The 2020 National Nursing Workforce Survey

Background: Every two years, the National Council of State Boards of Nursing (NCSBN) and the National Forum of State Nursing Workforce Centers (Forum) conduct the only national-level survey focused on the entire U.S. nursing workforce. The survey generates data on the supply of registered nurses (RNs) and licensed practical nurses/licensed vocational nurses (LPNs/LVNs). These data are especially crucial in providing information on emerging nursing issues which in 2020 was the significant burden placed on nurses and the healthcare system by the coronavirus (COVID-19) pandemic. Purpose: To provide data critical to planning for enough adequately prepared nurses and ensuring a safe, diverse, and effective healthcare system. Methods: This study used a national, randomized sample survey of 157,459 licensed RNs and 172,045 LPNs/LVNs. Data from 42,021 RN respondents and 39,765 LPN/LVN respondents were collected between February 19, 2020, and June 30, 2020. Data included nurse demographics, educational attainment, employment, practice characteristics, and trends. Results: The total number of active RN and LPN/LVN licenses in the United States were 4,198,031 and 944,813, respectively. The median age of RNs was 52 years and 53 years for LPNs/LVNs. The nursing workforce has become more diverse than in any other study year as nurses between 19 and 49 years of age have introduced greater racial diversity. Findings suggest the nursing workforce is becoming increasingly more educated and experienced. An average of 83% of all nurses who maintain licensure are employed in nursing with roughly two-thirds working full-time. Hospitals and nursing/extended care facilities continue to be the primary practice setting for RNs and LPNs, respectively. More than one-fifth of all nurses reported they plan to retire from nursing over the next 5 years. Nursing incomes have remained essentially flat over time. Conclusion: Employment setting, age, diversity, and education have all changed over the last 2 years. Challenges will continue in the nursing workforce such as matching workforce diversity to the population, compensation, and opportunities; preparing for the large numbers of nurses retiring; exploring the role of nurses in new practice settings; and changes in healthcare delivery modalities such as telehealth.

Keywords: U.S. nursing workforce, nursing demographics, nursing education, nursing licensure, nursing employment, nursing diversity, telehealth.

Executive Summary

orldwide, the coronavirus (COVID-19) pandemic has simultaneously strained healthcare infrastructures and demonstrated the agility and resilience of frontline healthcare professionals. In the United States, significant demand has been placed on the nursing workforce as cases continue to rise (National Council of State Boards of Nursing [NCSBN], 2020a). The collection of nursing data is especially crucial during this time because of the burden on our healthcare delivery systems. Evidence on the supply of nurses can be used to help curb potential shortages, guide recruitment efforts, influence policy decisions, and plan for future healthcare challenges (Fraher et al., 2020).

Since 2013, the NCSBN and the National Forum of State Nursing Workforce Centers (Forum) have collaborated every 2 years to conduct a national sample survey of registered nurses (RNs) and licensed practical nurses/licensed vocational nurses (LPNs/LVNs) in the United States. A team of scientists from both organizations developed and analyzed the data. The purpose of this study is to provide the most accurate data available on the characteristics of the U.S. nursing workforce. This study presents a national, randomized sample survey of 157,459 licensed RNs and 172,045 LPNs/LVNs. Data were collected between February 19, 2020, and June 30, 2020, from 42,021 RN respondents and 39,765 LPN/LVN respondents. Data collected included nurse demographics, educational attainment, employment, practice characteristics, and trends of the U.S. nursing workforce as of 2020. The data are also compared with data from previous Workforce Surveys. The 2020 data provide a portrait of the current state of the nursing workforce in the United States. Healthcare policy makers and leaders in nursing education and practice can use this evidence-based research when making decisions that impact the future of nursing in America.

Selected Survey Results

Size of the Workforce

As of December 31, 2019, the total number of active RN licenses in the United States was 4,948,914, an increase of 309,366 (6.7%), and active LPN/LVN licenses was 996,154 (NCSBN, 2020b), an increase of 20,166 (2.1%), compared to 2017. After adjusting for nurses with multiple licenses, the total number of active RNs in the United States was 4,198,031, an increase of 246,970 (6.3%), and active LPN/LVNs was 944,813 (NCSBN, 2020b), an increase of 24,070 (2.6%), compared to 2017.

Aging of the Workforce

The median age of RNs was 52 years, up from 51 years in 2017. Nurses aged 65 years or older account for 19.0% of the RN workforce, up from 14.6% in 2017 and 4.4% in 2013. They also comprise the largest age category. The median age of LPNs/LVNs was 53 years, up from 52 years in 2017. LPNs/LVNs who are aged 65 years or older account for 18.2% of the workforce. This cohort has grown by 5.0 percentage points since 2017 and by 8.3 percentage points since 2015. The aging of the nurse workforce is expected to continue: In 2020, more than one-fifth of all nurse respondents replied positively when asked if they plan to retire in the next 5 years.

Gender, Race, and Ethnicity

Males accounted for 9.4% of the RN workforce, an increase of 0.3 percentage points since 2017. Additionally, males accounted for 8.1% of all LPNs/LVNs, an increase of 0.4 percentage points since 2017. In 2020, a third gender response option of "other" was added to the survey and was selected by 0.1% of nurses. Nearly 81% of RNs reported being White/Caucasian. RNs who reported being Asian accounted for 7.2% of the workforce, representing the largest non-Caucasian racial group in the RN workforce. Black/African American RNs increased from 6.0% in 2013 to 6.7% in 2020 and the proportion of RNs reporting being Hispanic/Latinx also increased from 2017. LPNs/LVNs who reported being Black/African American represent the second largest racial group in the workforce (17.2%) after White/Caucasian (69.5%). LPNs/LVNs who reported being Hispanic/Latinx account for 10.0% of the workforce, an increase of 2.6 percentage points since 2017.

Education

Approximately 42% of nurses in 2020 reported the baccalaureate nursing degree as their first U.S. nursing license, an increase of 5.8 percentage points from 2013. The percentage of respondents who initially earned a diploma or associate degree decreased by 7.5 points. Diploma (almost 50%) and associate degree (17.2%) were associated with RNs who were aged 65 years or older. Increasingly, a baccalaureate degree is more common in younger age groups for initial licensure (13.5% for RNs younger than 30 years and aged 30–34 years), which suggests the RN workforce is becoming increasingly educated at initial licensure. The most common highest level of nursing education is a baccalaureate degree across all groups (65.2% of RNs), which increased by 7.8 percentage points between 2013 and 2020. RNs achieving a doctorate of nursing practice (DNP) as their highest level of nursing education increased by a full percentage point from 0.4% in 2013 to 1.4% in 2020.

In 2020, 81.5% of LPN/LVN respondents reported a vocational/practical certificate for their first nursing license. Interestingly, the proportion of LPNs/LVNs with an associate or baccalaureate degree increased over the years, while the number of those qualifying with a vocational/practical certificate and diploma has decreased. The highest level of nursing education reported by LPNs/LVNs were vocational/practical certificate (72%), diploma (12.2%), associate degree (12.7%), and baccalaureate degree (3.1%).

Licensure

Less than 1% of RNs also held an LPN/LVN license, while 6.6% held an advanced practice registered nurse (APRN) credential, which represents the highest proportion of RNs not credentialed as an APRN since 2013, dropping 3.4 percentage points since 2017. RNs responding to the survey were licensed for a median of 20 years. Most RNs (93.9%) reported receiving their entry-level nursing education in the United States and 24% reported holding a multistate license. Of those nurses reporting possession of a multistate license, 33% use that license for physical crossborder practice.

LPN/LVN respondents reported they were licensed for a median of 17 years. In 2020, 21.2% of LPNs/LVNs reported holding a multistate license. Of those LPNs/LVNs reporting possession of a multistate license, 21.9% use that license for physical crossborder practice.

Employment and Salary

The major portion of responding RNs (84.1%) were actively employed in nursing, with 64.9% employed in nursing full time. This represents a 0.5% decrease in the proportion of RNs working full time from 2017 (65.4%). Hospital was the primary nursing practice setting selected by RNs (54.8%), representing a decrease of 0.9 percentage points from 2017. Ambulatory care setting was the second most frequently selected setting by 9.7% of RNs, followed by home health at 4.5% and the nursing home/extended care setting at 4.4%.

Staff nurse was the title that most closely corresponded to the primary nursing position by 60.1% of respondents, up from 58.0% of 2017 respondents. The APRN title decreased from 10.1% in 2017 to 6.3% in 2020. In 2020, 13.4% of RNs reported their primary practice specialty was acute care/critical care, compared to 14.0% in 2017. The second most frequently selected specialty was medical-surgical at 8.5%, down from 8.6% of RN respondents in 2017. When Survey respondents were asked, "In your primary nursing practice position, do you spend the majority of your time providing direct patient care?" More than two-thirds, (68.6%) of RNs and 77.8% of LPNs/LVNs responded "yes".

The median pretax annual earnings for responding RNs increased from \$60,000 in 2015 to \$70,000 in 2020, constituting 3.3% growth in earnings during the 5-year period. Categorically, the percentage of respondents earning less than \$40,000 annually decreased by 0.4 percentage points, the percentage making between \$40,000 and \$60,000 decreased by 3.9 percentage points. Since 2015, median earnings have risen in all states.

Among responding LPNs/LVNs, 65.7% reported being actively employed in nursing full time, which is consistent with the 2017 survey (65.0%). The most notable increase was among those who selected retired, which increased from 8.7% in 2017 to 11.3% in 2020.

The median pretax annual earnings for responding LPNs/LVNs increased from \$38,000 in 2015 to \$40,000 in 2017 and \$44,000 in 2020. This constitutes a 3.2% simple annual growth in earnings during the 5-year period (0.1% lower than the growth in reported RN incomes during the same period). The largest increase has been in the \$60,000 to \$80,000 category, which has increased by 8.4 percentage points since 2015.

Telehealth Utilization

Telehealth utilization by nurses has remained relatively unchanged since 2017, with approximately 50% of RNs and LPNs/LVNs responding that they use telehealth technologies when providing nursing services. Considering that this survey was collected when healthcare delivery systems were transitioning to more telehealth due to the pandemic, it is expected that there will be a future trend toward an increase in time spent by nurses utilizing telehealth.

Conclusion

The nursing workforce in 2020 was more demographically diverse and representative of the country's population than in any other year in which this study was conducted. Although these data indicate that persons of color are still not adequately represented in the RN workforce, as younger nurses have entered the workforce, they have introduced greater racial diversity.

The proportion of nurses reporting a plan to retire from nursing over the next 5 years is on the rise, so the U.S. healthcare system needs to be prepared for large numbers of nurses leaving the profession in the near future. This may be even more critical as we face the COVID-19 pandemic, which may accelerate the retirement rate given that persons older than 60 years are at increased risk for severe symptoms from COVID-19.

The proportion of RNs holding a baccalaureate degree increased for those reporting their highest level of nursing education but remained steady for those reporting the degree held when obtaining their first nursing license. The proportion of RNs holding an associate degree when first licensed increased slightly in 2020. The proportion of LPNs/LVNs earning an associate or baccalaureate degree also increased, while those with a practical/vocational certificate or nursing diploma declined. The proportion of nurses with 10 or fewer years practicing declined according to survey respondents, while the proportion of those with between 11 and 30 years of experience grew in 2020. Evidence here suggests both RNs and LPNs/LVNs are more educated and more experienced now than in previous years.

Nursing incomes have remained essentially flat over time, with increases that just barely beat out inflation. Of concern are greaterthan-average drops in reported median income in specialties related to women and maternal-child health.

While telehealth has become a major focus of healthcare delivery during the pandemic, it does not seem that there have been major changes to how nurses use telehealth, which may be due to the timing of this survey. It is anticipated that the use of telehealth will change a great deal in the future as our care delivery systems learn how best to utilize nursing services in this new normal.

Over the next few years, new challenges will continue as the nursing workforce undergoes significant changes and healthcare delivery systems adjust to the pandemic. Ongoing monitoring of nursing data will be more important than ever. Ultimately, nursing will continue pursuing the goals of achieving higher levels of education, promoting diversity, and improving data collection regarding the national healthcare workforce.