307	227,233	12,330	30,391
Extremely Dissatisfied	944	632	426	391	67,720	4,242	9,839
Not known	450	297	87	137	8,318	1,009	1,485

[1]Includes an estimated 24,747 nurses for whom type of position was not known.

Note: Estimated numbers may not add up to totals because of rounding.

Table 30. Distribution of registered nurses not employed in nursing, by length of time since last worked as a nurse and whether or not nurse was seeking nursing position or had other occupation: March 2000

Length of time since worked	Number in sample	Total Estimated Number	Total Estimated Percent	Seeking nursing employment Number	Seeking nursing employment Percent	Has other occupation Number	Has other occupation Percent
Total	5,964	494,727	100.0	35,968	100.0	135,696[1]	100.0
Less than a year	1,285	96,318	19.5	17,096	47.5	21,027	15.5
1 - 4 years	2,095	167,538	33.9	10,967	30.5	38,595	28.4
5 - 9 years	1,078	95,516	19.3	3,795	10.6	26,602	19.6
10 - 19 years	836	76,406	15.4	2,525	7.0	31,078	22.9
20 Years or more	376	34,682	7.0	616	1.7	11,224	8.3
Never worked	80	6,797	1.4	596	1.7	3,895	2.9
Not known	214	17,469	3.5	373	1.0	3,275	2.4

[1]/ Includes an estimated 7,707 nurses who were both seeking a nursing position and had other occupation.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 31. Registered nurses actively seeking employment in nursing by type of employment sought and number of weeks looking: March 2000

Type of employment and weeks looking	Number in sample	Estimated Number	Estimated Percent
Total	464	35,968	100.0
Type of employment			
Full-time	128	10,265	28.5
Part-time	228	17,610	49.0
Either	99	7,655	21.3
Not known	9	439	1.2
Number of weeks looking			
Less than a week	101	7,928	22.0
1 - 4 weeks	138	10,496	29.2
5 - 9 weeks	63	4,837	13.4
10 - 14 weeks	57	4,587	12.8
15 - 34 weeks	52	4,087	11.4
35 weeks or more	29	2,143	6.0
Not known	24	1,889	5.3

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 32. Type of employment of registered nurses in non-nursing occupations: March 2000

Type of employment	Number in sample	Estimated Number	Estimated Percent
Total	1,630	135,696[1]	100.0
Health related occupation	721	59,083	43.5
Full-time	533	43,916	32.4
Part-time	185	14,968	11.0
Not known	3	199	0.1
Non-health related occupation	861	72,568	53.5
Full-time	463	37,628	27.7
Part-time	386	33,969	25.0
Not known	12	970	0.7
Unknown	48	4,045	3.0

[1]/ Includes an estimated 7,707 nurses employed in a non-nursing field but were actively seeking nursing employment.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 33. Reasons for registered nurses to have occupation other than nursing: March 2000

Reasons for other occupation	Number in sample	Estimated Number[1]	Percent
Total	1,630	135,696[2]	100.0
Difficult to find a position	87	6,820	5.0
Hours are more convenient in other position	731	62,033	45.7
Better salaries available in current type of position	554	48,046	35.4
Concern for safety in health care environment	297	26,769	19.7
Inability to practice nursing on a professional level	127	11,345	8.4
Find current position more rewarding professionally	746	60,973	44.9
Nursing skills are out of date	269	23,578	17.4
Disability/Illness	110	9,438	7.0
Taking care of home and family	402	33,747	24.9
Other	227	17,440	12.8

[1]/ Estimates and percents may not add up to totals because registered nurses may have answered to more than one reason.

[2]/ Includes an estimated 8,284 registered nurses whose reasons for having an occupation other than a nurse were not known.

Table 34. Age group and marital status of nurses who were not employed at all and not seeking nursing employment: March 2000

Marital status	Total		Age group							
			Less than 40		40-49		50-59		60 and over	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	322,453[1]	100.0	47,366	100.0	53,175	100.0	63,122	100.0	155,391	100.0
Married	242,463	75.2	43,551	91.9	47,682	89.7	50,142	79.4	99,525	64.0
With children under 6 only	20,175	6.3	16,645	35.1	3,295	6.2	124	0.2	111	0.1
With children 6 and over only	54,536	16.9	7,314	15.4	27,011	50.8	12,443	19.7	7,532	4.8
With children of all ages	26,119	8.1	16,501	34.8	8,705	16.4	225	0.4	417	0.3
No children at home	139,997	43.4	2,785	5.9	8,446	15.9	36,982	58.6	90,729	58.4
No information on children	1,635	0.5	305	0.6	226	0.4	369	0.6	736	0.5
Widowed, divorced, separated	62,012	19.2	1,503	3.2	3,433	6.5	9,778	15.5	46,565	30.0
With children under 6 only	356	0.1	251	0.5	0	0	105	0.2	0	0
With children 6 and over only	10,458	3.2	867	1.8	2,599	4.9	1,835	2.9	5,010	3.2
With children of all ages	498	0.2	0	0.0	259	0.5	0	0	239	0.2
No children at home	49,882	15.5	385	0.8	575	1.1	7,727	12.2	40,609	26.1
No information on children	818	0.3	0	0.0	0	0	111	0.2	707	0.5
Never married	15,346	4.8	2,085	4.4	1,794	3.4	3,187	5.0	8,129	5.2
No information on marital status	2,633	0.8	227	0.5	266	0.5	15	0	1,173	0.8

[1]/ Includes 3,398 nurses whose age was not known.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 35. Comparison between state of location[1] of registered nurses as of March 2000 and state of graduation by type of basic nursing education and number of years since graduation: March 2000

Number of years since graduation from basic nursing education program	Total[2]			Basic nursing education					
	Number in sample	Estimated		Diploma		Associate degree		Baccalaureate	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total[3]	34,611	2,638,949	100.0	777,717	100.0	1,070,829	100.0	773,873	100.0
Located in same state	21,170	1,709,039	64.8	447,431	57.5	799,873	74.7	453,586	58.6
Located in different state[4]	13,441	929,910	35.2	330,286	42.5	270,955	25.3	320,287	41.4
5 Years or less	6,336	481,898	100.0	29,052	100.0	272,321	100.0	176,662	100.0
Located in same state	4,775	378,096	78.5	22,555	77.6	225,120	82.7	128,207	72.6
Located in different state[4]	1,561	103,802	21.5	6,497	22.4	47,201	17.3	48,455	27.4
6 - 10 years	4,921	362,524	100.0	32,276	100.0	221,302	100.0	106,288	100.0
Located in same state	3,463	267,956	73.9	21,961	68.0	176,441	79.7	68,064	64.0
Located in different state[4]	1,458	94,567	26.1	10,315	32.0	44,861	20.3	38,224	36.0
11 - 15 years	4,570	349,993	100.0	47,264	100.0	180,331	100.0	120,458	100.0
Located in same state	2,938	237,991	68.0	30,425	64.4	134,654	74.7	72,077	59.8
Located in different state[4]	1,632	112,002	32.0	16,839	35.6	45,677	25.3	48,381	40.2
16 - 25 years	9,412	714,902	100.0	161,392	100.0	305,484	100.0	243,000	100.0
Located in same state	5,455	439,756	61.5	99,153	61.4	207,448	67.9	130,669	53.8
Located in different state[4]	3,957	275,145	38.5	62,239	38.6	98,036	32.1	112,331	46.2
26 years or more	9,287	722,661	100.0	506,628	100.0	87,290	100.0	125,925	100.0
Located in same state	4,482	380,406	52.6	272,684	53.8	53,179	60.9	53,646	42.6
Located in different state[4]	4,805	342,254	47.4	233,944	46.2	34,110	39.1	72,280	57.4

[1]/ State of location is the state in which employed, if employed in nursing or state of residence, if not employed in nursing.

[2]/ Includes those whose basic education was a master's or a doctoral degree or whose basic education was not known.

[3]/ Excludes an estimated 57,591 nurses whose state of graduation was not known.

[4]/ Includes those who graduated from a foreign country.

Table 36. Comparison between resident states in 1999 and 2000 for the registered nurse population by age group: March 2000

Age Group	Number in sample	Estimated total[2] Number	Estimated total[2] Percent	Resident State same in 1999 and 2000 Number	Resident State same in 1999 and 2000 Percent	Resident State different in 2000 than in 1999[1] Number	Resident State different in 2000 than in 1999[1] Percent
Total	35,358	2,696,540	100.0	2,592,847	100.0	76,630	100.0
Less than 25 years	646	66,462	2.5	57,424	2.2	8,308	10.8
25 - 29 years	2,398	176,777	6.6	162,677	6.3	11,927	15.6
30 - 34 years	3,288	248,375	9.2	235,994	9.1	10,058	13.1
35 - 39 years	4,726	360,030	13.4	345,995	13.3	10,343	13.5
40 - 44 years	6,175	464,425	17.2	451,816	17.4	9,679	12.6
45 - 49 years	6,303	464,539	17.2	453,904	17.5	7,434	9.7
50 - 54 years	4,545	342,415	12.7	331,969	12.8	8,361	10.9
55 - 59 years	3,093	238,129	8.8	232,464	9.0	4,861	6.3
60 - 64 years	2,009	156,061	5.8	150,917	5.8	3,892	5.1
65 years and over	1,847	154,467	5.7	150,275	5.8	1,435	1.9
Not known	328	24,861	0.9	19,412	0.7	331	0.4

[1]/ Residence in 1999 may be in a different state or a foreign country.

[2]/ Includes those cases where 1999 versus 2000 comparison could not be made.

Table 37. Comparison of employment status of registered nurse population in 1999 and 2000: March 2000

Employment Status in 2000	Employment Status in 1999											
	Employed full-time			Employed part-time			Employed but FT/PT unknown			Not employed in nursing		
	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent	Number in sample	Estimated Number	Estimated Percent
Total[1]	20,478	1,523,110	100.0	8,014	601,159	100.0	434	34,295	100.0	6,002	504,830	100.0
Employed full-time	18,780	1,394,143	91.5	950	71,091	11.8	281	21,666	63.2	822	67,893	13.4
Employed part-time	1,108	84,219	5.5	6,444	484,292	80.6	137	11,206	32.7	492	37,881	7.5
Not employed-nursing	590	44,748	2.9	620	45,777	7.6	16	1,424	4.2	4,688	399,056	79.0

[1]/ Excludes an estimated 33,146 nurses whose employment status was not known in 1999.

Table 38. Percent distribution of registered nurses in each employment setting in 2000 by employment setting in 1999: March 2000

Employment setting in 2000	Number in Sample	Total Estimated Number	Total Estimated Percent	Employment setting in 1999: Hospital	Nursing home Extended Care	Nursing Education	Community/ Public Health[1]	Ambulatory Care Setting	Other	Not Employed
Total	29,394	2,201,813[2]	100.0	53.6	6.6	1.9	14.5	7.7	9.6	6.1
Hospital	17,217	1,300,323	100.0	85.7	1.0	0.2	1.3	0.9	4.8	6.2
Nursing home, extended care facility	2,101	152,894	100.0	5.4	79.7	0.4	2.8	1.0	3.8	6.8
Nursing education	652	46,655	100.0	5.7	0.7	76.8	4.2	2.1	6.0	4.6
Community/Public Health setting[1]	5,344	402,283	100.0	7.5	1.7	0.5	71.3	1.9	11.3	5.8
Ambulatory care setting	2,899	209,324	100.0	9.5	0.9	0.4	2.9	69.3	11.3	5.7
Other	1,180	90,335	100.0	6.7	1.8	0	2.9	2.6	79.3	6.8

[1]/ Includes student and occupational health.

[2]/ Includes an estimated 9,631 nurses whose employment setting was unknown for 2000 and 33,146 for whom employment status was unknown for 1999.

Note: Estimated numbers and percents may not add to totals because of rounding.

Table 39. Registered nurse population in each State and area by activity status: March 2000

State and area	Number in sample	Total	Employed in nursing Number	Employed in nursing Percent	Not employed in Nursing Number	Not employed in Nursing Percent	Employed nurses per 100.000 population[1]
United States	35,358	2,696,540	2,201,813	81.7	494,727	18.3	782
New England	2,959	183,060	149,632	81.7	33,428	18.3	1,075
Connecticut	487	41,767	32,073	76.8	9,694	23.2	942
Maine	440	15,793	13,072	82.8	2,720	17.2	1,025
Massachusetts	850	91,628	75,795	82.7	15,833	17.3	1,194
New Hampshire	371	13,281	11,321	85.2	1,960	14.8	916
Rhode Island	390	13,690	11,542	84.3	2,148	15.7	1,101
Vermont	421	6,901	5,829	84.5	1,071	15.5	957
Middle Atlantic	4,100	451,501	351,286	77.8	100,215	22.2	885
New Jersey	949	87,979	67,280	76.5	20,699	23.5	800
New York	1,928	197,532	160,009	81.0	37,523	19.0	843
Pennsylvania	1,223	165,989	123,997	74.7	41,992	25.3	1,010
South Atlantic	5,881	496,794	407,728	82.1	89,065	17.9	788
Delaware	413	8,605	7,337	85.3	1,268	14.7	936
Dist. of Columbia	231	10,307	9,583	93.0	724	7.0	1,675
Florida	1,159	158,722	125,439	79.0	33,283	21.0	785
Georgia	749	67,958	55,881	82.2	12,077	17.8	683
Maryland	720	51,456	45,323	88.1	6,132	11.9	856
North Carolina	879	83,016	69,057	83.2	13,959	16.8	858
South Carolina	581	32,539	29,226	89.8	3,312	10.2	728
Virginia	687	66,466	50,359	75.8	16,107	24.2	711
West Virginia	462	17,725	15,523	87.6	2,203	12.4	858
East South Central	2,075	161,805	138,692	85.7	23,113	14.3	815
Alabama	537	41,513	34,073	82.1	7,440	17.9	766
Kentucky	494	39,470	33,655	85.3	5,816	14.7	833
Mississippi	543	24,874	21,338	85.8	3,536	14.2	750
Tennessee	501	55,947	49,626	88.7	6,322	11.3	872
West South Central	3,222	241,286	204,367	84.7	36,919	15.3	650
Arkansas	477	23,291	18,752	80.5	4,539	19.5	701
Louisiana	434	40,661	37,275	91.7	3,386	8.3	834
Oklahoma	579	27,083	21,905	80.9	5,178	19.1	635
Texas	1,732	150,251	126,436	84.1	23,815	15.9	606

(Continued)

Table 39. (cont.) Registered nurse population in each State and area by activity status: March 2000

State and area	Number in sample	Total	Employed in nursing Number	Employed in nursing Percent	Not employed in Nursing Number	Not employed in Nursing Percent	Employed nurses per 100.000 population[1]
East North Central	4,120	468,203	375,295	80.2	92,907	19.8	831
Illinois	1,169	126,166	101,660	80.6	24,507	19.4	819
Indiana	589	60,888	46,244	75.9	14,644	24.1	761
Michigan	669	100,769	79,353	78.7	21,417	21.3	798
Ohio	1,063	121,722	100,144	82.3	21,578	17.7	882
Wisconsin	630	58,658	47,895	81.7	10,763	18.3	893
West North Central	4,094	217,343	187,580	86.3	29,763	13.7	975
Iowa	620	35,089	31,020	88.4	4,069	11.6	1,060
Kansas	568	29,134	23,779	81.6	5,355	18.4	885
Minnesota	756	54,920	47,102	85.8	7,818	14.2	957
Missouri	601	62,403	53,730	86.1	8,673	13.9	960
Nebraska	477	18,550	16,399	88.4	2,151	11.6	958
North Dakota	579	7,661	7,039	91.9	622	8.1	1,096
South Dakota	493	9,587	8,511	88.8	1,075	11.2	1,128
Mountain	4,280	148,929	118,869	79.8	30,060	20.2	654
Arizona	594	42,658	32,222	75.5	10,435	24.5	628
Colorado	627	40,084	31,695	79.1	8,389	20.9	737
Idaho	504	10,069	8,230	81.7	1,839	18.3	636
Montana	532	9,299	7,327	78.8	1,973	21.2	812
Nevada	473	12,940	10,384	80.2	2,556	19.8	520
New Mexico	470	13,723	11,932	87.0	1,791	13.0	656
Utah	580	15,648	13,229	84.5	2,419	15.5	592
Wyoming	500	4,508	3,849	85.4	659	14.6	780
Pacific	4,627	327,620	268,363	81.9	59,257	18.1	596
Alaska	390	5,900	4,914	83.3	986	16.7	784
California	2,583	226,352	184,329	81.4	42,024	18.6	544
Hawaii	441	10,228	8,518	83.3	1,710	16.7	703
Oregon	528	30,369	27,121	89.3	3,249	10.7	793
Washington	685	54,771	43,482	79.4	11,289	20.6	738

[1]/ Population data were based on April 1, 2000 estimates of resident population of states from Census Bureau Press Release CB00-C

Table 40. Supply of registered nurses in each State and area according to whether employed on a full-time or part-time basis: March 2000

State and area	Number in sample	Total Estimated Number	Total Estimated Percent	Employed full-time Estimated Number	Employed full-time Estimated Percent	Employed part-time Estimated Number	Employed part-time Estimated Percent	Estimated Full-time Equivalent[1]
United States	29,394	2,201,813	100.0	1,576,675	71.6	625,139	28.4	1,889,244
New England	2,474	149,632	100.0	91,682	61.3	57,950	38.7	120,657
Connecticut	376	32,073	100.0	20,740	64.7	11,333	35.3	26,407
Maine	367	13,072	100.0	8,801	67.3	4,271	32.7	10,936
Massachusetts	704	75,795	100.0	43,973	58.0	31,822	42.0	59,884
New Hampshire	323	11,321	100.0	7,570	66.9	3,751	33.1	9,446
Rhode Island	334	11,542	100.0	7,236	62.7	4,306	37.3	9,389
Vermont	370	5,829	100.0	3,363	57.7	2,466	42.3	4,596
Middle Atlantic	3,214	351,286	100.0	244,558	69.6	106,728	30.4	297,922
New Jersey	730	67,280	100.0	46,456	69.0	20,824	31.0	56,868
New York	1,564	160,009	100.0	113,316	70.8	46,693	29.2	136,663
Pennsylvania	920	123,997	100.0	84,786	68.4	39,211	31.6	104,392
South Atlantic	4,911	407,728	100.0	315,095	77.3	92,634	22.7	361,411
Delaware	368	7,337	100.0	4,711	64.2	2,626	35.8	6,024
Dist. of Columbia	214	9,583	100.0	8,171	85.3	1,413	14.7	8,877
Florida	898	125,439	100.0	100,032	79.7	25,407	20.3	112,735
Georgia	619	55,881	100.0	43,612	78.0	12,269	22.0	49,746
Maryland	627	45,323	100.0	31,259	69.0	14,065	31.0	38,291
North Carolina	730	69,057	100.0	55,798	80.8	13,259	19.2	62,427
South Carolina	528	29,226	100.0	22,528	77.1	6,699	22.9	25,877
Virginia	518	50,359	100.0	36,845	73.2	13,514	26.8	43,602
West Virginia	409	15,523	100.0	12,139	78.2	3,383	21.8	13,831
East South Central	1,777	138,692	100.0	110,230	79.5	28,462	20.5	124,461
Alabama	442	34,073	100.0	27,901	81.9	6,172	18.1	30,987
Kentucky	421	33,655	100.0	26,474	78.7	7,181	21.3	30,064
Mississippi	471	21,338	100.0	17,967	84.2	3,371	15.8	19,652
Tennessee	443	49,626	100.0	37,889	76.3	11,737	23.7	43,757
West South Central	2,753	204,367	100.0	170,821	83.6	33,546	16.4	187,594
Arkansas	385	18,752	100.0	15,543	82.9	3,208	17.1	17,147
Louisiana	397	37,275	100.0	31,745	85.2	5,530	14.8	34,510
Oklahoma	471	21,905	100.0	17,463	79.7	4,441	20.3	19,684
Texas	1,500	126,436	100.0	106,069	83.9	20,367	16.1	116,252

(Continued)

Table 40. (cont.) Supply of registered nurses in each State and area according to whether employed on a full-time or part-time basis: March 2000

State and area	Number in sample	Total Estimated Number	Total Estimated Percent	Employed full-time Estimated Number	Employed full-time Estimated Percent	Employed part-time Estimated Number	Employed part-time Estimated Percent	Estimated Full-time Equivalent[1]
East North Central	3,301	375,295	100.0	255,452	68.1	119,843	31.9	315,374
Illinois	942	101,660	100.0	73,253	72.1	28,407	27.9	87,457
Indiana	448	46,244	100.0	31,316	67.7	14,928	32.3	38,780
Michigan	524	79,353	100.0	53,551	67.5	25,801	32.5	66,452
Ohio	873	100,144	100.0	68,231	68.1	31,913	31.9	84,188
Wisconsin	514	47,895	100.0	29,101	60.8	18,794	39.2	38,498
West North Central	3,598	187,580	100.0	130,149	69.4	57,432	30.6	158,864
Iowa	548	31,020	100.0	20,774	67.0	10,246	33.0	25,897
Kansas	471	23,779	100.0	18,629	78.3	5,150	21.7	21,204
Minnesota	650	47,102	100.0	27,613	58.6	19,488	41.4	37,357
Missouri	517	53,730	100.0	40,944	76.2	12,786	23.8	47,337
Nebraska	425	16,399	100.0	11,253	68.6	5,146	31.4	13,826
North Dakota	543	7,039	100.0	4,520	64.2	2,519	35.8	5,779
South Dakota	444	8,511	100.0	6,415	75.4	2,097	24.6	7,463
Mountain	3,544	118,869	100.0	85,519	71.9	33,350	28.1	102,194
Arizona	453	32,222	100.0	24,928	77.4	7,294	22.6	28,575
Colorado	500	31,695	100.0	21,417	67.6	10,278	32.4	26,556
Idaho	410	8,230	100.0	5,299	64.4	2,931	35.6	6,765
Montana	423	7,327	100.0	5,327	72.7	2,000	27.3	6,327
Nevada	400	10,384	100.0	8,256	79.5	2,128	20.5	9,320
New Mexico	417	11,932	100.0	8,657	72.6	3,275	27.4	10,295
Utah	495	13,229	100.0	8,650	65.4	4,579	34.6	10,940
Wyoming	446	3,849	100.0	2,985	77.6	864	22.4	3,417
Pacific	3,822	268,363	100.0	173,168	64.5	95,194	35.5	220,765
Alaska	328	4,914	100.0	3,615	73.6	1,299	26.4	4,264
California	2,106	184,329	100.0	123,675	67.1	60,654	32.9	154,002
Hawaii	365	8,518	100.0	6,513	76.5	2,005	23.5	7,516
Oregon	475	27,121	100.0	15,876	58.5	11,245	41.5	21,498
Washington	548	43,482	100.0	23,490	54.0	19,992	46.0	33,486

[1]/ Nurses working full-time plus one-half of working part-time

Table 41. Registered nurse population by activity status and geographic location: March 2000

Geographic area	Total number of nurses	In metropolitan statistical area		Not in metropolitan statistical area	
		Employed in nursing	Not employed in nursing	Employed in nursing	Not employed in nursing
Total	2,696,540[1]	1,810,913	407,147	349,699	85,180
New England	146,963	125,334	28,465	21,629	4,836
Middle Atlantic	344,633	317,113	89,071	27,519	10,733
South Atlantic	396,960	335,678	73,625	61,282	15,046
East South Central	136,070	96,908	16,483	39,162	6,550
West South Central	201,895	173,348	30,377	28,547	6,222
East North Central	369,500	307,290	73,586	62,210	18,870
West North Central	184,530	124,845	18,400	59,686	11,225
Mountain	117,449	90,923	24,406	26,526	5,557
Pacific	262,612	239,474	52,735	23,138	6,140

[1]/ Includes an estimated 43,601 nurses for whom metropolitan/non-metropolitan area status was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 42. Employed nurses in each State and area by highest educational preparation: March 2000

State and area	Number in Sample	Total	Highest educational preparation							
			Diploma		Associate Degree		Baccalaureate		Masters and doctorate	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States	29,394	2,201,813[1]	424,539	19.3	812,856	36.9	731,153	33.2	229,187	10.4
New England	2,474	149,632	40,521	27.1	39,616	26.5	48,629	32.5	20,583	13.8
Connecticut	376	32,073	11,092	34.6	6,562	20.5	9,507	29.6	4,824	15.0
Maine	367	13,072	3,077	23.5	4,254	32.5	4,727	36.2	978	7.5
Massachusetts	704	75,795	19,766	26.1	18,844	24.9	25,054	33.1	12,003	15.8
New Hampshire	323	11,321	3,018	26.7	4,021	35.5	3,199	28.3	1,083	9.6
Rhode Island	334	11,542	2,321	20.1	3,833	33.2	4,259	36.9	1,095	9.5
Vermont	370	5,829	1,246	21.4	2,102	36.1	1,882	32.3	599	10.3
Middle Atlantic	3,214	351,286	92,713	26.4	100,757	28.7	114,464	32.6	42,641	12.1
New Jersey	730	67,280	17,479	26.0	21,383	31.8	22,127	32.9	6,197	9.2
New York	1,564	160,009	31,392	19.6	51,345	32.1	53,552	33.5	23,103	14.4
Pennsylvania	920	123,997	43,843	35.4	28,028	22.6	38,784	31.3	13,342	10.8
South Atlantic	4,911	407,728	70,935	17.4	162,965	40.0	128,395	31.5	44,775	11.0
Delaware	368	7,337	1,757	24.0	1,983	27.0	2,320	31.6	1,276	17.4
Dist. of Columbia	214	9,583	1,424	14.9	2,848	29.7	3,651	38.1	1,621	16.9
Florida	898	125,439	20,615	16.4	57,231	45.6	34,599	27.6	12,570	10.0
Georgia	619	55,881	8,421	15.1	20,835	37.3	20,674	37.0	5,951	10.6
Maryland	627	45,323	9,000	19.9	13,328	29.4	15,782	34.8	7,092	15.6
North Carolina	730	69,057	10,186	14.7	30,710	44.5	21,643	31.3	6,518	9.4
South Carolina	528	29,226	4,617	15.8	12,441	42.6	8,874	30.4	3,295	11.3
Virginia	518	50,359	11,668	23.2	16,158	32.1	17,047	33.9	5,486	10.9
West Virginia	409	15,523	3,248	20.9	7,431	47.9	3,805	24.5	966	6.2
East South Central	1,777	138,692	16,059	11.6	66,320	47.8	42,043	30.3	14,225	10.3
Alabama	442	34,073	3,593	10.5	15,252	44.8	12,031	35.3	3,198	9.4
Kentucky	421	33,655	2,873	8.5	17,786	52.8	9,595	28.5	3,401	10.1
Mississippi	471	21,338	1,658	7.8	11,567	54.2	6,073	28.5	1,996	9.4
Tennessee	443	49,626	7,935	16.0	21,715	43.8	14,344	28.9	5,631	11.3
West South Central	2,753	204,367	30,954	15.1	86,723	42.4	70,747	34.6	15,424	7.5
Arkansas	385	18,752	4,036	21.5	9,022	48.1	4,570	24.4	1,124	6.0
Louisiana	397	37,275	5,847	15.7	13,878	37.2	13,673	36.7	3,749	10.1
Oklahoma	471	21,905	2,611	11.9	11,228	51.3	6,952	31.7	1,113	5.1
Texas	1,500	126,436	18,460	14.6	52,595	41.6	45,551	36.0	9,438	7.5

(Continued)

Table 42. (cont.) Employed nurses in each State and area by highest educational preparation: March 2000

State and area	Number in Sample	Total	Highest educational preparation							
			Diploma		Associate Degree		Baccalaureate		Masters and doctorate	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
East North Central	3,301	375,295	76,530	20.4	138,690	37.0	123,649	32.9	35,977	9.6
Illinois	942	101,660	21,165	20.8	35,685	35.1	34,003	33.4	10,806	10.6
Indiana	448	46,244	7,953	17.2	19,167	41.4	15,233	32.9	3,787	8.2
Michigan	524	79,353	13,663	17.2	33,450	42.2	23,884	30.1	8,105	10.2
Ohio	873	100,144	26,054	26.0	34,275	34.2	30,748	30.7	9,067	9.1
Wisconsin	514	47,895	7,695	16.1	16,113	33.6	19,781	41.3	4,211	8.8
West North Central	3,598	187,580	43,168	23.0	68,110	36.3	62,111	33.1	13,926	7.4
Iowa	548	31,020	9,337	30.1	12,966	41.8	7,486	24.1	1,231	4.0
Kansas	471	23,779	4,502	18.9	7,784	32.7	9,363	39.4	2,131	9.0
Minnesota	650	47,102	7,488	15.9	19,263	40.9	16,763	35.6	3,587	7.6
Missouri	517	53,730	13,013	24.2	20,330	37.8	15,851	29.5	4,302	8.0
Nebraska	425	16,399	5,482	33.4	3,338	20.4	5,978	36.5	1,601	9.8
North Dakota	543	7,039	1,748	24.8	1,104	15.7	3,587	51.0	588	8.4
South Dakota	444	8,511	1,599	18.8	3,325	39.1	3,083	36.2	486	5.7
Mountain	3,544	118,869	16,193	13.6	46,812	39.4	43,916	36.9	11,898	10.0
Arizona	453	32,222	5,062	15.7	13,989	43.4	10,759	33.4	2,413	7.5
Colorado	500	31,695	4,382	13.8	9,080	28.6	14,262	45.0	3,970	12.5
Idaho	410	8,230	850	10.3	3,427	41.6	2,977	36.2	977	11.9
Montana	423	7,327	1,407	19.2	2,167	29.6	3,092	42.2	643	8.8
Nevada	400	10,384	1,561	15.0	4,442	42.8	3,629	35.0	726	7.0
New Mexico	417	11,932	1,417	11.9	5,474	45.9	3,536	29.6	1,505	12.6
Utah	495	13,229	1,023	7.7	6,361	48.1	4,515	34.1	1,331	10.1
Wyoming	446	3,849	491	12.8	1,872	48.6	1,146	29.8	332	8.6
Pacific	3,822	268,363	37,465	14.0	102,864	38.3	97,201	36.2	29,739	11.1
Alaska	328	4,914	1,017	20.7	1,487	30.3	1,984	40.4	425	8.7
California	2,106	184,329	27,231	14.8	70,835	38.4	64,351	34.9	20,993	11.4
Hawaii	365	8,518	1,417	16.6	2,581	30.3	3,708	43.5	813	9.5
Oregon	475	27,121	3,106	11.5	11,831	43.6	9,264	34.2	2,770	10.2
Washington	548	43,482	4,695	10.8	16,130	37.1	17,894	41.2	4,738	10.9

1/ Includes 4,077 nurses for whom highest nursing-related education was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 43. Registered nurse population by activity status and geographic location: March 2000

Geographic area	Total number of nurses	In metropolitan statistical area		Not in metropolitan statistical area	
		Employed in nursing	Not employed in nursing	Employed in nursing	Not employed in nursing
Total	2,696,540	1,810,913	407,147	349,699	85,180
New England	146,963	125,334	28,465	21,629	4,836
Middle Atlantic	344,633	317,113	89,071	27,519	10,733
South Atlantic	396,960	335,678	73,625	61,282	15,046
East South Central	136,070	96,908	16,483	39,162	6,550
West South Central	201,895	173,348	30,377	28,547	6,222
East North Central	369,500	307,290	73,586	62,210	18,870
West North Central	184,530	124,845	18,400	59,686	11,225
Mountain	117,449	90,923	24,406	26,526	5,557
Pacific	262,612	239,474	52,735	23,138	6,140

Note: Estimated numbers may not add to totals because of rounding.

Table 44. Percent distribution of the registered nurse population in each geographic area by racial/ethnic background: March 2000

Racial/ethnic Background	United States	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Total	2,696,540	183,060	451,501	496,794	161,805	241,286	468,203	217,343	148,929	327,620
White (non-hispanic)	86.6	94.2	85.7	84.4	88.8	78.4	91.4	94.6	90.4	77.5
Black/African Amer. (non-hispanic)	4.9	1.4	5.6	8.6	7.7	8.2	2.8	1.9	1.4	3.4
Asian (non-hispanic)	3.5	1.4	4.6	2.3	0.6	4.6	2.3	0.4	1.3	9.9
Native Hawaiian/Pacific Islander	0.2	0	0.2	0.2	0.1	0.1	0.1	0	0.2	1.0
American Indian/Alaskan Native	0.5	0.1	0.3	0.5	0.2	1.4	0.4	0.5	1.0	0.4
Hispanic/Latino (any race)	2.0	0.8	1.4	1.9	0.8	4.7	0.9	0.9	3.2	4.1
Two or more races (non-hispanic)	1.2	0.6	0.8	1.1	1.5	1.9	0.8	1.0	1.2	2.3
Not known	1.1	1.4	1.4	0.9	0.4	0.7	1.2	0.8	1.3	1.3

Note: Estimated percents may not add to 100 because of rounding.

Table 45. Percent distribution of the registered nurse population in each geographic area by age group: March 2000

Age group	United States	New England	Middle Atlantic	East South Atlantic	West South Central	East South Central	West North Central	North Central	Mountain	Pacific
Estimated RN population in area	2,696,540	183,060	451,501	496,794	161,805	241,286	468,203	217,343	148,929	327,620
Less than 25 years	2.5	2.3	2.1	2.7	3.8	2.6	2.0	4.6	1.9	1.5
25 - 29 years	6.6	4.8	5.9	6.8	8.8	8.6	7.1	7.0	5.5	4.9
30 - 34 years	9.2	8.7	8.8	9.7	12.2	10.5	9.4	9.1	8.3	7.1
35 - 39 years	13.4	13.8	12.7	13.5	16.2	13.4	13.9	14.2	12.3	11.7
40 - 44 years	17.2	15.8	17.4	17.2	17.4	18.7	16.6	17.3	16.9	17.7
45 - 49 years	17.2	17.7	16.6	17.0	15.3	17.4	16.7	17.0	19.1	18.9
50 - 54 years	12.7	13.7	12.7	12.3	11.3	11.6	12.4	12.1	13.7	14.5
55 - 59 years	8.8	9.2	8.9	8.7	7.2	7.9	9.1	7.6	9.9	10.1
60 - 64 years	5.8	6.4	6.1	6.2	3.7	4.2	5.9	5.9	6.0	6.5
65 years and over	5.7	6.6	7.8	5.2	3.4	4.3	5.7	4.6	5.7	6.1
Not known	0.9	1.1	1.0	0.8	0.7	0.8	1.1	0.7	0.9	0.9

Note: Estimated percents may not add to 100 due to rounding.

Table 46. Employment setting of registered nurses in each geographic area: March 2000

Employment setting	United States	New England	Middle Atlantic	East South Atlantic	West South Central	East South Central	West North Central	North Central	Mountain	Pacific
Total	2,201,813[1]	149,632	351,286	407,728	138,692	204,367	375,295	187,580	118,869	268,363
Hospital	1,300,323	80,847	195,341	247,867	86,138	127,004	221,977	107,512	68,734	164,903
Nursing home, extended care facility	152,894	14,828	29,364	18,704	8,159	9,095	31,674	19,382	6,909	14,779
Nursing education	46,655	2,680	6,003	8,703	4,176	5,430	8,426	4,817	2,030	4,389
Community/public health	282,618	22,843	48,171	55,729	18,510	25,397	43,036	20,880	15,122	32,930
Student health service	83,269	8,864	22,500	10,571	3,224	8,729	10,332	5,653	5,321	8,076
Occupational health	36,395	1,449	5,587	7,554	1,885	2,825	8,834	2,636	1,642	3,983
Ambulatory care setting	209,324	11,789	30,664	40,083	11,401	17,350	36,959	19,580	13,323	28,175
Other	90,335	6,332	13,656	18,517	5,198	8,538	14,057	7,121	5,788	11,128

[1]/ Includes 9,631 nurses for whom employment setting was not known.

Note: Estimated numbers may not add to totals because of rounding.

Table 47. Percent distribution of the registered nurse population in each geographic area who changed employer or position between March 1999 and 2000, by principal reason for change

Reason for change	United States	New England	Middle Atlantic	South Atlantic	East South Central	West South Central	East North Central	West North Central	Mountain	Pacific
Estimated RNs who changed employer or position	494,800	30,592	70,696	95,874	34,025	54,367	80,174	38,750	32,735	57,585
Was laid off	3.4	7.4	3.9	3.3	3.2	3.1	2.4	1.0	4.7	4.0
Employer shifted positions due to reorganization	4.2	5.0	5.6	3.9	5.8	5.3	3.6	2.4	3.5	3.4
Employer reduced number of RNs on staff	1.2	0.1	1.2	1.1	1.1	2.0	1.0	0.5	1.7	1.5
Employer planned to reduce salaries/benefits	0.4	0.5	0.1	0.3	0.7	0.7	0.5	0.6	0.6	0.5
Changes in organization/unit made work more stressful	10.3	12.3	10.2	10.0	12.5	9.7	11.4	9.4	7.9	9.7
Received a promotion	9.8	9.6	11.5	8.4	12.1	12.2	10.1	9.5	8.4	7.5
Was more interested in another position/job	17.8	18.3	20.0	15.1	16.6	14.9	20.1	22.5	12.8	18.9
Offered better pay/benefits	7.8	8.4	6.4	8.9	7.1	9.3	7.6	9.5	7.2	5.7
Relocated to a different geographic area	10.4	6.4	6.6	13.0	7.4	10.8	7.4	11.2	16.2	14.2
Better opportunity to do the kind of nursing I like	7.4	6.7	7.2	6.6	4.8	8.2	9.5	7.2	6.8	7.9
Disability/Illness	2.4	2.9	2.4	2.4	3.4	3.2	2.6	1.1	1.9	2.0
Other	22.3	18.6	23.4	24.4	22.3	18.5	20.9	24.1	26.0	21.9
Not known	2.4	3.7	1.6	2.7	3.2	2.1	2.8	1.0	2.5	2.7

Note: Estimated percents may not add to 100 due to rounding.

Table 48. Average annual salary of registered nurses in full time staff nurse positions in each geographical area: March 2000

Area of employment	Number in Sample	Estimated Number	Annual Salary
Total	12,017	893,206	$42,133
New England	818	49,170	$45,534
Middle Atlantic	1,230	135,966	$45,435
South Atlantic	2,113	175,715	$41,233
East South Central	847	65,766	$37,364
West South Central	1,391	100,481	$40,222
East North Central	1,239	142,652	$40,455
West North Central	1,423	74,942	$36,958
Mountain	1,516	50,614	$39,817
Pacific	1,440	97,900	$49,825

Note: Estimated numbers may not to totals because of rounding.

APPENDIX B
SURVEY METHODOLOGY

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SURVEY METHODOLOGY

This appendix provides a brief summary of the methodology of the study including the sample design and the statistical techniques used in summarizing the data. It also includes a discussion of sampling errors, provides the standard errors for key variables in the study and presents a simplified methodology for estimating standard errors. Much of the material included here has been abstracted from the technical report provided by the Research Triangle Institute (RTI), the contractor who carried out the sampling for and conducted the seventh National Sample Survey of Registered Nurses discussed in this report.

The basic sample design used in all seven cycles of the National Sample Survey of Registered Nurses is basically the same. The NSSRN 2000, the seventh in the series, oversampled minority nurses in order to allow for more in-depth analysis of this special population of RNs. Several options for oversampling were considered. The State boards of nursing were asked to provide information on the race/ethnic background of RNs in order to facilitate the oversampling. However, this information was not available on many of the States' files. Two States, Texas and North Carolina, did provide race information which was used to oversample minorities. For States that were not able to provide race/ethnic information for nurses on the list, minority population distribution and minority nurses distribution by State from the 1996 study were used to assign larger samples of nurses to States with both high proportions of minority populations and high proportions of minority nurses. This increased both the number of minority and non-minority nurses in the sample for those states relative to the sample sizes for 1996. The basic design was enhanced by using sample design optimization methodology and software developed by Chromy[1] to determine the sample allocation to the lists that would simultaneously satisfy variance constraints defined by the 51 States, the minority race groups and the total US.

Sample Design

The seven surveys carried out to date all followed the same design developed by Westat, Inc. under a contract with the Division of Nursing, BHPr, HRSA in 1975-76. The design approach took into account two key characteristics of the sampling frame. First, no single list of all individuals with licenses to practice as registered nurses in the United States exists although lists of those who have licenses in any one State are available. Second, a nurse may be licensed in more than one State.

[1] Chromy, James R. "Design Optimization with Multiple Objectives". American Statistical Association of the Section on Survey Research Methods, Arlington, VA., pp A4-199

A sampling frame was required to select a probability sample of nurses from which valid inferences could be made to the target population of all those with current licenses to practice in the United States. State Boards of Nursing in the 50 States and in the District of Columbia (hereafter also referred to as a State) provided files containing the name, address, and license number of every RN currently licensed in that State. The States were also asked to provide the race/ethnicity of each nurse. Texas and North Carolina provided files containing usable race/ethnicity data for 5 groups. For sample allocation and selection, these race/ethnicity groups in Texas and North Carolina were collapsed into White and nonWhite. Thus, 53 separate lists were used: a White and NonWhite file for Texas and North Carolina and a separate file for each of the remaining 49 States and the District of Columbia. These 53 lists constituted a multiple sampling frame containing all the RNs licensed in the US. Because many nurses are licensed in more than one State, their names could appear in the combined list more than once. A nested alpha-segment design was used to properly determine selection probabilities for nurses appearing in more than one of the 53 lists.

The target population of this study was the current RN population of the United States as of March 2000. RNs were selected with equal probabilities within States. Whether RNs fell into the sample depended on whether their names fell within one of the alpha-segments or portions of alpha-segments that were selected for the sample. Approximately equal-sized alpha-segments were constructed by partitioning an alphabetically ordered list of all RN names nationwide into 250 segments with equal (or as nearly equal as possible) numbers of RNs. An alpha-segment consisted of all alphabetically adjacent names falling between set boundaries.

Both national and State-level estimates were required. While uniform-sampling rates would have produced the best national estimates, the resulting sample sizes for the smallest States would have been inadequate to support State-level estimates. Sampling rates were increased in the smaller States to obtain larger State-level sample sizes. Planned sampling rates ranged from less than 1 percent in several of the States with a large RN population to 15 percent in Wyoming. Planned State sizes ranged from a sample of over 4,320 RNs in California to approximately 625 in Nebraska. While this disproportionate sampling improved the precision of estimates in the smaller States, it also reduced precision of national estimates due to unequal weighting effects.

Registered nurses were in the sample on the basis of name, with an RN being included in the sample if the name of licensure fell within a specific portion of the alpha-segments included in the sample from the RN's State of licensure. As stated earlier, an alpha-segment consisted of all alphabetically adjacent names falling between set boundaries. The segments were constructed so that each segment contained approximately the same number of RNs. Specifically, the lower boundary of an alpha-segment was the last name in alphabetical order of all the names included in that segment. The membership of the segment consisted of all names, beginning with the lower boundary, *up to but not including* a name that defined the upper boundary. The latter name fell into the next alpha-segment.

A planned variation in the size of the portions of segments was used to accommodate the differing State sampling rates. The largest portions used were full alpha-segments while other sizes were 1/2-, 1/4-, 1/8-, 1/16-, and 1/32-portions. The fractions indicated the size of the specified alpha-segment portion relative to the size of the basic alpha-segment. The sampling rate required for a given State was achieved using a combination of these portions of alpha-segments.

From the frame of 250 alpha-segments, 40 alpha-segments were randomly selected. Although each State had 40 sample segments (i.e., portions of alpha-segments), the segments differed in size depending on the State's sampling rate. To identify and account for nurses having multiple licenses, the alpha-segment portions from larger States were "nested" or included, within those from smaller States. Under this scheme, an RN who was licensed under the same name in two States with identical sampling rates was selected (or not selected) for both States because the alpha-segments and portions of alpha-segments that defined sample membership were identical for both States. However, for two States that were sampled

at different rates, the alpha-segment portions for the lower sampling rate (the State with a larger RN population) were nested within those of the higher sampling rate (the State with the smaller RN population). The nested alpha-segment design permitted the use of each sample RNs data for State estimates of each of her/his States of licensure and also provided appropriate (multiplicity-adjusted) weights for both State and national estimates.

The nesting was based on how the 40 basic alpha-segment selections were used to define the sample for each State. Each of these alpha-segments, or one of the fractional portions of it, constituted one of the 40 sample clusters for each State. Accordingly, each of the basic alpha-segments had associated with it a 1/2-portion selection and 1/4-portion, 1/8-portion, 1/16-portion, and 1/32-portion selections.

The sampling rate for a particular State was obtained from some combination of the alpha-segments and portions. For example, the 40 complete alpha-segments would have constituted the sample for States with a 16 percent sampling rate. Because each segment contained an expected 0.4 percent of the State's RN names, taken together they contained an expected 40 x 0.4 percent, or 16 percent, of those names.) The sample for a State with an 8 percent sampling rate consisted of the 40 2-portion selections. A 5 percent sampling rate was achieved by first randomly dividing the 40 alpha-segments into two groups, the first containing 30 alpha-segments and the other containing 10, and by using the 1/4-portions from the first group and 2-portions from the second group (0.4 x [(30x1/4) + (10x1/2)] = 5).

The survey design specified precisely which alpha-segments and portions would correspond to each of the different sampling rates used. This design resulted in the specification of 40 pairs of names for each of the sampling rates. Each pair consisted of the names defining the lower and upper boundaries for one of the alpha-segments or alpha-segment portions corresponding to the sampling rate. Thus, the alpha-segment (portion) was defined by all names from its lower boundary up to but not including its upper boundary.

To ensure that current information about RNs could be obtained, the survey design called for periodic implementation. A panel structure for the RN survey allowed for several of the sample alpha-segments in the periodic surveys to be systematically replaced. Under the original survey design, the 40 sample alpha-segments were randomly assigned to five panels of eight alpha-segments each. For each successive survey, a new panel (consisting of eight new alpha-segments) was entered into the sample, replacing one of the five panels that was in the previous survey. Under this scheme, a nurse who maintained an active license in the same State(s) and whose name did not change could be retained in the sample for up to five surveys. With the reconstruction of the alpha-segments in the fourth RN survey (1988), changes were made so that exact correspondence of the current segments to those established initially may no longer exist; therefore, some nurses may not have been carried through all five surveys.

Each of the 51 State Boards of Nursing provided one or more files that contained the names of currently licensed RNs. These files formed the basis of the sampling frame from which the RNs for each State were selected. The licensure files provided by the States were submitted on computer tape, on diskettes, or on a printed list. Essentially the same procedure was followed for sample selection for all States regardless of which form was submitted. For this current study, States were also asked to identify those for whom the State provided advanced practice nurse (APN) status. In some cases, these APNs were identified on separate lists and their APN status was added to the information on the RN sampling frame list. In other cases, the State identified these nurses on the basic list provided. Once a State provided a licensure file containing all appropriate names of individuals with active RN licenses and meeting all specifications, the required sample names in that file were selected.

Regardless of the way a State alphabetized and standardized the names in its files, the sample names were selected according to the standards established by the survey design. That is, sample selections ignored blanks and punctuation in the last names (except a dash in hyphenated names)

and ignored titles (e.g.,"sister"). Whether or not the RN was an APN was not taken into account in the sample selection.

Table B-1 shows the sampling rates and sample sizes that were planned and actually obtained for the 53 State and State by race lists in the survey. Differences between planned and actual sampling rates result from State-specific variation in the distribution of nurses' names. States are priority ordered by sampling rate size.

The original State frame sizes were adjusted to account for duplicate licenses within States and ineligible licenses (i.e., frame errors) found in the sample. Duplicates within States arose primarily from combining RN and APN lists. Most duplicates were identified before selecting the sample and determining the frame size, but a few were identified after sample selection, requiring a frame size adjustment. The ineligible licenses were identified in the process of reconciling the State and nurse reported licenses. Cases that could not be reconciled by RTI were sent to the State Boards of Nursing for resolution. No changes in the sampling rates occurred as a result of the frame adjustments, so the nesting of the alphabetic clusters remained the same even though the ordering by adjusted frame would have changed. It was, therefore, not necessary to change the priority ordering as a result of any changes in relative size.

Weighting Procedures

The probability sample design of the survey permits the computation of unbiased estimates of characteristics of the target population. These estimates are based on weights that reflect the complex design and compensate for the potential risk of nonresponse bias to the extent feasible. The weights that are assigned to each sample nurse may be interpreted as the number of nurses in the target population that the sample nurse represents. The weight for an RN is the reciprocal of the nurse's probability of selection in her/his priority State, adjusted to account for nonresponse.

The weights were computed sequentially for States A, B, etc., where A was the highest-priority State, and B the next-highest-priority State. The weight for State A was the ratio of the count of licenses in the sampling frame for State A to the number of respondents licensed in State A. For State B, and the remaining States, the numerator and denominator of this ratio were adjusted to account for State A and other higher-priority States. To describe the basic method, the following terms are defined:

$N(_i)$ = total number of licenses for State I

$m(_i)$ = number of respondents for State I that did not have a license in a higher-priority State

$n(_{i,j})$ = number of respondents with a license in both State i and State j [note $n(_{i,i})$ denotes the number of eligible respondents with a license only in State i]

$W(_i)$ = the adjusted weight for eligible respondents who were assigned to the priority State I.

The weight for State A was computed as follows:

$$W(A) = N(A) / m(A).$$

For the State B weight, W(B), the numerator was the total frame count of RNs licensed in State B, N(B), after removing the estimated total count of State B nurses who were also licensed in State A (i.e., W(A) n(A,B)). Similarly, the numerator of W(C) excluded State C nurses who were also licensed in either State A or State B (i.e., W(A) n(A,C) + W(B) n(B,C)). That is, for the State B weight and the State C weight, the computations were:

$$W(B) = [N(B) - W(A)\, n(A,B)] / m(B)$$
$$W(C) = [N(C) - W(A)\, n(A,C) - W(B)\, n(B,C)] / m(C).$$

In either case, the denominator was the number (m(B) or m(C)) of respondents in the State not licensed in a higher-priority State.

In general, the numerator of a State I weight, W(I), was the total frame count licensed in State I after

Table B-1. State Sampling Rates and Sample Sizes (Priority Ordered)

State	Frame Size[1]	Sampling Rate Percentage		
		Planned	**Actual**	**Actual Sample Size**
Total	3,066,554			54,125
Wyoming	5,123	15.00	15.26	782
Alaska	6,629	11.00	10.44	692
North Dakota	7,694	10.00	9.66	743
Vermont	7,906	9.00	8.73	690
Delaware	10,196	7.00	7.50	765
South Dakota	10,442	7.00	6.81	711
Montana	10,633	7.00	7.50	798
Idaho	11,876	7.00	6.408	761
Nevada	14,173	7.00	6.216	881
Hawaii	11,248	6.00	6.383	718
New Mexico	15,556	5.00	5.08	790
Texas Minority	32,929	5.00	4.41	1,451
North Carolina Minority	10,456	4.50	4.065	425
Rhode Island	16,752	4.50	3.94	660
Utah	17,345	4.50	4.94	857
New Hampshire	17,207	4.00	3.70	637
District of Columbia	19,941	4.00	3.955	788
West Virginia	21,194	4.00	3.77	798
Maine	18,216	4.00	3.82	695
Nebraska	20,830	3.00	3.20	666
Mississippi	28,343	3.00	3.25	921
Arkansas	28,649	3.00	3.02	865
Oklahoma	31,156	3.00	3.09	963
Kansas	42,840	2.50	2.71	944
South Carolina	36,136	2.50	2.42	875
Oregon	35,007	2.25	2.14	749
Iowa	38,896	2.25	2.22	863
Louisiana	40,117	1.75	1.68	673
Colorado	43,371	1.75	1.93	837
Kentucky	43,750	1.75	1.67	729
Alabama	44,749	1.75	1.68	754
Arizona	46,165	1.75	1.78	821
Connecticut	50,143	1.75	1.63	818
California	247,562	1.75	1.625	4,022
Minnesota	59,098	1.50	1.633	965
Maryland	59,228	1.50	1.528	905
Washington	61,139	1.50	1.42	871
Georgia	79,327	1.50	1.56	1,238
New Jersey	108,330	1.50	1.44	1,558
New York	231,793	1.50	1.44	3,334
Tennessee	64,805	1.25	1.20	776
Indiana	74,184	1.25	1.22	903
Virginia	81,957	1.25	1.22	998
Massachusetts	105,955	1.25	1.11	1,172
Illinois	142,828	1.25	1.262	1,809
Wisconsin	67,415	1.125	1.19	805
Missouri	71,033	1.125	1.17	828
North Carolina White	75,548	1.00	1.06	801
Ohio	134,915	1.00	1.06	1,432
Florida	170,108	1.00	.96	1,640
Michigan	113,753	0.90	.91	1,037
Pennsylvania	199,252	0.90	.89	1,782
Texas White	130,656	0.85	.86	1,129
Texas Total	163,585	1.514	1.577	2,580
North Carolina Total	86,004	1.381	1.426	1,226

[1/] Adjusted frame size.
[2/] Since the actual distribution of names differs for each State from the distribution derived from the merged States used for the development of the 250 alpha-segments some variation occurs between the planned and actual sampling rates.

removing the estimated total count of State I nurses also licensed in higher-priority States. The denominator, m(I), was the number of State I respondents not licensed in a higher-priority State. This weighting scheme incorporated a nonresponse adjustment that inflated the respondents' data to represent the entire universe. The adjusted frame total shown in Table B-1 was used in computing the State I weight.

Estimation Procedure

State-level estimates can be computed using the final set of sampling weights, W_k (for sample nurse k). For example, an estimate of the total number of RNs working in Iowa may be based on the following indicator variable, X_k:

X_k = 1 if nurse k worked in Iowa,
= 0 otherwise.

The desired estimated total may then be written as

$$\hat{X} = \sum_k W_k X_k,$$

the sum being over all sample nurses.

Estimates of ratios and averages are obtained as the ratio of estimated totals.

Sampling and Nonsampling Errors

To the extent that samples are sufficiently large, relatively precise estimates of characteristics of the licensed RN population of the United States can be made because of the underlying probability structure of the sample data. Such estimates are, sometimes, an imperfect approximation of the truth. Several sources of error could cause sample estimates to differ from the corresponding true population value. These sources of error are commonly classified into two major categories: sampling errors and nonsampling errors.

A probability sample such as the one used in this study is designed so that estimates of the magnitude of the sampling error can be computed from the sample data. Nonsystematic components of nonsampling error are also reflected in the sampling error estimates.

Nonsampling Errors

Some sources of error, such as unusable responses to vague or sensitive questions; no responses from some nurses; and errors in coding, scoring, and processing the data are, to a considerable extent, beyond the control of the sampling statistician. They are called "nonsampling errors" and also occur in cases where there is a complete enumeration of a target population, such as the U.S. Census. Among the activities that were directed at reducing nonsampling errors to the lowest level feasible for this survey were careful planning, keeping nonresponses to the lowest feasible level, and coding and processing the sample data carefully.

If nonsampling errors are random, in the sense that they are independent and tend to be compensating from one respondent to another, then they do not cause bias in estimates of totals, percents, or averages. Furthermore, the contribution from such nonsampling errors will automatically be included in the sampling errors that are estimated from the sample data.

Although nonsampling errors that are randomly compensating do not tend to bias estimates of simple statistics, correlations or relationships in cross-tabulations are often decreased by such errors, and sometimes substantially. Thus, errors that tend to be compensated in estimates of simple aggregates or averages may (but not necessarily will) introduce systematic errors or biases in measures of relationships or cross-tabulations.

Nonsampling errors that are systematic rather than random and compensating are a source of bias for sample estimates. Such errors are not reduced by increasing the size of the sample, and the sample data do not provide an assessment of the magnitude of these errors. Systematic errors are reduced in this study by such things as careful wording of questionnaire items, respondent motivation, and well-designed data-collection and data-management procedures. However, such errors sometimes occur in subtle ways and are less subject to design control than is the case for sampling errors.

Nonresponse to the survey is one source of nonsampling error because a characteristic being estimated may differ, on average, between respondents and nonrespondents. For this reason, considerable effort has been expended in this survey to obtain a high response rate through such actions as respondent motivation and follow-up procedures. A high response rate reduces both random and systematic errors. After taking into account duplicates and frame errors, the overall response rate to this survey was 72 percent. State-level response rates ranged from a little over 60 percent in the State of Louisiana to 83 percent in Wisconsin.

Sampling Errors

Sample survey results are subject to sampling error. The magnitude of the sampling error for an estimate, as indicated by measures of variability such as its variance or its standard error (the square root of its variance), provides a basis for judging the precision of the sample estimates.

Systematic sampling, which was the selection procedure used in choosing the alpha-segments for this study, is convenient from certain practical points of view, including providing for panel rotation. However, it does not permit unbiased estimation of the variability of survey estimates unless some assumptions are made.

Standard errors were estimated based upon the assumption that the systematic sample of 40 alpha-segments is equivalent to a stratified random sample of two alpha-segments from each of 20 strata of adjacent alpha-segments. Ordinarily, this assumption should lead to overestimates of the sampling error for systematic sampling, but in this case (with alpha-segments as the sampling units) the magnitude of the overestimate is believed to be trivial.

Regarding the sample as consisting of 20 pairs of alpha-segments thus obtaining 20 degrees of freedom) for variance estimation, the probability is approximately .95 that the statistic of interest differs from the value of the population characteristic that it estimates by not more than 2.086 standard deviations.

Specifically, a 95 percent confidence interval for an estimated statistic $\hat{x}$ takes the form

$$\hat{x} \pm 2.086\hat{\sigma}_{\hat{x}},$$

where $\hat{\sigma}_{\hat{x}}$ is the estimated standard error for $\hat{x}$.

Direct Variance Estimation

The direct computation of the sampling variance used the jackknife variance estimation procedure with 20 replicates of the sample. Each replicate was based on 19 pairs of alpha-segments and 1 alpha-segment from the 20th pair. The actual respondent count in the included segments for a particular replicate was approximately 39/40ths of the full respondent sample and was weighted to represent the full population.

Variance estimates using the jackknife approach require the computation of a set of weights for the full sample and a set for each replicate using the established weight computation procedure i.e., 20 additional sets of weights). For the replicates, the weights were based on the number of responding nurses from the 39 segments associated with each replicate. Having 20 sets of weights permits construction of 20 replicate estimates to compare with the estimate produced from all of the data; each replicate estimate is based on about 39/40ths of the data.

This procedure was performed 20 times, once for each pair of alpha-segments.

The variance estimate is computed using the following procedure. Define the following:

$\hat{X}_i$ = an estimated total for replicate I associated with alpha-segment pair I, and

$\hat{X}$ = an estimated total obtained over the full sample.

The variance of $\hat{x}$ Var $(\hat{x})$ is estimated by computing

$$\mathrm{Var}(\hat{x}) = \sum_{i=1}^{20} (\hat{x}_i - (\hat{x})^2.$$

If the estimate of interest is a ratio of two estimated totals (e.g., the proportion of RNs resident in Florida between 25 and 29 years old to the total number of RNs resident in Florida), the variance estimate for the estimated ratio would be of the following form:

$$\mathrm{Var}\left(\frac{\hat{x}}{\hat{y}}\right) = \sum_{i=1}^{20}\left(\frac{\hat{x}_i}{\hat{y}_i} - \frac{\hat{x}}{\hat{y}}\right)^2.$$

Following the example, the $\hat{x}$ and $\hat{x}_i$ measurements would be full sample and replicate estimates, respectively, of the number of RNs resident in Florida who were 25 to 29 years old, while $\hat{y}$ and $\hat{y}_i$ would be the corresponding estimates of the total number of RNs resident in Florida. The variance of any other statistic, simple or complex, can be similarly estimated by computing the statistic for each replicate.

The jackknife variance estimator can use either the full sample estimate, $\hat{x}$, or the average of the replicate estimates. While usually little difference exists between the two estimates, RTI used the estimator, $\hat{x}$ which tends to provide more conservative estimates of variance.

Direct estimates of the variance were computed for a variety of variables. These variables were chosen not only due to their importance, but also to represent the range of expected design effects. The average of these design effects (on a State-by-State basis) provides the basis for the variance estimate for variables not included in the set for which direct variance estimates were computed. Direct estimates of the standard error (the square root of the variance) are presented for a selected set of variables in Table B-2. Table B-3 shows the estimated State population of nurses and the standard error of these population totals.

Design Effects and Generalized Variances

The generalized variance is a model-based approximation of the sampling variance estimate, which is less computationally complex than the direct variance estimator but is also less accurate. The generalized variance equations use the national-level or State-level estimates of the design effect and, for some estimates, the coefficient of variation (CV) to estimate the sampling variance.

The design effect, F, for an estimated proportion $\hat{p}$ is determined by taking the ratio of the estimated sampling variance, $\hat{\sigma}^2_{\hat{p}}$, obtained by the jackknife method, to the sampling variance of the $\hat{p}$ simple random sample of the same size. For the proportion, $\hat{p}$ this is given by

$$F = \hat{\sigma}^2_{\hat{p}}/[\hat{p}\,(1 - \hat{p}],$$

where n is the unweighted number of respondents used to determine the denominator of $\hat{p}$.

Direct estimates of the design effect were computed for a set of variables for each State. The averages of the design effects were then computed for each State and the nation. These average design effects can be used in formulas for estimating generalized variances or standard errors. This procedure uses average design effects for a class of estimates instead of calculating direct estimates (with a resulting economy in time and costs), at the sacrifice generally of some accuracy in the variance estimates.

A generalized standard error estimate for an estimated proportion, $\hat{p} = \hat{Y}/\hat{X}$, for a State or for the United States, is provided by the equation:

$$\sigma_{\hat{Y}/\hat{X}} = \sqrt{F \cdot (\hat{Y}/\hat{X}) \cdot (1 - \hat{Y}/\hat{X})/n} \qquad (1)$$

where n is the number of survey respondents used to determine the estimate $\hat{X}$. The multiplier F, the median[2] design effect, depends upon the State for which the estimated proportion was generated. The median design effects are on Table B-4.

Generalized estimates of standard errors can also be computed for estimated numbers (or totals) of

[2]The median design effect was based on all design effects for estimates of proportions computed on selected variables. Using a median instead of mean value avoids the effects of extreme estimates of standard errors, which can occur for some relatively rare attributes. In prior years, an average (mean) design effect was computed for selected variables. Given that the distribution of design effects is skewed to the right, it is expected that the true median be less than the true mean.

Table B-2. Estimates and Standard Errors (S.E.) For Selected Variables or U.S. Registered Nurse Population

Description	Estimated Number	S.E. of Es timated Number	Estimated Percent	S.E. of Estimated Percent
Number of Nurses	2,696,540	6,348		
Basic Nursing Education				
Diploma	799,354	7,694	29.64	0.3100
Associate Degree	1,087,602	11,559	40.33	0.3900
Baccalaureate Degree	791,004	8,687	29.33	0.3100
Master Degree	10,282	828	0.38	0.0300
Doctorate (N.D.)	525	211	0.02	0.0100
Not Reported	7,773	1,251	0.29	0.0500
Employed in Nursing				
Yes	2,201,813	9,663	81.65	0.3200
No	494,727	8,766	18.35	0.3200
Racial/Ethnic Background				
Hispanic	54,861	6,368	2.03	0.2400
American Indian/Alaska Native Alone (Non-Hispanic)	13,040	1,264	0.48	0.0500
Asian Alone (Non-Hispanic)	93,415	15,565	3.46	0.5800
Black/African American Alone (Non-Hispanic)	133,041	15,373	4.93	0.5700
Native Hawaiian/other Pacific Islander Alone (Non-Hispanic)	6,475	960	0.24	0.0400
White/Alone (Non-Hispanic)	2,333,896	20,970	86.55	0.8265
Two or More Races (Non-Hispanic)	32,536	2,127	1.21	0.0800
Race Missing (Non-Hispanic)	10,808	1,605	0.40	0.0600
Not Reported	18,468	1,579	0.68	0.0600
Employment Status in 1996				
Employed in Nursing FT	1,576,675	`13,973	58.47	0.4790
Employed in Nursing PT	625,139	8	23.18	0.3200
Not Employed in Nursing	494,727	8,766	18.35	0.3200
Graduation Year				
Before 1961	233,583	5,003	8.66	0.1900
1961 to 1965	156,895	3,744	5.82	0.1400
1966 to 1970	199,732	3,615	7.41	0.1400
1971 to 1975	288,607	6,004	10.70	0.2200
1976 to 1980	370,937	6,668	13.76	0.2600
1981 to 1985	374,872	5,975	13.90	0.2200
1986 to 1990	332,627	4,472	12.34	0.1600
After 1990	730,466	10,775	27.09	0.3800
Not Reported	8,823	942	0.33	0.0300
Employment Setting (For nurses employed in nursing)				
Hospital	1,300,323	13,009	59.06	0.4400
Nursing Home Extended Care	152,894	5,758	6.94	0.2600
Nursing Education	46,655	1,973	2.12	0.0900
Public Health Community Health	282,618	5,519	12.84	0.2400
Student Health	83,269	3,755	3.78	0.1800
Occupational Health	36,395	1,950	1.65	0.0900
Ambulatory Care/Not Owned	203,346	3,234	9.24	0.1600
Owned/Operated Ambulatory Care	5,978	801	0.27	0.0400
Other	18,033	1,250	0.82	0.0600
Not Reported	9,651	1,067	0.44	0.0500

Table B-2. (continues)

Description	Estimated Number	S.E. of Es timated Number	Estimated Percent	S.E. of Estimated Percent
Type of Position (For nurses employed in nursing)				
Administrator/Assistant Administrator	124,461	4,285	5.65	0.2000
Consultant	24,712	1,515	1.12	0.0700
Supervisor	78,295	3,057	3.73	0.1514
Instructor	61,641	2,605	2.80	0.1200
Head Nurse or Assistant	105,803	3,562	4.81	0.1600
Staff or General Duty	1,357,349	14,180	61.65	0.4900
Practitioner/Midwife	67,882	6,772	3.08	0.3000
Clinical Specialist	40,833	1,753	1.86	0.0800
Nurse Clinician	30,396	1,754	1.19	0.0680
Certified Nursing Anesthetist	24,314	1,553	1.10	0.0700
Research	16,118	1,264	0.73	0.0600
Private Duty	10,592	842	0.48	0.0400
Informatic Nurse	8,406	892	0.38	0.0400
Other	216,047	5,563	9.81	0.2600
Home Health	3,153	664	0.14	0.0300
Survey/Auditors Regulators	5,096	635	0.23	0.0300
Not Reported	24,747	1,639	1.12	0.0700
	2,422	568	0.09	0.0222
Highest Nursing Education				
Diploma	601,704	7,787	22.31	0.3000
Associate Degree	925,516	9,211	34.32	0.3200
Baccalaureate	880,996	9,997	32.67	0.3700
Masters	257,812	7,989	9.56	0.2900
Doctorate	17,256	1,274	0.64	0.0500
Other	7,682	966	0.28	0.0400
Not Reported	5,573	987	0.21	0.0400
Age of Nurse				
<25	66,482	3,001	2.46	0.1100
25 to 29	176,777	4,002	6.56	0.1500
30 to 34	248,375	4,924	9.21	0.1800
35 to 39	360,030	5,601	13.35	0.2000
40 to 44	464,425	8,576	17.22	0.3300
45 to 49	464,539	6,203	17.23	0.2200
50 to 54	342,415	5,903	12.70	0.2300
55 to 59	238,129	5,326	8.83	0.1900
60 to 64	156,061	3,374	5.79	0.1200
>= 65	154,467	4,420	5.73	0.1600
Not Reported	24,861	1,570	0.92	0.0600
Marital Status and Children				
Married Child < 6	206,078	4,397	7.64	0.1600
Married Child $ 6	783,573	10,691	29.06	0.3900
Married Child < 6 and $ 6	204,053	5,397	7.57	0.2000
Married No Children	720,077	8,923	26.70	0.3000
Married Child Unknown	14,703	1,145	0.55	0.0400
Wid/Sep/Div Child < 6	11,973	894	0.44	0.0300
Wid/Sep/Div Child $ 6	176,743	5,690	6.55	0.2100
Wid/Sep/Div Child All	19,281	1,070	0.72	0.0400
Wid/Sep/Div No Children	271,170	6,557	10.06	0.2500
Wid/Sep/Div Child UK/Refused	3,728	612	0.14	0.0200
Never Married	251,484	5,537	9.83	0.2154
Not Reported	17,680	1,296	0.66	0.0500
Mean Gross Annual Salary for Full-Time RNs	46,782	117		
Mean Scheduled Hours Per Year	1,747	5		
Mean Hours Worked in Week Beginning March 22, 2000	38	0.1		

Table B-3. Direct Estimates of State Nurse Population, Standard Error, and Coefficient of Variation by State, 2000

State	2000 Estimated State Nurse Population	Standard Error	Coefficient of Variation (in Percent)
United States	2,696,540	6,348	0.24
Alabama	41,513	570	1.37
Alaska	5,900	240	4.06
Arizona	42,658	858	2.01
Arkansas	23,291	472	2.03
California	226,352	1,606	.71
Colorado	40,084	625	1.56
Connecticut	41,767	760	1.82
Delaware	8,605	493	5.73
District of Columbia	10,307	765	7.42
Florida	158,722	2,340	1.47
Georgia	67,958	1,112	1.64
Hawaii	10,228	506	4.95
Idaho	10,069	371	3.69
Illinois	126,166	1,608	1.27
Indiana	60,888	1,055	1.73
Iowa	35,089	537	1.53
Kansas	29,134	740	2.54
Kentucky	39,470	808	2.05
Louisiana	40,661	704	1.73
Maine	15,793	314	1.99
Maryland	51,456	957	1.86
Massachusetts	91,628	1,373	1.50
Michigan	100,769	1,159	1.15
Minnesota	54,920	573	1.04
Mississippi	24,874	515	2.07
Missouri	62,403	1,064	1.70
Montana	9,299	276	2.97
Nebraska	18,550	398	2.15
Nevada	12,940	361	2.79
New Hampshire	13,281	548	4.13
New Jersey	87,979	1,919	2.18
New Mexico	13,723	342	2.50
New York	197,532	1,740	0.88
North Carolina	83,016	1,097	1.32
North Dakota	7,661	277	3.62
Ohio	121,722	1,080	0.89
Oklahoma	27,083	625	2.31
Oregon	30,369	617	2.03
Pennsylvania	165,989	1,921	1.16
Rhode Island	13,690	381	2.79
South Carolina	32,539	721	2.22
South Dakota	9,587	222	2.32
Tennessee	55,947	956	1.71
Texas	150,251	1,147	0.76
Utah	15,648	254	1.62
Vermont	6,901	300	4.35
Virginia	66,466	1,183	1.78
Washington	54,771	704	1.29
West Virginia	17,725	456	2.57
Wisconsin	58,658	1,032	1.76
Wyoming	4,508	186	4.13

RNs in a State, $\hat{Y}$, with a particular characteristic (such as those employed in hospitals). The estimate $\hat{Y}$, is a subtotal of the estimate $\hat{X}$ the estimated total of RNs working and/or living in the State. The standard error and coefficient of variation of $\hat{X}$ (represented by $C.V._{\hat{x}}$) were determined for the nation and for each State. The following explanation is made simpler by defining the relative variance of an estimate as the square of its coefficient of variation.

Then the relative variance of the ratio of $\hat{Y}$ to $\hat{X}$ (called $V^2_{\hat{Y}/\hat{X}}$) can be calculated as:

$$V^2_{\hat{Y}/\hat{X}} = \frac{F(1 - \hat{Y}/\hat{X})}{n(\hat{Y}/\hat{X})},$$

where F is the design effect for the State of interest and n is the number of respondents to the survey (i.e., the number in the sample that were weighted to obtain the estimate $\hat{X}$).

Then we can approximate the relative variance of $\hat{Y}$, denoted $V^2_{\hat{y}}$, using

$$V^2_{\hat{Y}} = V^2_{\hat{Y}/\hat{X}} + (C.V._{\hat{X}})^2.$$

This approximation is based on the first-order Taylor series approximation to the variance of a product and the assumption of zero correlation between the estimate of ratio and the denominator of the ratio.

Finally, the variance of $\hat{Y}$ can be estimated by multiplying by the relative variance above by the square of the estimate. The standard error of $\hat{Y}$, $\sigma_{\hat{Y}}$, is thus estimated as

$$\sigma_{\hat{Y}} = \hat{Y}\sqrt{\hat{V}^2_{\hat{Y}}} \qquad (2)$$

The standard error of an estimated percentage for a region of the United States depends upon a linear combination of the variance of the same estimated percentages for the States making up that particular region. The estimated proportion for the region is

$$\hat{Y}_R/\hat{X}_R = \frac{\sum_{s=1}^{h} \hat{Y}_s}{\sum_{s=1}^{h} \hat{X}_s}$$

here h is the number of States in region R, and $\hat{Y}_s$ and $\hat{X}_s$, are estimates for a particular State. The formula used to approximate the standard error of an estimated proportion for a region is

$$\sigma_{\hat{Y}_R\,\hat{X}_R} = \sqrt{\sum_{s=1}^{h} (\hat{X}_s^2 \sigma^2_{\hat{Y}_s}/\hat{X}_s)/(\sum_{s=1}^{h} \hat{X}_s)^2} \qquad (3)$$

where $\sigma_{\hat{Y}_s/\hat{X}_s}$ represents the standard error of the estimated proportion Y_s/X_s for the States and the standard errors are estimated from equation (1) or from direct estimation.

The direct standard error for an estimated number for a region of the United States also depends upon a linear combination of the variance of the same estimated numbers for the States that make up the region. The formula used is

$$\sigma_{\hat{Y}_R} = \sqrt{\sum_{s=1}^{h} \sigma^2_{\hat{Y}_s}} \qquad (4)$$

where the standard error $(\sigma_{\hat{Y}})$ of the estimated number $\hat{Y}_s$ is available either from the direct procedures or from equation (2).

Table B-4. Median Design Effects for Percentages Estimated from the Seventh National Sample Survey of Registered Nurses, 2000

State	Median Design Effect
United States	1.66
Alabama	1.10
Alaska	1.03
Arizona	1.02
Arkansas	0.99
California	1.16
Colorado	1.01
Connecticut	1.02
Delaware	1.12
District of Columbia	0.98
Florida	1.17
Georgia	0.99
Hawaii	1.04
Idaho	1.01
Illinois	1.02
Indiana	1.02
Iowa	0.99
Kansas	1.08
Kentucky	0.98
Louisiana	1.03
Maine	0.96
Maryland	1.13
Massachusetts	1.06
Michigan	1.08
Minesota	0.98
Mississippi	1.02
Missouri	1.11
Montana	1.00
Nebraska	0.97
Nevada	1.01
New Hampshire	1.03
New Jersey	1.03
New Mexico	0.99
New York	1.04
North Carolina	1.15
North Dakota	1.03
Ohio	1.06
Oklahoma	1.00
Oregon	1.05
Pennsylvania	1.05
Rhode Island	1.00
South Carolina	0.97
South Dakota	0.97
Tennessee	1.03
Texas	1.50
Utah	1.07
Vermont	1.14
Virginia	1.11
West Virginia	0.94
Wisconsin	0.98
Wyoming	0.97

APPENDIX C
QUESTIONNAIRE

OMB No.: 0915-0192
Expiration Date: 07/31/2002

National Sample Survey of Registered Nurses

DEPARTMENT OF HEALTH & HUMAN SERVICES **Public Health Service**

Bureau of Health Professions

Division of Nursing

Health Resources and Services Administration
Rockville MD 20857

Dear

We are writing to request your participation in an important study of the nurse population in the United States. This survey is being conducted for the Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration, Public Health Service, U.S. Department of Health and Human Services by the Research Triangle Institute. The information is for statistical purposes only and will not be connected with your name. Individually identifiable information will be used for sample definition and for preventing data duplication. Once this process is completed, individual identifiers will be destroyed. Participation is voluntary, and there are no penalties for failure to answer any question; however, each unanswered question substantially reduces the accuracy of the data.

This study is being carried out to assist in fulfilling congressional requirements stated in Section 951 of P.L. 94-63 (42 USC 296 note), which specifies that information be obtained, on a continuing basis, on the number and distribution of nurses; and in Section 792 of Title VII of the Public Health Service Act (42 USC 295k), which calls for the collection and analysis of data on health professionals. These public laws require the preparation and submission of reports to Congress. In addition, these data are a primary resource throughout the health care arena as studies are made assessing the number and characteristics of the registered nurse supply.

The questionnaire has been divided into five sections. These sections are designed to gather information on (a) your education background, (b) your employment in nursing, (c) your employment status if you are not currently employed in nursing, (d) prior nursing employment status, and (e) general information.

Please read and follow all instructions carefully and answer all questions unless otherwise instructed. It should take about 20 minutes of your time to complete. Return the completed questionnaire in the postage-paid envelope enclosed in this package at your earliest convenience. All RNs who have received the questionnaire are requested to complete it regardless of their retirement or working status. If possible, we suggest you complete it now. If you have any questions, please call (toll-free) Kris Fahrney at 877-294-1302.

Thank you for your cooperation. Your efforts are greatly appreciated.

Sincerely,

Denise H. Geolot, PhD, RN, FAAN
Director

If you have received more than one copy of the questionnaire, please return the extra copies along with the completed questionnaire.

Instructions

I. Everyone receiving this questionnaire is requested to complete it. This includes persons who are:

- Retired
- Not presently working
- Employed, but not as an RN
- Employed as an RN

II. If you receive more than one questionnaire, please complete only one copy and return it and all extra copies of the questionnaire to the Research Triangle Institute. Do not give extra questionnaires to another nurse to complete.

III. Please read and carefully follow all instructions. Answer all questions unless otherwise instructed.

IV. In many questions you are asked to "Mark only one box." Please mark an ☒ in the box to the right of the correct response.

Example:

The correct way to answer a question is to…
(Mark only one box.)

Mark an X in the box to the right of the response	☒ 1
Check the box	☐ 2
Fill-in the box	☐ 3
Circle the response	☐ 4
Circle the box	☐ 5

PUBLIC BURDEN STATEMENT

Section A. Education

Please mark an X in the box corresponding to your answer in each question, or supply the requested information.

la. In what type of basic nursing education program were you prepared to become a registered nurse?
(Mark an ☒ in one box only.)

- Diploma ..... ☐ 1
- Associate Degree ..... ☐ 2
- Baccalaureate Degree .. ☐ 3
- Master's Degree ..... ☐ 4
- Doctorate (N.D.)..... ☐ 5

1b. In what month and year did you graduate from this program?

_____ _____
Month Year

1c. In which State or foreign country was this basic nursing education program located?

_____

Office Use

2a. Immediately prior to starting the basic nursing education program you described in Question 1, were you employed in a health occupation?

- Yes ..... ☐ 1
- No..... ☐ 2 ® Skip to Question 3a

2b. Were you employed as a…
(Mark only one box.)

- Nursing Aide ..... ☐ 1
- Licensed Practical/Vocational Nurse .... ☐ 2
- Other (*please specify below*) ..... ☐ 3

_____

3a. Before starting the basic nursing education program you described in Question 1, were you ever licensed to practice as a practical or vocational nurse?

- Yes..... ☐ 1
- No..... ☐ 2

3b. Before starting the basic nursing education program you described in Question 1, did you receive a degree from any other formal post-secondary education program?

- Yes..... ☐ 1
- No..... ☐ 2 ® Skip to Question 4

3c. What was the highest degree you received before starting your basic nursing education program?
(Mark only one box.)

- Associate Degree ..... ☐ 1
- Baccalaureate Degree ..... ☐ 2
- Master's Degree ..... ☐ 3
- Doctorate..... ☐ 4
- Other *(specify)*_____..... ☐ 5

3d. Was this degree in a health-related field?

- Yes ..... ☐ 1 ® Skip to Question 4
- No..... ☐ 2

3e. What was your major field of study?
(Mark only one box.)

- Biological or Physical Science ..... ☐ 1
- Business or Management..... ☐ 2
- Education ..... ☐ 3
- Liberal Arts ..... ☐ 4
- Social Science..... ☐ 5
- Other *(please specify below)* ..... ☐ 6

_____

4. <u>Since</u> graduating from the basic nursing program you described in Question 1, have you earned any additional degrees?

Yes ..... ☐ 1
No..... ☐ 2 ® Skip to Question 6a

5. For each academic degree you have received <u>since graduation from your basic nursing education program</u>, please indicate (A) the type of degree; (B) whether or not the degree is related to your nursing career; (C) the primary focus of your degree; (D) the State in which you received your degree; (E) the year you received your degree.

Type of Degree	**A** Received degree? (*Mark all that apply*)	**B** Related to nursing career? *(Mark yes or no)* Yes ▼	No ▼	**C** Primary focus of your degree (*Enter # from table below*)	**D** State in which you received your degree	**E** Year you received degree
Associate Degree in nursing	☐ 1			**NA**	_____	_____
Associate Degree in another field	☐ 2	☐ 1	☐ 2	**NA**	_____	_____
Baccalaureate in nursing	☐ 3			**NA**	_____	_____
Baccalaureate in another field	☐ 4	☐ 1	☐ 2	**NA**	_____	_____
Master's in nursing (1st degree)	☐ 5			_____	_____	_____
Master's in nursing (2nd degree)	☐ 6			_____	_____	_____
Master's in another field	☐ 7	☐ 1	☐ 2	_____	_____	_____
Doctorate in nursing	☐ 8			_____	_____	_____
Doctorate in another field	☐ 9	☐ 1	☐ 2	_____	_____	_____
Other (*specify*) _____	☐ 10	☐ 1	☐ 2	_____	_____	_____

▼

<u>Degree Focus Categories</u>

1. Clinical Practice
2. Education
3. Supervision/Administration
4. Research
5. Law
6. Informatics
7. Master's in Business Admin. (MBA)
8. Public Health
9. Other (*specify)* _____

6a. Since graduating from the basic nursing program you described in Question 1, have you completed a formal educational program preparing you for advanced practice as a clinical nurse specialist, nurse anesthetist, nurse-midwife, or nurse practitioner?

Yes ..... ☐ 1

No..... ☐ 2 ® Skip to Question 7a

	A Clinical Nurse Specialist	B Nurse Anesthetist	C Nurse - Midwife	D Nurse Practitioner
6b. For which advanced practice nurse category(ies) you have been prepared? *(Mark all columns that apply.)*	☐ 1	☐ 1	☐ 1	☐ 1

For items 6c-6h, the first column on the left contains the description of the response items for each question. In the columns for the advanced practice category(ies) which you marked above, please mark the box corresponding to the appropriate response item.

6c. Length of Program: *(Mark the appropriate box.)*				
1. Less than 3 months	☐ 1	☐ 1	☐ 1	☐ 1
2. 3 through 8 months	☐ 2	☐ 2	☐ 2	☐ 2
3. 9 months or more	☐ 3	☐ 3	☐ 3	☐ 3
6d. Award Received: *(Mark the appropriate box.)*				
1. Certificate	☐ 1	☐ 1	☐ 1	☐ 1
2. Master's degree	☐ 2	☐ 2	☐ 2	☐ 2
3. Post-Master's Certificate	☐ 3	☐ 3	☐ 3	☐ 3
4. Other degree (*specify in appropriate column*)	☐ 4 *(Specify)* _____	☐ 4 *(Specify)* _____	☐ 4 *(Specify)* _____	☐ 4 *(Specify)* _____
Year you received the award	_____	_____	_____	_____
6e. Specialty studied: *(Mark the appropriate box.)*				
1. Adult Health/Medical Surgical	☐ 1	☐ 1	☐ 1	☐ 1
2. Anesthesia	☐ 2	☐ 2	☐ 2	☐ 2
3. Community Health/Public Health	☐ 3	☐ 3	☐ 3	☐ 3
4. Critical Care	☐ 4	☐ 4	☐ 4	☐ 4
5. Family	☐ 5	☐ 5	☐ 5	☐ 5
6. Geriatric/Gerontology	☐ 6	☐ 6	☐ 6	☐ 6
7. Maternal-Child Health	☐ 7	☐ 7	☐ 7	☐ 7
8. Neonatal	☐ 8	☐ 8	☐ 8	☐ 8
9. Nurse-Midwifery	☐ 9	☐ 9	☐ 9	☐ 9
10. Obstetric/gynecology	☐ 10	☐ 10	☐ 10	☐ 10
11. Occupational health	☐ 11	☐ 11	☐ 11	☐ 11
12. Oncology	☐ 12	☐ 12	☐ 12	☐ 12
13. Pediatrics	☐ 13	☐ 13	☐ 13	☐ 13
14. Psychiatric/mental health	☐ 14	☐ 14	☐ 14	☐ 14
15. Rehabilitation	☐ 15	☐ 15	☐ 15	☐ 15
16. School health	☐ 16	☐ 16	☐ 16	☐ 16
17. Women's health	☐ 17	☐ 17	☐ 17	☐ 17
18. Other (*specify in appropriate column*)	☐ 18 (*Specify*) _____	☐ 18 (*Specify*) _____	☐ 18 (*Specify*) _____	☐ 18 (*Specify*) _____

(Question 6 continued from page 3)

	A Clinical Nurse Specialist	B Nurse Anesthetist	C Nurse - Midwife	D Nurse Practitioner
6f. Are you currently certified by a national certifying body? (*Mark all columns that apply.*)	☐ 1	☐ 1	☐ 1	☐ 1

➜ **If you do not have <u>any</u> certifications, skip to Question 7a.**

6g. National certifying body: *(Mark the appropriate box.)*				
1. American Academy of Nurse Practitioners	☐ 1	☐ 1	☐ 1	☐ 1
2. American Association of Nurse Anesthetists	☐ 2	☐ 2	☐ 2	☐ 2
3. American College of Nurse-Midwives	☐ 3	☐ 3	☐ 3	☐ 3
4. American Nurses Credentialing Center (ANCC)	☐ 4	☐ 4	☐ 4	☐ 4
5. National Certification Board of Pediatric Nurse Practitioners & Nurses (NCPNP/N)	☐ 5	☐ 5	☐ 5	☐ 5
6. National Certification Corporation for the Obstetric, Gynecologist, and Neonatal Nursing Specialties (NCC)	☐ 6	☐ 6	☐ 6	☐ 6
7. Other (*specify in appropriate column*)	☐ 7 *(Specify)* _____	☐ 7 *(Specify)* _____	☐ 7 *(Specify)* _____	☐ 7 *(Specify)* _____
6h. Type of certification: *(Mark the appropriate box.)* **(CS = clinical specialist, NP = nurse practitioner)**				
1. Acute Care NP	☐ 1	☐ 1	☐ 1	☐ 1
2. Acute Care CS	☐ 2	☐ 2	☐ 2	☐ 2
3. Adult NP	☐ 3	☐ 3	☐ 3	☐ 3
4. Certified Registered Nurse Anesthetist (CRNA)	☐ 4	☐ 4	☐ 4	☐ 4
5. Certified Nurse-Midwife (CNM)	☐ 5	☐ 5	☐ 5	☐ 5
6. Community Health CS	☐ 6	☐ 6	☐ 6	☐ 6
7. Family NP	☐ 7	☐ 7	☐ 7	☐ 7
8. Gerontological CS	☐ 8	☐ 8	☐ 8	☐ 8
9. Gerontological NP	☐ 9	☐ 9	☐ 9	☐ 9
10. Home Health CS	☐ 10	☐ 10	☐ 10	☐ 10
11. Medical Surgical CS	☐ 11	☐ 11	☐ 11	☐ 11
12. Neonatal NP	☐ 12	☐ 12	☐ 12	☐ 12
13. Occupational Health NP	☐ 13	☐ 13	☐ 13	☐ 13
14. Pediatric NP	☐ 14	☐ 14	☐ 14	☐ 14
15. Psychiatric & Mental Health NP	☐ 15	☐ 15	☐ 15	☐ 15
16. Psychiatric & Mental Health CS – Adult	☐ 16	☐ 16	☐ 16	☐ 16
17. Psychiatric & Mental Health CS – Child	☐ 17	☐ 17	☐ 17	☐ 17
18. School NP	☐ 18	☐ 18	☐ 18	☐ 18
19. Women's Health Care NP (Ob-Gyn NP)	☐ 19	☐ 19	☐ 19	☐ 19
20. Other (*specify in appropriate column)*	☐ 20 (*Specify)* _____	☐ 20 (*Specify)* _____	☐ 20 (*Specify)* _____	☐ 20 (*Specify)* _____

7a. Are you currently enrolled in a formal education program leading to an academic degree with a nursing or nursing-related major?

Yes ..... ☐ 1
No..... ☐ 2 ® Skip to Question 8

7b. Are you considered a full-time or part-time student?

Full-time student ..... ☐ 1
Part-time student..... ☐ 2

7c. What degree are you currently working toward in this program?
(Mark only one box.)

Associate Degree ..... ☐ 1
Baccalaureate Degree ..... ☐ 2
Master's Degree ..... ☐ 3
Doctorate..... ☐ 4
Other *(specify)*_____..... ☐ 5

7d. How are your tuition and fees being financed?
(Mark all that apply.)

Personal and family resources ..... ☐ 1
Employer tuition reimbursement plan (including Veterans Administration employer tuition plan) ..... ☐ 2
Federal traineeship, scholarship, or grant ..... ☐ 3
Federally assisted loan..... ☐ 4
State or local government loan or scholarship ..... ☐ 5
Non-government scholarship, loan, or grant... ☐ 6
University teaching or research fellowship ..... ☐ 7
Other resources *(please specify below)*..... ☐ 8

_____

Section B. Employment Status

8. In the next questions, employment also includes: being on a temporary leave of absence from your nursing position; on vacation; on sick leave; or a nurse doing private duty or working through a temporary employment service and not on a case at the moment.

Were you employed in nursing as of March 22, 2000?

Yes ..... ☐ 1
No..... ☐ 2 ® Skip to Question 20

Questions 9 through 18 refer to your principal position in nursing and your employment setting as of March 22, 2000. If you held more than one position in nursing (e.g., day/night, winter/summer), your principal nursing position is the one at which you work the most hours during your regular work year.

9. What was the location of employment on March 22, 2000? If you were not employed in a fixed location (e.g., you were a private duty nurse or worked through a temporary employment service), consider the area where you spend most of your working time as your location of employment.

City: _____

County: _____

State (or country if not USA): _____

ZIP+4 code: ☐☐☐☐☐ - ☐☐☐☐

10. In your principal nursing position, are you…
(Mark only one box.)

An employee of the organization or facility for which you are working? ..... ☐ 1
Employed through a temporary employment service agency?..... ☐ 2
Self employed? ..... ☐ 3

11. Which one of the following best describes the type of setting in which you were working on March 22, 2000 in your principal nursing position? (If your employment is that of a private duty nurse or you work through a temporary employment service, mark the one setting in which you spend most of your working time.)

(Mark only one box on the page.)

Hospital (Exclude nursing home units and all off-site units of hospitals, but include all on-site clinics and other services of the hospitals.)

- Non-Federal, short-term hospital, except psychiatric (for example, acute care hospital) ☐ 110
- Non-Federal, long-term hospital, except psychiatric ☐ 120
- Non-Federal psychiatric hospital ☐ 130
- Federal Government hospital ☐ 140
- Other type of hospital *(Specify)* _____ ☐ 150

Nursing Home/Extended Care Facility

- Nursing home unit in hospital ☐ 210
- Other nursing home ☐ 220
- Facility for mentally retarded ☐ 230
- Other type of extended care facility *(Specify)* _____ ☐ 240

Nursing Education Program

- LPN/LVN program ☐ 310
- Diploma program (RN) ☐ 320
- Associate degree program ☐ 330
- Baccalaureate and/or higher degree nursing program ☐ 340
- Other program *(Specify)* _____ ☐ 350

Public or Community Health Setting

- Official State Health Department ☐ 400
- Official State Mental Health Agency ☐ 405
- Official City or County Health Department ☐ 410
- Combination (official/voluntary) nursing service ☐ 415
- Visiting nurse service (VNS/NA) ☐ 420
- Home health service unit (hospital-based) ☐ 422
- Other home health agency (non-hospital based) ☐ 425
- Community mental-health organization or facility (including freestanding psychiatric outpatient clinics) ☐ 430
- Substance abuse center/clinic ☐ 431
- Community/neighborhood health center ☐ 435
- Planned Parenthood/family planning center ☐ 440
- Day care center ☐ 445
- Rural health care center ☐ 450
- Retirement community center ☐ 455
- Hospice ☐ 460
- Other *(Specify)* _____ ☐ 465

School Health Service

- Public school system ☐ 510
- Private or parochial elementary or secondary school ☐ 520
- College or university ☐ 530
- Other *(Specify)* _____ ☐ 540

Occupational Health (Employee Health Service)

- Private industry ☐ 610
- Government ☐ 620
- Other *(Specify)* _____ ☐ 630

Ambulatory Care Setting

- Solo practice (physician) ☐ 710
- Solo practice (nurse) ☐ 715
- Partnerships (physicians) ☐ 720
- Partnerships (nurses) ☐ 725
- Group practice (physicians) ☐ 730
- Group practice (nurses) ☐ 735
- Partnership or group practice (mixed group of professionals) ☐ 740
- Freestanding clinic (physicians) ☐ 750
- Freestanding clinic (nurses) ☐ 755
- Ambulatory surgical center (non-hospital based) ☐ 760
- Dialysis center/clinic ☐ 761
- Dental practice ☐ 770
- Health Maintenance Organization (HMO) ☐ 780
- Other *(Specify)* _____ ☐ 790

Insurance Claims/Benefits

- Government ☐ 810
- State or local agencies ☐ 820
- Insurance company ☐ 830
- Private industry/organization ☐ 840

Planning or Licensing Agency Setting

- Central or regional Federal agency ☐ 910
- State Board of Nursing ☐ 920
- Nursing or health professional membership association ☐ 930
- Health planning agency, non-Federal ☐ 940
- Other *(Specify)* _____ ☐ 945

Other

- Prison or jail ☐ 950
- Other *(Specify)* _____ ☐ 960

12. Which one of the following best corresponds to the position title for your <u>principal nursing position</u>?
(Mark only one box.)

- Administrator of organization/facility/agency or assistant ☐ 1
- Administrator of nursing or assistant (e.g., vice president for nursing, director or assistant director of nursing services) ☐ 2
- Case manager ☐ 3
- Certified nurse anesthetist (CRNA) ☐ 4
- Charge nurse ☐ 5
- Clinical nurse specialist ☐ 6
- Consultant ☐ 7
- Dean, director, or assistant/associate director of nursing education ☐ 8
- Discharge planner ☐ 9
- Head nurse or assistant head nurse ☐ 10
- Infection control nurse ☐ 11
- Informatics nurse ☐ 12
- In-service education director ☐ 13
- In-service instructor ☐ 14
- Instructor at a school of nursing ☐ 15
- Insurance reviewer ☐ 16
- Nurse clinician ☐ 17
- Nurse coordinator ☐ 18
- Nurse manager ☐ 19
- Nurse-midwife ☐ 20
- Nurse practitioner ☐ 21
- Outcomes manager ☐ 22
- Patient care coordinator ☐ 23
- Private duty nurse ☐ 24
- Professor or assistant/associate professor ☐ 25
- Public health nurse ☐ 26
- Quality improvement nurse ☐ 27
- Researcher ☐ 28
- School nurse ☐ 29
- Staff nurse ☐ 30
- Supervisor or assistant supervisor ☐ 31
- Team leader ☐ 32
- No position title ☐ 33
- Other *(Specify)* _____ ☐ 34

13a. For your <u>principal nursing position</u>, approximately what percentage of your time is spent in the following areas during a usual work week? The total should equal 100%.

- a. Administration ..... _____ %
- b. Consultation with agencies and/or professionals ..... _____ %
- c. Direct patient care not including staff supervision ..... _____ %
- d. Research ..... _____ %
- e. Supervision ..... _____ %
- f. Teaching nursing or other students in health care occupations (include class preparation time) ..... _____ %
- g. Other (*specify*) _____ .... _____ %

13b. Does your <u>principal nursing position</u> involve direct patient care in a hospital setting during a usual workweek?

Yes ☐ 1
No ☐ 2 ® Skip to Question 15

14a. In what type of unit do you work more than half of your patient care time during a usual workweek?
(Mark only one box.)

- Intensive care bed unit ☐ 1
- Step-down, transitional bed unit ☐ 2
- General/specialty (other than intensive care or step-down bed unit) ☐ 3
- Outpatient department ☐ 4

→ Go to Question 14b

- Operating room ☐ 5
- Post anesthesia recovery unit ☐ 6
- Labor/delivery room ☐ 7
- Emergency department ☐ 8
- Home health care ☐ 9
- Hospice unit ☐ 10
- Other specific area *(Specify)* _____ ☐ 11
- No specific assigned type of area ☐ 12

→ Skip to Question 15

14b. What types of patients are primarily treated in the hospital unit in which you work?
(Mark only one box.)

- Chronic care ☐ 1
- Coronary care ☐ 2
- Neurological ☐ 3
- Newborn ☐ 4
- Obstetrics/gynecologic ☐ 5
- Orthopedic ☐ 6
- Pediatric ☐ 7
- Psychiatric ☐ 8
- Rehabilitation ☐ 9
- Basic medical/surgical (or specialty areas not specified above) ☐ 10
- Work in multiple units not specifically specialized ☐ 11

15. For this next question, if you are employed by an organization or agency in your principal nursing position and are scheduled to work for the normal "full" workweek throughout the normal work year, as defined by the organization or the agency, mark the box for category "l " below. If you worked less than the normal "full" workweek and/or less than the normal work year, mark the box below for either "2" or "3", whichever is applicable.

If you are self-employed and are generally available for work throughout the year during what would constitute a normal "full" workweek, mark the box for category "l " below. If you restrict yourself to work only a segment of the workweek and/or year, mark the box below for either "2" or "3", whichever is applicable.

Do you…

1. Work an entire calendar year or school or academic year on a full time basis? ☐ 1
2. Work an entire calendar year or school or academic year on a part-time basis? ☐ 2
3. Work only part of the normal work year on either a full- or part-time basis? ☐ 3

16a. Approximately how many hours are you usually scheduled to work during a normal workweek (as defined by the organization) at your principal nursing position? If you do not work on a routine schedule, how many hours do you usually work during a week at your principal nursing position?

_____ hours

16b. How many hours did you actually work during the week beginning on March 20, 2000? (Include overtime but exclude holidays, sick leave, vacation, and time not worked.)

_____ hours

17. Approximately how many weeks are there in your normal work year for your principal nursing position (include in your work year paid vacation, etc.) Note: If you are self-employed or do not work a routine schedule, report the estimated number of weeks you expect to work in 2000.

_____ weeks

18. Please specify the annual salary/earnings for your principal nursing position only.

What is your gross annual salary before deductions for taxes, social security, etc.? If you do not have a set annual salary (for example, you are part-time, private duty, or self-employed), estimate your annual earnings for 2000.

Annual salary/earnings: $ _____ /year

19a. Do you hold more than one position in nursing for pay?

- Yes ☐ 1
- No ☐ 2 ® Skip to Question 23a

19b. In your other nursing position(s) for pay, do you:
(Mark all that apply)

- Work as an employee of the organization? ☐ 1
- Work through a temporary employment service agency? ☐ 2
- Work in a self-employed capacity? ☐ 3

19c. What type of work do you do in your <u>other</u> nursing position(s) for pay?
(Mark all that apply.)

- Home health ☐ 1
- Hospital staff ☐ 2
- Nursing home staff ☐ 3
- Private duty nursing ☐ 4
- Teaching ☐ 5
- Patient consultation ☐ 6
- Consultation ☐ 7
- Research ☐ 8
- Other *(Specify)* _____ ☐ 9

19d. What is the average number of hours per week you work in your <u>other</u> nursing position(s)? Please also provide an estimate of the total number of weeks in 2000 that you will work in this <u>other</u> nursing position(s). Note: If you are self-employed or do not work a routine schedule, report the estimated number of weeks you expect to work in 2000.

Average hours per week: _____

Weeks in 2000: _____

19e. How many hours did you actually work in your <u>other</u> nursing position (s) during the week beginning on March 20, 2000? If you did not work in your other nursing position(s) during that week, please enter "0".

_____ hours

19f. For your <u>other</u> nursing position(s), please provide an estimate of the total annual earnings for 2000. Note: If you are self-employed or do not work a routine schedule, report the estimated amount you expect to earn in 2000.

Estimated <u>annual</u> earnings: $_____/ year

➜ Skip to Question 23a

Section C. Employment Status of RNs <u>Not</u> Employed in Nursing

20. How long has it been since you last worked for pay as a registered nurse?

- Never worked as a registered nurse ☐ 1
- Less than a year ☐ 2
- One year or more ☐ 3

How many years? _____ years

21a. Are you employed in an occupation other than nursing?

- Yes ☐ 1
- No ☐ 2 ® Skip to Question 22a

21b. Are you considered a full-time or part-time employee?

- Full-time ☐ 1
- Part-time ☐ 2

21c. Are you employed in a health-related organization or position?

- Yes ☐ 1
- No ☐ 2

21d. What is the reason(s) you are not working in a nursing position?
(Mark all that apply.)

- Difficult to find a nursing position ☐ 1
- Hours more convenient in other position ☐ 2
- Better salaries available in current type of position ☐ 3
- Concern about safety in health care environment ☐ 4
- Inability to practice nursing on a professional level ☐ 5
- Find current position more rewarding professionally ☐ 6
- My nursing skills are out-of-date ☐ 7
- Disability ☐ 8
- Illness ☐ 9
- Taking care of home and family ☐ 10
- Other *(Specify)* _____ ☐ 11

22a. Are you actively seeking employment as a registered nurse (e.g., making inquiries as to availability of employment, answering advertisements, having interviews)?

Yes ..... ☐ 1
No..... ☐ 2 ® Skip to Question 23a

22b. How many weeks have you been actively seeking a nursing position?

Less than a week..... ☐ 1
One week or more..... ☐ 2

How many weeks? _____ weeks

22c. Are you looking for a full-time or part-time nursing position?

Full-time ..... ☐ 1
Part-time ..... ☐ 2
Either ..... ☐ 3

Section D. Prior Nursing Employment Status

23a. Were you employed in nursing one year ago on March 22, 1999?

Yes..... ☐ 1
No..... ☐ 2 ® Skip to Question 23h

23b. In your principal nursing position on March 22, 1999, if you were employed by an organization or agency and were scheduled to work for the normal "full" work week throughout the normal work year, as defined by the organization or the agency, mark the box for category "l " below. If you worked less than the normal work year mark the box below for either "2" or "3", whichever is applicable.

If you were self-employed and were generally available for work throughout the year during what would constitute a normal "full" work week, mark the box for category "l" below. If you restricted yourself to work only a segment of the workweek and/or year, mark the box below for either "2" or "3", whichever is applicable.

In your nursing position on March 22, 1999, did you…

1. Work an entire calendar year or school or academic year on a full-time basis?..... ☐ 1

2. Work an entire calendar year or school or academic year on a part-time basis?..... ☐ 2

3. Work only part of the normal work year on either a full- or part-time basis? ..... ☐ 3

23c. What was the location of your principal nursing position on March 22, 1999? If you were not employed in a fixed location (e.g., you were a private duty nurse), consider the area where you spent most of your working time as your location of employment.

City: _____

County: _____

State (or country if not USA): _____

ZIP+4 code: ☐☐☐☐☐ - ☐☐☐☐

23d. Which one of the following best describes the type of employment setting of your principal position in which you worked a year ago on March 22, 1999?

(Mark only one box on the page.)

Hospital (Exclude nursing home units and all off-site units of hospitals, but include all on-site clinics and other services of the hospitals.)

- Non-Federal, short-term hospital, except psychiatric (for example, acute care hospital) .... ☐ 110
- Non-Federal, long-term hospital, except psychiatric ..... ☐ 120
- Non-Federal psychiatric hospital..... ☐ 130
- Federal Government hospital..... ☐ 140
- Other type of hospital *(Specify)*..... ☐ 150

_____

Nursing Home/Extended Care Facility

- Nursing home unit in hospital..... ☐ 210
- Other nursing home ..... ☐ 220
- Facility for mentally retarded..... ☐ 230
- Other type of extended care facility *(Specify)*..... ☐ 240

_____

Nursing Education Program

- LPN/LVN program..... ☐ 310
- Diploma program (RN)..... ☐ 320
- Associate degree program ..... ☐ 330
- Baccalaureate and/or higher degree nursing program..... ☐ 340
- Other program *(Specify)*_____ .... ☐ 350

Public or Community Health Setting

- Official State Health Department..... ☐ 400
- Official State Mental Health Agency..... ☐ 405
- Official City or County Health Department ..... ☐ 410
- Combination (official/voluntary) nursing service ... ☐ 415
- Visiting nurse service (VNS/NA)..... ☐ 420
- Home health service unit (hospital-based) ..... ☐ 422
- Other home health agency (non-hospital based) ..... ☐ 425
- Community mental-health organization or facility (including freestanding psychiatric outpatient clinics) ..... ☐ 430
- Substance abuse center/clinic ..... ☐ 431
- Community/neighborhood health center..... ☐ 435
- Planned Parenthood/family planning center..... ☐ 440
- Day care center..... ☐ 445
- Rural health care center..... ☐ 450
- Retirement community center..... ☐ 455
- Hospice..... ☐ 460
- Other *(Specify)* _____ ..... ☐ 465

School Health Service

- Public school system..... ☐ 510
- Private or parochial elementary or secondary school..... ☐ 520
- College or university..... ☐ 530
- Other *(Specify)* _____..... ☐ 540

Occupational Health (Employee Health Service)

- Private industry..... ☐ 610
- Government..... ☐ 620
- Other *(Specify)* _____..... ☐ 630

Ambulatory Care Setting

- Solo practice (physician) ..... ☐ 710
- Solo practice (nurse)..... ☐ 715
- Partnerships (physicians)..... ☐ 720
- Partnerships (nurses)..... ☐ 725
- Group practice (physicians)..... ☐ 730
- Group practice (nurses)..... ☐ 735
- Partnership or group practice (mixed group of professionals)..... ☐ 740
- Freestanding clinic (physicians)..... ☐ 750
- Freestanding clinic (nurses)..... ☐ 755
- Ambulatory surgical center (non-hospital based)... ☐ 760
- Dialysis center/clinic ..... ☐ 761
- Dental practice..... ☐ 770
- Health Maintenance Organization (HMO)..... ☐ 780
- Other *(Specify)* _____..... ☐ 790

Insurance Claims/Benefits

- Government..... ☐ 810
- State or local agencies..... ☐ 820
- Insurance company ..... ☐ 830
- Private industry/organization..... ☐ 840

Planning or Licensing Agency Setting

- Central or regional Federal agency..... ☐ 910
- State Board of Nursing..... ☐ 920
- Nursing or health professional membership association ..... ☐ 930
- Health planning agency, non-Federal..... ☐ 940
- Other *(Specify)* _____..... ☐ 945

Other

- Prison or jail..... ☐ 950
- Other *(Specify)* _____..... ☐ 960

23e. One year ago, on March 22, 1999, were you employed by your current employer?

Yes, in same position as current one..... ☐ 1 ® Skip to Question 23h

Yes, in a different position ..... ☐ 2

No..... ☐ 3

23f. If answer to above question is 2 or 3, provide the <u>principal</u> reason for the change.
(Mark only one box.)

Received a promotion..... ☐ 1

Was laid off..... ☐ 2

Employer shifted positions due to reorganization..... ☐ 3

Was more interested in another position/job.... ☐ 4

Offered better pay/benefits..... ☐ 5

Relocated to a different geographic area ..... ☐ 6

Employer reduced the number of registered nurses on staff..... ☐ 7

Better opportunity to do the kind of nursing that I like ..... ☐ 8

Employer planned to reduce salaries/benefits.. ☐ 9

Changes in organization/unit made work more stressful ..... ☐ 10

Disability..... ☐ 11

Illness..... ☐ 12

Other *(Specify)*_____ ..... ☐ 13

23g. During the past year, have you switched working from an inpatient unit to a non-inpatient unit?

Yes ..... ☐ 1

No..... ☐ 2

A continuing education program is a formal program designed to maintain, update and increase knowledge and skills in health care. Exclude study for an academic degree but include self-study.

23h. During the past year, what type of formal continuing education program(s) have you participated in? Include programs inside and outside your employment setting.
(Mark all that apply.)

None ..... ☐ 0

Case Management..... ☐ 1

Quality Improvement..... ☐ 2

Clinical Care..... ☐ 3

Informatics ..... ☐ 4

Leadership/Supervision..... ☐ 5

Risk Management..... ☐ 6

Other *(Specify)* _____..... ☐ 7

Section E. General Information

We would like you to answer some additional questions for use in the statistical interpretation of your responses.

24. What is your gender?

Female..... ☐ 1

Male ..... ☐ 2

25. What is your year of birth?

19_____

26a. What is your ethnic background?

Hispanic or Latino..... ☐ 1

Not Hispanic or Latino ..... ☐ 2

26b. What is your racial background?
(Mark all that apply.)

American Indian or Alaska Native..... ☐ 1

Asian..... ☐ 2

Black or African American..... ☐ 3

Native Hawaiian or Other Pacific Islander..... ☐ 4

White ..... ☐ 5

27. What is your current marital status?

Now married..... ☐ 1
Widowed, divorced, separated..... ☐ 2
Never married..... ☐ 3

28. How old are the children who live at home with you? (Include all children who live with you for 6 months of the year or more.)
(Mark only one box.)

No children at home ..... ☐ 1
All less than 6 years old..... ☐ 2
All 6 years old or older..... ☐ 3
Some less than 6 and some 6 or over.... ☐ 4

29a. Which category best describes how much income you (or you and your spouse together if you are currently married) anticipate earning during 2000? (Include your annual employment earnings before deductions and your spouse's annual employment earnings before deductions, if married; and all other income, including alimony, child support, dividends, royalties, interest, social security, retirement etc.)

$15,000 or less..... ☐ 1
15,001 to 25,000 ..... ☐ 2
25,001 to 35,000 ..... ☐ 3
35,001 to 50,000 ..... ☐ 4
50,001 to 75,000 ..... ☐ 5
75,001 to 100,000 ..... ☐ 6
100,001 to 150,000..... ☐ 7
More than $150,000 ..... ☐ 8

29b. Compared to a year ago, how would you best describe your feeling about your nursing job?

Extremely satisfied..... ☐ 1
Moderately satisfied..... ☐ 2
Neither satisfied nor dissatisfied..... ☐ 3
Moderately dissatisfied..... ☐ 4
Extremely dissatisfied ..... ☐ 5

30. Where were you living on March 22, 2000?

City: _____

County: _____

State (or country if not USA): _____

ZIP+4 code: ☐☐☐☐☐ - ☐☐☐☐

31a. Did you reside in the same city on March 22, 2000, and on March 22, 1999?

Yes..... ☐ 1 ® Skip to Question 32
No..... ☐ 2

31b. Where were you living on March 22, 1999?

City: _____

County: _____

State (or country if not USA): _____

ZIP+4 code: ☐☐☐☐☐ - ☐☐☐☐

32. Please indicate below when and where you were issued your <u>first U.S. license to practice</u> as a <u>registered nurse</u> by one of the 50 States or the District of Columbia:

Year: _____

State: _____

Please note that the following question (Question 33) is very important for determining how many nurses in the country your answers may represent. As soon as this number is calculated and the proper statistical code assigned, your name(s) and registration number(s) will no longer be associated with other information in this questionnaire.

33. In the space provided below, please provide the following information:

Column A - List all States in which you are now actively licensed.
Column B - List the permanent number of your certificate of registration or license for each State you listed.
Column C - List your complete name as it appears on each license, or mark the box next to 'same' if your name is the same as it is printed on the back of the questionnaire.

A **State of licensure**	**B** **Permanent number on certificate of registration**	**C** **Name as it appears on the registration or license, or mark the box next to 'same' if your name is the same as on the back cover**	**FOR OFFICE USE**	
		Last First MI	**D**	**E**
1.		same ☐		
2.		same ☐		
3.		same ☐		
4.		same ☐		
5.		same ☐		
6.		same ☐		
7.		same ☐		
8.		same ☐		
9.		same ☐		
10.		same ☐		
11.		same ☐		
12.		same ☐		

Note: As soon as your answers have been processed, the information you provide below will no longer be associated with any other information on this questionnaire.

34. If we should need to contact you regarding the questionnaire, what is the best time to call?

_____

35. What is your telephone number?

(☐☐☐) ☐☐☐ - ☐☐☐☐
Area Code Telephone Number

36a. Are your name and address correct as they appear on the back of this questionnaire?

Yes ..... ☐ 1 ® Skip to Question 36c
No..... ☐ 2

36b. What is your correct name and address?

First name: _____

MI: _____

Last name: _____

Street or P.O. Box: _____

_____

State: _____

ZIP+4 code: ☐☐☐☐☐ - ☐☐☐☐

36c. What is your Internet email address?

_____

I don't have an email address ..... ☐

36d. Do you currently have Web access (i.e., ability to browse the World Wide Web) at work or home?

Yes..... ☐ 1
No..... ☐ 2

36e. Do you speak any languages fluently other than English?

Yes..... ☐ 1
No..... ☐ 2 ® Skip to Question 37

36f. Which languages do you speak?

Spanish..... ☐ 1
French..... ☐ 2
Other (*specify*) _____ ... ☐ 3

37. Use this space for any special comments you wish to make about any of your responses to the questions or any additional remarks you may have.

Thank you very much for your help!

Please return the questionnaire in the enclosed self-addressed envelope. If you have received more than one copy of the questionnaire, please return the extra copies along with the completed questionnaire.

Research Triangle Institute
ATTN: Don Evers
P.O. Box 12194
Research Triangle Park, NC 27709-2194