

Nursing Data and Analysis

New Jersey Collaborating Center for Nursing

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Vision

• To be the dominant voice on nursing workforce solutions for New Jersey residents.

Mission

- Ensure that competent, future-oriented, diverse nursing providers are available in sufficient numbers and preparation to meet the demand of the evolving healthcare system in New Jersey.
- Transform the healthcare system through research and innovative model programs.
- Create a central repository for education practice and research related to the nursing workforce.
- Engage academic/practice partners, inter-professional colleagues, government and legislative agencies, consumers, business, and industry.
- Promote a positive image for nursing.

The correct reference is as follows:

New Jersey Collaborating Center for Nursing. (2023). Nursing data and analysis. Newark, NJ; NJCCN.

https://www.njccn.org/nursing-workforce-supply-and-demand/

NOTE:

Any future modifications to this report will be published electronically. For the most recent data on the New Jersey Nursing Workforce, visit www.njccn.org.

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Introduction

The New Jersey Collaborating Center for Nursing (NJCCN) is the primary source for data on New Jersey's nursing workforce. NJCCN serves as a catalyst for the implementation of innovative education and practice models using data to create programs that address needs in the state. To that end, NJCCN conducts an annual survey of all nursing education programs on behalf of the New Jersey Board of Nursing (NJBON). This Educational Capacity Survey allows NJCCN to monitor enrollment and graduation trends as well as demographics of both students and faculty. These data contribute to the **supply** data.

Working collaboratively with NJBON, NJCCN also collects workforce data at time of licensure renewal for Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Advanced Practice Nurses (APNs). In 2018, NJBON transitioned its survey questions to the Nursys® Licensure and Workforce tool to align with national datasets. The Educational Capacity and Workforce data together create our understanding of the **supply** of nurses in New Jersey.

Based on the national trends and the need to monitor and prepare the workforce, NJCCN has determined that using real-time **demand data** is an important first step in evaluating demand for nursing in New Jersey. While survey data for a specific industry is important, the limited response rate of surveys and the delays in obtaining primary data in real-time do not make these methods a first-tier approach. Quality data are a prerequisite for effective workforce planning and policymaking for the nursing workforce. Healthcare workforce forecasting models provide a means for making future projections, which can be valuable in quantifying the supply, distribution, and demand of nurses and are critical to designing programs and policies that will ensure access to care and an effective healthcare system (Bienemy, 2015).

Forecasting nursing workforce supply and demand is complex. State-level data may be more detailed than national data, leading state-level projections to differ substantially from their national counterparts. Some variables, such as changes in healthcare or population shifts within New Jersey, may be too difficult to factor into the model. Though the goal is to provide current data on supply and demand, one must view this report in the context of volatility. Workforce data should to be viewed with the following caveats:

- National estimates may differ from state data substantially
- Nurses work in teams and therefore other healthcare workforce members data are also important to consider (e.g. Certified Nursing Assistants, Home Health Aides, and MDs)
- Projections that are further out in years have a greater error rate
- Data are only as good as the information that is provided by the respondent

How to Use the Report

This report is broken up into the following chapters, with references and a glossary at the end:

- Chapter 1: Educational Capacity Report
- Chapter 2: Workforce Supply Data
- Chapter 3: Workforce Demand Data
- Chapter 4: Nurse Retirement Projections

Executive Summary

The 2023 edition of the Nursing Data and Analysis Report provides insights on the workforce supply and demand data across setting. The pandemic over the last 2 years has significantly impacted the workforce.

New in this Report:

- Impact of COVID-19 on Nursing Educational Programs
- Nurse Licensure Compact Data
- Expanded Demand Data

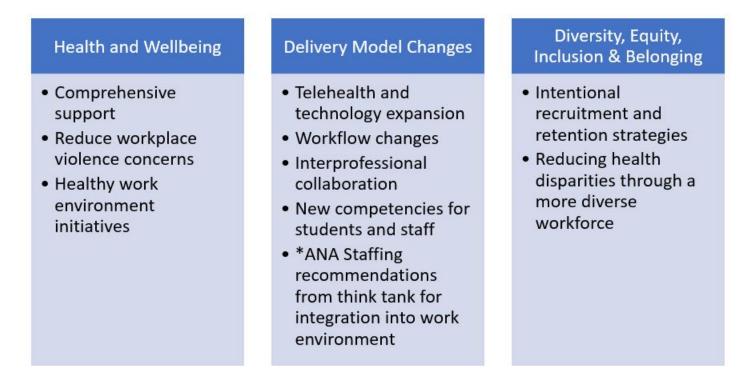
Issues Facing the Residents of New Jersey Include:

- Primary health care access deficit
- High maternal mortality rates, especially with populations of color
- Aging population which increases care needs
- Increase mental health concerns
- Increase in health costs

National Perspective

- Demand for healthcare workers continues to outpace supply.
- Turnover and vacancy rates for healthcare workers are high across settings in the U.S.
 - RN Turnover in hospitals nationally is 27% (NSI, 2022).
 - RN Vacancy rates in hospitals nationally is 17% (NSI, 2022).
 - For every 1% change in RN turnover, it will cost organizations \$262,300 (NSI, 2022).
 - RNs with less than 1 year service have a turnover rate of 27.7% (NSI, 2022).
- Economic instability in healthcare organizations have been impacted by the pandemic.
- Agency and travel nursing costs are significant across all settings.

Areas of Focus for Healthcare



At a national level, nursing organizations are creating a blueprint for nursing. The Tri-Council and the *ANA, AONL, American Association of Critical Care Nurses, IHI, and HFMA have developed staffing recommendations. These reports can be found at the end of this summary. These reports can help develop strategic directions for NJ.

The Future of Nursing 2020-2030 Report (NASEM, 2021) Recommendations Include:

- An increase in the number of nurses available to meet the healthcare demands will be required.
- Right size the distribution of nurses where they are needed, especially in specialty areas.
- Ensure a nursing workforce that is diverse and prepared with the knowledge and skills to address the social determinants of health.
- Overcome barriers affecting workforce capacity such as faculty availability.
- Ensure the health and well-being of nurses are addresses across the continuum.

Supply Projections for New Jersey

Faculty

- Faculty shortages identified in LPN (20%) and RN (range 4-8%) programs.
- Surveys were sent to schools of nursing to determine enrollment capacity in 2022. Results showed that schools were unable to enroll more students.
 - 93% of BSN programs
 - 90% of ADN programs
 - 88% of Diploma programs

Pre-Licensure

- New graduates are being employed at a faster rate.
- NCLEX rates for RNs and LPNs have declined in 2021.
- LPN pass rates are 5% below the national average.
- Racial/ethnic diversity is highest in LPN-RN bridge and LPN programs.

Workforce

- The workforce is primarily female (APN 90%, RN 91%, LPN 90%).
- RN workforce is primarily white (60%), have a BSN or higher degree (70%), and are hospital based (54%).
- LPNs are of diverse racial/ethnic backgrounds (over 48%) and work primarily in nursing homes and home care.
- APNs are primarily white (61%) and are working in hospital settings (44%).
- In 2021, the nurse license compact was instituted, 860 nurses applied for multi-state compact licensure.

Demand Projections for New Jersey

- Posting intensity is high for RNs with greatest demand for ICU nurses.
- NJ has the highest demand concentration for NPs in the country.
- NJ has high demand concentration for RNs and LPNs in the country.
- Turnover rate for LPNs (50%), RNs (24%), and NPs (29%) are high, which translates to high demand.

Initiatives in New Jersey

• New graduate residency programs (NJCCN nurse residency collaborative) - 21 hospitals participating in a 12-month transition into practice initiative. First year outcomes showed 10% turnover as compared to the national turnover of 27%.

Legislative Bills Pending

- S1522/A2286 eliminates practice restrictions for APNs.
- S2925/A4325 provides 25 million for academic program grants, 1.2 million for NJ-NEW continuation, mandatory data collection, investment to re-purpose funds to continue to implement transition into practice programs across settings, preceptor tax credits for APN students, and transfer of CNAs to the NJ Board of Nursing.
- A4614 Nursing Faculty Loan Redemption Program definition of faculty and time when nursing faculty can apply revised to increase usage.

Resource Reports

- NSI (2022). NSI national health care retention & RN staffing report. NSI Nursing Solutions Inc. Retrieved at: https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_ Care_Retention_Report.pdf.
- Tri-Council for Nursing (2021). Transforming together implications and opportunities from Covid-19 Pandemic for nursing education, practice and regulations. Retrieved at: https://img1.wsimg.com/blobby/go/3d8c2b58-0c32-4b54-adbd-efe8f931b2df/downloads/Tri-Council-COVID-19-Report-5-2021-Updated2.pdf?ver=1623419813920.
- ANA, AONL, AACN, HFMA, IHI (2022). Nurse staffing think tank: Topics and recommendations. Retrieved at: https://www.nursingworld.org/ 49940b/globalassets/practiceandpolicy/nursestaffing/nurse-staffing-think-tank-recommendation.pdf.

Chapter 1

Educational Capacity Report

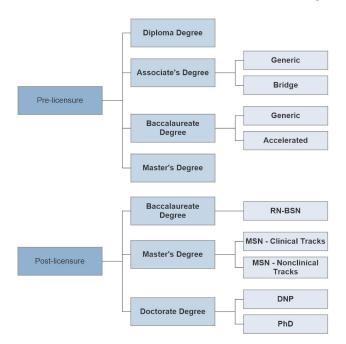
This chapter presents program information and statistics on students and faculty in New Jersey's nursing education programs. These data were self-reported by schools in the 2020-2021 surveys. This survey is distributed annually by NJCCN and compliance is reported to the NJBON. To reduce duplication and survey fatigue, data were obtained from the American Association of Colleges of Nursing (AACN) and a shorter survey was provided to BSN and higher deans and directors.

The first section of this chapter presents program information and student data for pre-licensure and post-licensure programs for Registered Nurse (RN) education (see **Figure 1.1**). The second section presents program information and student data for Practical Nurse education programs. The third section describes faculty employment and demographic data.

Educational Capacity Report-RN

Overview

Figure 1.1: Pre-Licensure and Post-Licensure RN Nursing Program Types



There are 48 schools in New Jersey that provide RN education (pre-licensure and post-licensure). **This year, 46 schools provided data on their educational capacity.** Pre-licensure programs qualify graduates to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN). These include Diploma in Nursing (DIP); Associate Degree in Nursing (ADN); Baccalaureate of Science in Nursing (BSN); and Pre-licensure Master's in Nursing (Pre-licensure MSN). Please note that although Associate Degree programs may be Associate Degree in Nursing (ADN), Associate of Science Degree in Nursing (ASN) or Associate of Applied Science in Nursing (AAS), for the purposes of this report, all Associate Degree Programs are abbreviated as ADN.

Post-licensure programs provide additional credentials for graduates who have already attained their RN licensure. These include RN-BSN Programs for Registered Nurses who obtained their degree at the Diploma or Associate level; Post-Licensure Master's Degrees (Post-licensure MSN); Doctorate of Nursing Practice (DNP); and Doctor of Philosophy in Nursing (PhD).

New Jersey schools offer the following pre-licensure and post-licensure programs. Each school may have multiple programs. For example, one school could have both a Generic ADN and an ADN-Bridge program.

NOTE: Data for the rest of this chapter only includes respondent programs/schools. The data in this chapter combines AACN data and NJCCN survey data.

Table 1.1: New Jersey RN Programs

Pre-licensure Nursing Schools

5 Diploma Schools

21 Associate Degree Schools (17 Generic programs; 12 ADN Bridge (LPN-RN) programs)

20 Baccalaureate Degree Schools (17 Generic Programs; 12 Accelerated Programs; and

1 LPN to BSN Program)

2 Pre-licensure Masters programs

Post-licensure Nursing Programs

 $18~\mathrm{RN}$ to BSN

18 Post-licensure Master's

11 Doctorate of Nursing Practice (DNP)

3 Doctor of Philosophy (PhD) in Nursing

| | DIP | \mathbf{ADN} | BSN and |
|-------------------|---------|----------------|----------------|
| | | | Higher Degree |
| | N=5 | N=19 | N=20 |
| Public | 1 (20%) | 16 (84%) | 10 (50%) |
| Private/Secular | 2(40%) | 3(16%) | 4 (20%) |
| Private/Religious | 2(40%) | 0 (0%) | 6 (30%) |

 Table 1.2:
 Federal tax classification status

N is the number of respondent schools.

In the Educational Capacity Survey, NJCCN presented possible reasons for why respondents rejected qualified applicants. **Table 1.3** represents the reasons for rejection of qualified applicants. The highest reasons for rejection are at the associate degree level.

Table 1.3: Reason for rejection of qualified applicants

| | DIP | ADN | BSN and Higher Degree |
|---------------------------|---------|---------|--------------------------|
| | N=5 | N=19 | N=20 |
| No applications rejected | 3 (60%) | 6 (32%) | 2 (10%) |
| Lack of qualified faculty | 0 (0%) | 6 (32%) | 9 (45%) |
| Lack of clinical space | 2(40%) | 5(26%) | 0 (0%) |
| Limited classroom space | 1 (20%) | 5(26%) | 2 (10%) |
| Lack of clinical sites | 2(40%) | 8 (42%) | 4 (20%) |
| Other | 0 (0%) | 6(32%) | 10 (50%) |

Pre-Licensure Programs

Program Characteristics

This section presents information about the format and content of New Jersey's pre-licensure education programs. Pre-licensure programs are those that prepare students for the **initial** National Council Licensure Exam for Registered Nurses (NCLEX-RN) that leads to licensure as a registered nurse. All survey respondents were accredited nursing education programs.

Self-reported data in **Table 1.4** indicates the delivery format during this time period. Based on the previous report, transition from hybrid to face-to-face has increased.

| | DIP | ADN Generic | 11211 | BSN Generic | BSN Accel. | MSN |
|--------------|-----|-----------------------|-------|-----------------------|----------------------|-----|
| Face-to-Face | 3 | 11 | 8 | 15 | 10 | 2 |
| Hybrid | 3 | 6 | 6 | 5 | 6 | 0 |

Table 1.4: Delivery format of pre-licensure programs

In NJCCN's Educational Capacity Survey, clinical practice time may be hands-on, or in skill labs, simulation labs, or other settings. As shown in Table 1.5, a majority of clinical practice time is hands-on across all levels of pre-licensure RN education.

| | DIP | ADN | ADN | \mathbf{BSN} | BSN | MSN |
|--|-----|---------|--------|----------------|--------|-----|
| | | Generic | Bridge | Generic | Accel. | |
| | N=5 | N=15 | N=12 | N=17 | N=12 | N=2 |
| Skill Lab | 17% | 19% | 17% | 12% | 13% | 20% |
| Simulation Lab | 9% | 13% | 13% | 12% | 16% | 10% |
| Hands-On | 74% | 68% | 70% | 75% | 67% | 70% |
| Other | 0% | 0% | 0% | 1% | 4% | 0% |
| N is the number of respondent programs | | | | | | |

Table 1.5: Format of Clinical Practice Time (%)

N is the number of respondent programs.

Table 1.6 shows graduates are being employed at a faster rate. This is reflective of the current demand for nurses.

Table 1.6: Time to employment after graduation (%)

| | DIP | ADN Generic | ADN Bridge | BSN Generic | BSN Accel. | MSN |
|----------------------|-----|-----------------------|----------------------|-----------------------|----------------------|-----|
| | N=5 | N=15 | N=12 | N=17 | N=12 | N=2 |
| 0-3 Months | 23% | 16% | 24% | 32% | 37% | 45% |
| 4-7 Months | 8% | 19% | 23% | 28% | 23% | 5% |
| 8-11 Months | 56% | 10% | 2% | 6% | 1% | 0% |
| 12+ Months | 6% | 20% | 0% | 6% | 8% | 0% |
| Unknown/Do not Track | 7% | 35% | 50% | 27% | 31% | 50% |

N is the number of schools reporting.

Pre-Licensure Application, Admission, Enrollment, and Graduation

The total number of applicants reported by each school may be greater than the raw number of applicants if an individual applied to more than one school. Our data do not provide unique identifiers for each applicant, and thus a student applying to two programs will be counted twice. Table 1.7 through Table 1.10 provide the number of pre-licensure applicants, admitted students, enrollees, and graduates for the 2021 academic year and four-year trended data for 2018-2021.

In **Table 1.7**, the number of Available Seats (Available) is a count of the total number of seats available for newly admitted students. Qualified Applicants (Qualified) are those who submitted complete applications on time and met all institutional requirements for formal admission to the nursing program. Admitted Applicants (Admitted) are those who received official notice from the program that they were invited to begin the nursing program. Enrollees are those who actually enrolled in the program. The data shows a sufficient number of seats for those enrolled. Schools have not used all available seats. The reasons are identified in Table 1.7.

| | DIP | ADN | \mathbf{ADN} | \mathbf{BSN} | \mathbf{BSN} |
|-----------|-----------|-------------|----------------|----------------|----------------|
| | | Generic | Bridge | Generic | Accel. |
| | N=5 | N=15 | N=12 | N=17 | N=12 |
| Available | $1,\!176$ | 1,734 | 967 | 3,100 | 1,123 |
| Qualified | 1,008 | 2,310 | $1,\!157$ | $7,\!857$ | 1,301 |
| Admitted | 865 (86%) | 1,713 (74%) | 865 (75%) | 7,181 (91%) | 1,246 (96%) |
| Enrollees | 803~(93%) | 1,573 (92%) | 828 (96%) | 2,577~(36%) | 612 (49%) |

 Table 1.7: Pre-licensure student application, admission, and enrollment 2021

N is the number of respondent schools.

| | 2018 N=42 | 2019 N=45 | 2020 N=48 | $\begin{array}{c} 2021 \\ \mathrm{N}{=}45 \end{array}$ | | | |
|-----------|---------------------------------------|--------------|--------------|--|--|--|--|
| Available | 5,878 | 5,736 | 6,055 | 8,100 | | | |
| Qualified | 11,478 | 12,056 | $13,\!051$ | 13,633 | | | |
| Admitted | 8,279 | 8,101 | 9,285 | 11,870 | | | |
| Enrollees | 4,467 (59%) | 4,762 (59%) | 5,423 (59%) | 6,399(54%) | | | |
| | N is the number of regnandant schools | | | | | | |

N is the number of respondent schools.

AACN does not collect application data on pre-licensure MSN students despite that two schools in NJ currently have pre-licensure MSN programs. The data in this table has been updated to account for removing the MSN data.

Table 1.9 shows the total number of students enrolled in pre-licensure programs each year, inclusive of all students from new enrollees through those in their final year.

| | 2018 N=42 | $\begin{array}{c} 2019 \\ \mathrm{N=}45 \end{array}$ | 2020 N=48 | $\begin{array}{c} 2021 \\ \mathrm{N=}45 \end{array}$ |
|-------|--------------|--|--------------|--|
| DIP | 1,584 (14%) | 1,449 (13%) | 1,584 (12%) | 1519 (12%) |
| ADN | 4,100 (35%) | 3,465(31%) | 4,478 (34%) | 3,878 (29%) |
| BSN | 5,861 (51%) | 6,179~(56%) | 7,190 (54%) | 7,751 (59%) |
| MSN | 42 (0%) | 27 (0%) | 47 (0%) | 55 (0%) |
| Total | 11,587 | 11,120 | 13,299 | $13,\!203$ |

 Table 1.9:
 Pre-licensure total student enrollment trend 2018-2021

N is the number of respondent schools.

 Table 1.10:
 Pre-licensure student graduation trend 2018-2021

| | 2018 N=42 | $2019 \\ N=45$ | $2020 \ N=48$ | $2021 \\ N=45$ |
|-----------------|--------------|----------------|---------------|----------------|
| DIP | 384 | 473 | 630 | 521 |
| ADN Generic | 1,074 | 977 | 1,303 | 1,313 |
| ADN Bridge | 628 | 490 | 466 | 406 |
| BSN Generic | 975 | 1,426 | 1,495 | 1,495 |
| BSN Accelerated | 291 | 498 | 588 | 547 |
| MSN | 22 | 25 | 14 | 12 |
| Total | 3,374 | 3,889 | 4,496 | $4,\!294$ |

N is the number of respondent schools.

There was a total of 4,294 pre-licensure graduates from NJ pre-licensure nursing programs in 2021. The data in **Table 1.10** shows an increase in the number of pre-licensure graduates from 2018 to 2021.

NCLEX-RN Pass Rates for Pre-Licensure Students

Nursing students must pass the National Council Licensure Exam (NCLEX-RN) to receive licensure as an RN. Table 1.11 and Table 1.12 show the pass rates for first-time, U.S. and NJ educated candidates who took the NCLEX-RN in 2021 (NCSBN, 2022). These data represent all NJ schools. NJ was 2% higher than the U.S. in pass rates for RNs. Compared to 2020, there was a decrease of 4% for the New Jersey NCLEX pass rate for all programs. This trend was similar nationally where the cumulative pass rate was 87% in 2020 and was 82% in 2021.

Table 1.11: First-Time, NJ Educated Candidates Taking the NCLEX-RN® in 2021

| | Candidates | Total Passed | Pass Rate (%) |
|---------|------------|--------------|---------------|
| Diploma | 532 | 452 | 85% |
| ADN | 1,787 | 1,470 | 82% |
| BSN | 1,889 | 1,593 | 84% |
| Total | $4,\!208$ | $3,\!515$ | 84% |

Table 1.12: First-Time, U.S. Educated Candidates Taking the NCLEX-RN® in 2021

| | Candidates | Total Passed | Pass Rate (%) |
|---------|-------------|--------------|---------------|
| Diploma | 2,296 | 1,837 | 80% |
| ADN | 88,349 | 69,796 | 79% |
| BSN | 94,308 | 81,105 | 86% |
| Total | $184,\!953$ | $152,\!738$ | 82% |

Pre-Licensure Student Demographics

Table 1.13 describes pre-licensure student demographics. This is inclusive of all students matriculating in the 2021 academic year, from new enrollees to those who are about to graduate. Any student data that was not known by respondent schools is marked DND for "Did not Disclose".

| | DIP | ADN Generic | ${f ADN} {f Bridge}$ | BSN Generic | BSN Accel. | MSN |
|-----------------------|-------------|----------------|----------------------|----------------|---------------|----------|
| | N=1,519 | N=2,830 | N=1,048 | N = 6,637 | N = 1,114 | N=55 |
| Gender | | | | | | |
| Female | 1,321 (87%) | 2,386 (84%) | 958 (91%) | 5,752 (87%) | 890 (80%) | 48 (87%) |
| Male | 198~(13%) | 437~(15%) | 90~(9%) | 867~(13%) | 224 (20%) | 7(13%) |
| Transgender | 0 (0%) | 1 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| DND | 0 (0%) | 6~(0%) | 0 (0%) | 18 (0%) | 0 (0%) | 0 (0%) |
| Race/Ethnicity | | | | | | |
| American Indian | 4(0%) | 11~(0%) | 3~(0%) | 14~(0%) | 3~(0%) | 1 (2%) |
| Asian | 138~(9%) | 300~(11%) | 66~(6%) | 996~(15%) | 134~(12%) | 4 (7%) |
| Black/African Am. | 442~(29%) | 390~(14%) | 584~(56%) | 1062~(16%) | 178~(16%) | 14~(25%) |
| Hawaiian/Pacific Isl. | 20~(1%) | 29~(1%) | 2~(0%) | 66~(1%) | 7~(1%) | 1(2%) |
| White | 418 (28%) | 1,370~(48%) | 174 (17%) | 2,854~(43%) | 514 (46%) | 22(40%) |
| Hispanic/Latino | 366~(24%) | 512~(18%) | 125~(12%) | 1,327~(20%) | 245~(22%) | 0 (0%) |
| Other | 45 (3%) | 57~(2%) | 4 (0%) | 0 (0%) | 0 (0%) | 2(4%) |
| 2 or more Races | 42 (3%) | 67~(2%) | 24 (2%) | 265~(4%) | 33~(3%) | 11 (20%) |
| DND | 44 (3%) | 94~(3%) | 66~(6%) | 53~(1%) | 0 (0%) | 0 (0%) |
| Age | | | | | | |
| 17-20 | 45 (3%) | 233~(8%) | 4 (0%) | 2,956~(45%) | 2(0%) | 0 (0%) |
| 21-25 | 425 (28%) | 887~(31%) | 94~(9%) | 2,119~(32%) | 491 (44%) | 21 (38%) |
| 26-30 | 413 (27%) | 664 (23%) | 211 (20%) | 760~(11%) | 351 (32%) | 18 (33%) |
| 31-40 | 440 (29%) | 730~(26%) | 431 (41%) | 479 (7%) | 221 (20%) | 10 (18%) |
| 41-50 | 145 (10%) | 241 (9%) | 228 (22%) | 146 (2%) | 35~(3%) | 5 (9%) |
| 51-60 | 37~(2%) | 68~(2%) | 60~(6%) | 36~(1%) | 13~(1%) | 0 (0%) |
| 61+ | 1 (0%) | 5~(0%) | 6(1%) | 1 (0%) | 1 (0%) | 1 (2%) |
| DND | 13 (1%) | 2(0%) | 14 (1%) | 140 (2%) | 0 (0%) | 0 (0%) |
| Mean Age | 30.9 | 29.8 | 36.3 | 23.2 | 28.2 | 29.6 |

 Table 1.13:
 Pre-licensure student demographics

N is the number of students.

Pre-licensure nursing students are primarily female at 86%. Male students account for 14% of the nursing workforce. Most students across all levels of pre-licensure education are White (41%), followed by Black/African American (20%), Hispanic/Latino (20%) and Asian (12%). Most students in the BSN Generic and BSN Accelerated are in the lower age brackets compared to the other programs.

 Table 1.14 describes four-year trends in pre-licensure nursing student demographics.

| | 2018 | 2019 | 2020 | 2021 |
|-----------------------|----------------------------|-------------|--------------|-------------|
| | N=42 | N=45 | N=48 | N=45 |
| Gender | | | | |
| Female | 9,883 (85%) | 9,645 (87%) | 11,240 (85%) | 11,355(86%) |
| Male | 1,578 (14%) | 1,448 (13%) | 1,954~(15%) | 1,823(14%) |
| Transgender | 0 (0%) | 0 (0%) | 10 (0%) | 1(0%) |
| DND | 126~(1%) | 28~(0%) | 95~(1%) | 24(0%) |
| Race/Ethnicity | | | | |
| American Indian | 40 (0%) | 29 (0%) | 41 (0%) | 36(0%) |
| Asian | 1,365 (12%) | 1,362 (12%) | 1,543 (12%) | 1,638(12%) |
| Black/African Am. | 2,205 (19%) | 2,062 (19%) | 2,461 (19%) | 2,670(20%) |
| Hawaiian/Pacific Isl. | 71 (1%) | 60 (1%) | 95~(1%) | 125(1%) |
| White | 4,989 (43%) | 4,813 (43%) | 5,575 (42%) | 5,352(41%) |
| Hispanic/Latino | 1,909~(16%) | 1,904 (17%) | 2,444~(18%) | 2,575(20%) |
| Other | 59~(1%) | 95 (1%) | 131 (1%) | 108(1%) |
| 2+ Races | 385~(3%) | 316~(3%) | 446 (3%) | 442(3%) |
| DND | 564~(5%) | 479~(4%) | 563~(4%) | 257(2%) |
| Age | | | | |
| 17-20 | 2,800 (24%) | 2,810(25%) | 2,852~(21%) | 3,240(25%) |
| 21-25 | 3,797 (33%) | 3,570 (32%) | 3,919~(29%) | 4,037(31%) |
| 26-30 | 1,984 (17%) | 1,841 (17%) | 2,309~(17%) | 2,417(18%) |
| 31-40 | 1,878 (16%) | 1,782(16%) | 2,164~(16%) | 2,311(18%) |
| 41-50 | 845 (7%) | 761 (7%) | 801 (6%) | 800(6%) |
| 51-60 | 164~(1%) | 181 (2%) | 233~(2%) | 214(2%) |
| 61+ | 11 (0%) | 21 (0%) | 11 (0%) | 15(0%) |
| DND | 108 (1%) | 154 (1%) | 1,010 (8%) | 169(1%) |
| Total Students | 11,587 er of respondent | $11,\!120$ | $13,\!299$ | 13,203 |

 Table 1.14:
 Pre-licensure student demographic trend 2018-2021

Post-Licensure Programs

Program Characteristics

Post-licensure programs provide additional credentials for graduates who have already attained their RN licensure. **Table 1.15** describes the delivery format of post-licensure programs. Except for PhD programs, post-licensure programs are delivered in a variety of online, face-to-face, and hybrid formats.

| | RN-BSN | MSN | \mathbf{MSN} | \mathbf{DNP} | PhD |
|--------------------|---------------|----------|----------------|----------------|-----|
| | | Clinical | Non-Clinical | | |
| | N=18 | N=13 | N=14 | N=11 | N=3 |
| Exclusively Online | 8 | 3 | 4 | 5 | 1 |
| Face-to-Face | 3 | 2 | 1 | 1 | 2 |
| Hybrid | 8 | 8 | 9 | 7 | 0 |

Table 1.15: Delivery format of post-licensure programs

N is the number of respondent programs.

Post-Licensure Application, Admission, Enrollment, and Graduation

The total number of applicants reported by each school may be greater than the raw number of applicants if an individual applied to more than one school. Our data do not provide unique identifiers for each applicant, and thus a student applying to two programs will be counted twice. The following four tables provide post-licensure application, admission, enrollment, and graduation rates for the 2021 academic year and four-year trended data for 2018-2021.

Table 1.16: Post-licensure student application, admission, and enrollment 2021

| | RN-BSN | \mathbf{MSN} | DNP | \mathbf{PhD} |
|--------------|---------------|----------------|------------|----------------|
| | N=18 | N=18 | N=11 | N=3 |
| Available | 1,123 | 745 | 398 | 10 |
| Qualified | 1,301 | 437 | 285 | 11 |
| Admitted(%) | 1,246~(96%) | 382 (87%) | 284 (100%) | 11 (100%) |
| Enrollees(%) | 612~(49%) | 238~(62%) | 206~(73%) | 10 (91%) |

N is the number of respondent programs.

In **Table 1.16**, the number of Available Seats is a count of the total number of seats available for newly admitted students. Qualified Applicants (Qualified) are those who submitted complete applications on time and who met all institutional requirements for formal admission to the nursing program during the reporting period. Admitted Applicants (Admitted) are those who received official notice from the program that they were invited to begin the nursing program during the reporting period. Enrollees are those who actually enrolled in the program.

| | $\begin{array}{c} 2018 \\ \mathrm{N}{=}20 \end{array}$ | $2019 \\ N=21$ | $2020 \ N=19$ | $\begin{array}{c} 2021 \\ \mathrm{N}{=}20 \end{array}$ |
|------------------|--|----------------|---------------|--|
| Available | 6,310 | 7,875 | 1,567 | 2,776 |
| Qualified | 2,299 | 2,245 | 2,361 | 2,034 |
| Admitted (%) | 2,211 (96%) | 2,137 (95%) | 2,239~(95%) | 1,923(95%) |
| Enrollees $(\%)$ | 1,447~(65%) | 1,427 (67%) | 1,584 (71%) | 1,066(55%) |

Table 1.17: Post-licensure student application, admission, and enrollment trend 2018-2021

N is the number of respondent schools.

 Table 1.18: Post-licensure total student enrollment trend 2018-2021

| | $\begin{array}{c} 2018 \\ \mathrm{N}{=}20 \end{array}$ | $2019 \\ N=21$ | $2020 \ N=19$ | $\begin{array}{c} 2021 \\ \mathrm{N}{=}20 \end{array}$ |
|--------|--|-------------------|---------------|--|
| RN-BSN | 1,947~(49%) | 1,600 (38%) | 1,544 (41%) | 1,602(38%) |
| MSN | 1,235 (31%) | 1,709 (41%) | 1,333~(35%) | 1,667(40%) |
| DNP | 738~(18%) | 811 (19%) | 868 (23%) | 866(21%) |
| PhD | 85 (2%) | 70 (2%) | 60 (2%) | 66(16%) |
| Total | 4,005 | 4,190 | $3,\!805$ | 4,201 |
| | N is | s the number of s | chools. | |

The trend in Table 1.19 shows the graduate rate for 2021 compared to prior years are flat.

| | 2018 N=20 | 2019 N=21 | $\begin{array}{c} 2020\\ \mathrm{N}{=}19 \end{array}$ | $\begin{array}{c} 2021 \\ \mathrm{N}{=}20 \end{array}$ |
|--------|--------------|--------------|---|--|
| RN-BSN | 745 | 732 | 518 | 646 |
| MSN | 377 | 435 | 416 | 378 |
| DNP | 137 | 190 | 155 | 204 |
| PhD | 10 | 8 | 4 | 6 |
| Total | 1,269 | 1,365 | 1,093 | 1,234 |

 Table 1.19:
 Post-licensure graduation trend 2018-2021

Post-Licensure Student Demographics

Table 1.20 describes post-licensure student student demographics. This is inclusive of all students matriculating in the 2021 academic year, from new enrollees to those who are about to graduate.

| | m RN-BSN N=1,602 | ${ m MSN} { m N=1667}$ | ${ m DNP} { m N=866}$ | PhD N=66 |
|-------------------------------|------------------|------------------------|-----------------------|-------------|
| Gender | | | | |
| Female | 1,364 (85%) | 1,484 (89%) | 746 (86%) | 60 (91%) |
| Male | 237 (15%) | 180 (11%) | 120 (14%) | 6 (9%) |
| Transgender | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| DND | 1 (0%) | 3~(0%) | 0 (0%) | 0 (0%) |
| Race/Ethnicity | | | | |
| American Indian/Alaska Native | 3 (0%) | 2 (0%) | 2 (0%) | 0 (0%) |
| Asian | 189 (12%) | 205 (12%) | 132 (15%) | 6 (9%) |
| Black/African Am. | 256 (16%) | 215 (13%) | 199 (23%) | 11 (17%) |
| Hawaiian/Pacific Isl. | 7~(0%) | 10 (1%) | 1 (0%) | 5(8%) |
| White | 702 (44%) | 886~(53%) | 354~(41%) | 35(53%) |
| Hispanic/Latino | 282~(18%) | 228~(14%) | 134~(15%) | 8 (12%) |
| Other | 0 (0%) | 0 (0%) | 0~(0%) | 0 (0%) |
| 2+ Races | 44 (3%) | 33~(2%) | 11 (1%) | 1(2%) |
| DND | 119~(7%) | 88~(5%) | 33~(4%) | 0 (0%) |
| Age | | | | |
| 17-20 | 1 (0%) | 1 (0%) | 0 (0%) | 0 (0%) |
| 21-25 | 220 (14%) | 76~(5%) | 68~(8%) | 0 (0%) |
| 26-30 | 259~(16%) | 391 (23%) | 232 (27%) | 1 (2%) |
| 31-40 | 446 (28%) | 384 (23%) | 277 (32%) | 21 (32%) |
| 41-50 | 300 (19%) | 348 (21%) | 132 (15%) | 17 (26%) |
| 51-60 | 144 (9%) | 60 (4%) | 92~(11%) | 7 (11%) |
| 61+ | 21 (1%) | 8 (0%) | 12 (1%) | 1 (2%) |
| DND | 211 (13%) | 399~(24%) | 53~(6%) | 19 (29%) |
| Mean Age | 31.9 | 27.6 | 34.3 | 30.3 |

| Table 1.20: | Post-licensure | $\operatorname{student}$ | demographics |
|-------------|----------------|--------------------------|--------------|
| | | | |

N is the number of students.

Post-licensure nursing students are primarily female (87%). The mean age of post-licensure students is 31. The mean age was calculated by weighting the median values of each age range. Table 1.21 shows that in 2021, 47% of post-licensure students were White, 16% Black/African American, 16% Hispanic/Latino, and 13% Asian.

| | 2018 N=20 | $\begin{array}{c} 2019 \\ \mathrm{N}{=}21 \end{array}$ | $\begin{array}{c} 2020 \\ \mathrm{N}{=}19 \end{array}$ | $\begin{array}{c} 2021 \\ \mathrm{N}{=}20 \end{array}$ |
|-----------------------|-----------------|--|--|--|
| Gender | 11-20 | | 11-10 | |
| Female | 3,434 (86%) | 3,629 (87%) | 3,255~(86%) | 3,654(87%) |
| Male | 533 (13%) | 550 (13%) | 526 (14%) | 543(13%) |
| Transgender | 1 (0%) | 0 (0%) | 1 (0%) | 0(0%) |
| DND | 37 (1%) | 11 (0%) | 23 (1%) | 4(0%) |
| Race/Ethnicity | | | | |
| American Indian | 5(0%) | 7(0%) | 7(0%) | 7(0%) |
| Asian | 500 (12%) | 549 (13%) | 477 (13%) | 532(13%) |
| Black/African Am. | 593 (15%) | 609 (15%) | 547 (14%) | 681(16%) |
| Hawaiian/Pacific Isl. | 37 (0%) | 39 (1%) | 26 (1%) | 23(1%) |
| White | 1,969 (50%) | 2,012 (48%) | 1,785 (47%) | 1977(47%) |
| Hispanic/Latino | 456 (11%) | 514 (12%) | 540 (14%) | 652(16%) |
| Other | 24 (0%) | 8 (0%) | 28 (1%) | 0(0%) |
| 2+ Races | 73 (2%) | 58 (1%) | 108 (3%) | 89(2%) |
| DND | 640 (9%) | 394 (9%) | 287 (8%) | 240(6%) |
| Age | | | | |
| 17-20 | 2 (0%) | 3(0%) | 8 (0%) | 2(0%) |
| 21-25 | 434 (11%) | 303 (7%) | 414 (11%) | 364(9%) |
| 26-30 | 790 (20%) | 714 (17%) | 733 (19%) | 883 (21%) |
| 31-40 | 1,213 (30%) | 1,035 (25%) | 1,107 (29%) | 1,128(27%) |
| 41-50 | 978 (24%) | 804 (19%) | 723 (19%) | 797(19%) |
| 51-60 | 484 (12%) | 439 (10%) | 311 (8%) | 303(7%) |
| 61+ | 61 (2%) | 58 (1%) | 42 (1%) | 42(1%) |
| DND | 43 (1%) | 834 (20%) | 467 (12%) | 682(16%) |
| Total Students | 4,005 | 4,190 | 3,805 | 4,201 |
| | N is the number | of respondent sc | hools. | |

 Table 1.21:
 Post-licensure student demographic trend 2018-2021

| School Name | County | D_{iplom_a} | ADN Bridge | $^{ADN} G_{eneric}$ | $BSN \ G_{eneric}$ | BSN $A_{ccel.}$ | $P_{ m re}M_{SN}$ | RN- BSN | $P_{ost} M_{SN}$ | DNP | P_{hD} | LPN-BSN |
|--|------------|---------------|------------|---------------------|--------------------|-------------------|-------------------|-----------|------------------|-----|----------|---------|
| Atlantic Cape Community College | Atlantic | | x | x | | | | | | | | |
| Bergen Community College | Bergen | | | x | | | | | | | | |
| Berkeley College | Passaic | | | | | | | | | | | x |
| Bloomfield College | Essex | | | | x | | | x | | | | |
| Brookdale Community College | Monmouth | | x | x | | | | | | | | |
| Caldwell University | Essex | | | | x | x | | x | x | | | |
| Chamberlain University | Middlesex | | | | x | A | | A | | | | |
| County College of Morris | Morris | | x | x | | | | | | | | |
| Eastern International College* | Essex | | л | x | | | | | | | | |
| Eastern International College* | Hudson | | | x | | | | | | | | |
| Eastwick College | Bergen | | | л | | | | | | | | |
| Eastwick Conlege Essex County College | Essex | | x | | | | | | | | | |
| | | | x | x | | | | | | | | l |
| Fairleigh Dickinson Felician University | Bergen | | | | x | X | | X | x | x | | l |
| 2 | Bergen | | | | x | x | | x | x | x | | |
| Georgian Court University | Ocean | | | | x | х | | x | | | | l |
| Holy Name Medical Center | Bergen | х | | | | | | | | | | l |
| Hudson County College | Hudson | | | х | | | | | | | | |
| Jersey College at Ewing | Mercer | | х | | | | | | | | | ļ |
| Jersey College at Teterboro | Bergen | | х | | | | | | | | | |
| JFK Muhlenberg Snyder | Middlesex | х | | | | | | | | | | |
| Kean University | Union | | | | | | | х | х | | x | 1 |
| Mercer County Community College | Mercer | | | х | | | | | | | | |
| Middlesex County College | Middlesex | | | х | | | | | | | | |
| Monmouth University | Monmouth | | | | x | | | х | x | x | | |
| Montclair State University | Essex | | | | x | | x | х | x | | | |
| New Jersey City University | Hudson | | | | | х | | х | x | | | |
| Ocean County College | Ocean | | | х | | | | | | | | |
| Our Lady Lourdes | Camden | x | | | | | | | | | | |
| Passaic County Community College | Passaic | | х | x | | | | | | | | |
| Ramapo College | Bergen | | | | x | | | x | x | x | | |
| Raritan Valley Community College | Somerset | | x | x | | | | | | | | |
| Richard Stockton University | Atlantic | | | | x | x | | | x | x | | |
| Rider University | Mercer | | | | | | | x | x | | | |
| Rowan College Burlington | Burlington | | | x | | | | | | | | |
| Rowan College of South Jersey | Cumberland | | x | x | | | | | | | | |
| Rowan College of South Jersey | Gloucester | | x | x | | | | | | | | |
| Rutgers School of Nursing, Newark | Essex | | | | x | x | | x | x | x | x | |
| Rutgers School of Nursing, Rewark | Camden | | | | x | x | | X | x | x | | |
| Saint Elizabeth University | Morris | | | | x | | | X | x | | | |
| Saint Peter's University | Hudson | | | | x | x | | X | X | x | | |
| Salem Community College | Salem | | x | | | ^ | | | | | | |
| Seton Hall University | Essex | | | | x | x | x | | x | x | x | |
| Saint Francis Medical Center | Mercer | x | | | | ^ | ^ | | | | | |
| The College of New Jersey | Mercer | X | | | | | | | | | | |
| | Mercer | | | | x | 75 | | X | X | | | |
| Thomas Edison State University | | | | | | x | | Х | x | x | | |
| Trinitas School of Nursing | Union | x | | | | | | | | | | l |
| Warren County Community College | Warren | | | x | | | | | | | | |
| William Patterson University | Passaic | | did not r | | x | х | | х | x | x | | Í. |

Table 1.22: New Jersey's RN Education Programs

*Schools did not provide data.

Educational Capacity Report-LPN

Overview

This report includes data for 27 of the 31 schools in New Jersey that provide LPN education. LPN programs prepare students for the National Council Licensure Examination for Practical Nurses (NCLEX-PN), which leads to licensure as a LPN. Of the 27 respondent schools only 70% are currently accredited.

| | $_{ m N=27}^{ m LPN}$ |
|--------------------|-----------------------|
| Public | 16 (59%) |
| Private/For-Profit | 10 (37%) |
| Private/Non-Profit | 1 (4%) |

 Table 1.23:
 Federal Tax Classification

N is the number of respondent schools.

| | \mathbf{LPN} |
|-------------------------------|----------------|
| | N=27 |
| Accredited | 19 (70%) |
| Not Accredited/In Progress | 8 (30%) |
| N is the number of respondent | schools. |

In **Table 1.25** reasons for rejection of qualified applicants are presented. Schools can select more than one reason for rejection of qualified applicants.

| Table 1.25: | Reason | for | rejection | of | qualified | applicants |
|-------------|--------|-----|-----------|----|-----------|------------|
| | | | | | | |

| | $_{ m N=27}^{ m LPN}$ |
|-----------------------------------|-----------------------|
| No applications rejected | 19 (70%) |
| Lack of qualified faculty | 4 (15%) |
| Lack of clinical space | 4 (15%) |
| Limited classroom space | 7(26%) |
| Lack of clinical sites | 3 (11%) |
| Insufficient number of Preceptors | 1 (4%) |
| Other | 1 (4%) |

Program Characteristics

This section presents information about the format and content of New Jersey's LPN education programs. Data in **Table 1.26** indicates that programs are primarily face-to-face.

Table 1.26: Delivery format of LPN programs

| | \mathbf{LPN} |
|----------------------|------------------|
| | N=27 |
| Face-to-Face | 23 (85%) |
| Hybrid | 4 (15%) |
| Online | 0 (0%) |
| V is the number of r | ospondont school |

N is the number of respondent schools.

The clinical practice time may be hands-on or conducted in skill lab, simulation lab, or other settings. As shown in **Table 1.27**, 59% of clinical practice time is hands-on, which is 6% more than previous years.

| Table 1.27: | Format | of clinical | practice | time $(\%)$ |
|-------------|--------|-------------|----------|-------------|
| | | | | |

| | \mathbf{LPN} |
|----------------|----------------|
| | N=27 |
| Skill Lab | 23% |
| Simulation Lab | 16% |
| Hands-on | 59% |
| Other | 2% |
| 1 1 0 | 1 / 1 |

N is the number of respondent schools.

As shown in Table 1.28, 50% of graduates secured their first job within 0-7 months of graduation.

| Table 1.28: | Time to | employment | after | graduation | (%) |) |
|-------------|---------|------------|-------|------------|-----|---|
|-------------|---------|------------|-------|------------|-----|---|

| | $_{ m N=27}^{ m LPN}$ |
|----------------------------------|-----------------------|
| 0-3 Months Post Graduation | 25% |
| 4-7 Months Post Graduation | 25% |
| 8-11 Months Post Graduation | 4% |
| 12+ Months Post Graduation | 2% |
| Unknown/ Do not Track | 44% |
| N is the number of respondent so | hools |

LPN Application, Admission, Enrollment, and Graduation

The total number of applicants reported by each school may be greater than the raw number of applicants if an individual applied to more than one school. Our data do not provide unique identifiers for each applicant, and thus a student applying to two programs will be counted twice. **Table 1.29** provides four-year trended data for LPN student application, enrollment, and graduation rates.

The number of Available Seats (Available) is a count of the total number of seats available for newly admitted students. Qualified Applicants (Qualified) are those who submitted complete applications on time and met all institutional requirements for formal admission to the nursing program. Admitted Applicants (Admitted) are those who received official notice from the program that they were invited to begin the nursing program. Enrollees are those who actually enrolled in the program.

| | 2018 | 2019 | 2020 | 2021 |
|-----------|-------------|-------------|-------------|-------------|
| | N=31 | N=25 | N=25 | N=27 |
| Available | 2,612 | 2,629 | 2,877 | 3,134 |
| Qualified | $3,\!170$ | $3,\!017$ | $3,\!459$ | 3,132 |
| Admitted | 2,352 (74%) | 2,219 (74%) | 2,436 (70%) | 2,829 (90%) |
| Enrollees | 1,897~(81%) | 1,996~(90%) | 2,188 (90%) | 2,342 (83%) |
| Graduates | 1,323 | 1,340 | 1,412 | 1,180 |

Table 1.29: LPN student application, admission, and enrollment 2021

N is the number of respondent schools.

NCLEX-PN Pass Rates for LPN Students

LPN students must pass the National Council Licensure Exam (NCLEX-PN) to apply for licensure as an LPN. **Table 1.30** and **Table 1.31** shows the pass rates for first-time, U.S. and NJ educated candidates who took the NCLEX-PN in 2021 (NCSBN, 2022). NJ pass rate percentages for first-time candidates are 5% lower than the national average.

Table 1.30: First-Time, NJ Educated Candidates Taking the NCLEX-PN in 2021

| Candidates | Total Passed | Pass Rate (%) |
|------------|--------------|---------------|
| 1,504 | 1,124 | 75% |

 Table 1.31: First-Time, U.S. Educated Candidates Taking the NCLEX-PN in 2021

| Candidates | Total Passed | Pass Rate (%) |
|------------|--------------|---------------|
| 46,356 | $37,\!085$ | 80% |

LPN Student Demographics

Table 1.32 shows four years of LPN student demographic data from 2018-2021. This is inclusive of all students matriculating in the 2021 academic year, from new enrollees to those who are about to graduate. Students are primarily female (90%) and Black/African American (51%). The mean age for LPN students in 2021 was 34. The mean age was calculated by weighting the median values of each age range.

| | 2018 N=2,438 | $2019 \ N{=}2,672$ | $2020 \ { m N=2,681}$ | 2021 N=2,947 |
|---------------------------|--------------|--------------------|-----------------------|--------------|
| Gender | | | | |
| Female | 2,178 (89%) | 2,371 (89%) | 2,351 (88%) | 2,661 (90%) |
| Male | 257 (11%) | 300 (11%) | 330 (12%) | 286 (10%) |
| Transgender | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| DND | 3~(0%) | 1 (0%) | 0 (0%) | 0 (0%) |
| Race/Ethnicity | | | | |
| American Indian | 14 (1%) | 6~(0%) | 1 (0%) | 4 (0%) |
| Asian | 123~(5%) | 130~(5%) | 142~(5%) | 99~(3%) |
| Black/African American | 1,214~(50%) | 1,322~(49%) | 1,293~(48%) | 1,497~(51%) |
| Hawaiian/Pacific Islander | 6~(0%) | 4(0%) | 65~(2%) | 10 (0%) |
| White | 427~(18%) | 404 (15%) | 371~(14%) | 462 (16%) |
| Hispanic/Latino | 449~(18%) | 530~(20%) | 530~(20%) | 539 (18%) |
| Other | 15 (1%) | 28 (1%) | 15 (1%) | 13 (0%) |
| 2+ Races | 41 (2%) | 43 (2%) | 54 (2%) | 80 (3%) |
| DND | 149 (6%) | 205~(8%) | 210 (8%) | 243 (8%) |
| Age | | | | |
| 17-20 | 142 (6%) | 105 (4%) | 108 (4%) | 118 (4%) |
| 21-25 | 536 (22%) | 554 (21%) | 574 (21%) | 478 (16%) |
| 26-30 | 620 (25%) | 635~(24%) | 787 (29%) | 685 (23%) |
| 31-40 | 729~(30%) | 831 (31%) | 790 (29%) | 985 (33%) |
| 41-50 | 316 (13%) | 305~(11%) | 291 (11%) | 481 (16%) |
| 51-60 | 85 (4%) | 151 (6%) | 101 (4%) | 145 (5%) |
| 61+ | 2(0%) | 16 (1%) | 9~(0%) | 21 (1%) |
| DND | 8 (0%) | 75 (3%) | 21 (1%) | 34 (1%) |

 Table 1.32:
 LPN student demographics trend 2018-2021

N is the number of students.

| Atlantic County Institute of Technology | Atlantic |
|--|------------|
| | |
| AVTECH Institute of Technology | Middlesex |
| Berkeley College | Passaic |
| Best Care Training Institute | Essex |
| Burlington County Institute of Technology | Burlington |
| Camden County College | Camden |
| Cape May County Technical School | Cape May |
| Eastwick College, Hackensack | Bergen |
| Eastwick College, Ramsey | Bergen |
| Essex County College* | Essex |
| Holy Name Medical Center | Bergen |
| Hudson County Community College | Hudson |
| Jersey College, Ewing | Mercer |
| Jersey College, Teterboro | Bergen |
| Lincoln Technical Institute, Iselin | Middlesex |
| Lincoln Technical Institute, Moorestown | Burlington |
| Lincoln Technical Institute, Paramus | Bergen |
| Merit Technical Institute [*] | Hudson |
| Middlesex County Vocational and Technical School | Middlesex |
| Monmouth County Vocational Technical School | Monmouth |
| Morris County School of Technology | Morris |
| Ocean County Vocational Technical School | Ocean |
| Passaic County Technical Institute | Passaic |
| Pinelands School of Practical Nursing | Ocean |
| Prism Career Institute, Cherry Hill | Camden |
| Prism Career Institute, Egg Harbor [*] | Atlantic |
| Rowan College of South Jersey Cumberland | Cumberland |
| Salem Community College | Salem |
| Union County College | Union |
| Universal Training Institute [*] | Middlesex |
| Warren County Technical School | Warren |

 Table 1.33:
 New Jersey's LPN Education Programs

*Schools did not provide data.

Nursing Faculty Report

Faculty for Pre- and Post-licensure RN Programs

Employment

This section describes the employment of full-time (FT) faculty across pre- and post-licensure nursing programs. In **Table 1.34** and **Table 1.35**, full-time vacancies only include those that are being actively recruited. "BSN & Higher" includes Baccalaureate, Master's, DNP, and PhD programs.

| | DIP | ADN | BSN & | Total |
|-------------------------------|-------|--------|--------|--------|
| | | | Higher | |
| Full-time positions available | 76 | 169 | 388 | 633 |
| Full-time faculty employed | 72 | 156 | 374 | 602 |
| Full-time position vacancies | 4(5%) | 13(8%) | 14(4%) | 31(5%) |

 Table 1.34:
 RN Faculty Positions and Vacancies

 Table 1.35:
 RN Program Faculty Vacancy Trend 2018-2021

| | 2018 | 2019 | 2020 | 2021 |
|--------------|------|------|------|------|
| | N=45 | N=45 | N=48 | N=46 |
| DIP | 3 | 1 | 2 | 4 |
| ADN | 8 | 15 | 18 | 13 |
| BSN & Higher | 46 | 54 | 29 | 14 |
| Total | 57 | 70 | 49 | 31 |

N is the number of respondent schools.

Table 1.36 shows the trend of full-time faculty employed since 2018.

 Table 1.36: RN Program Faculty Employment Trend 2018-2021

| | 2018 | 2019 | 2020 | 2021 |
|--------------|------|------|------|------|
| | N=45 | N=45 | N=45 | N=46 |
| DIP | 71 | 73 | 72 | 72 |
| ADN | 159 | 140 | 172 | 156 |
| BSN & Higher | 349 | 380 | 348 | 374 |
| Total | 579 | 593 | 592 | 602 |

Figure 1.2 shows the percentage of RN classes taught by adjuncts by program level. In 2021, the percentage of classes taught by adjuncts were 21% for RN to BSN, 19% for ADN Generic and 23% for BSN Generic. This may account for how schools are covering their full-time vacancies.

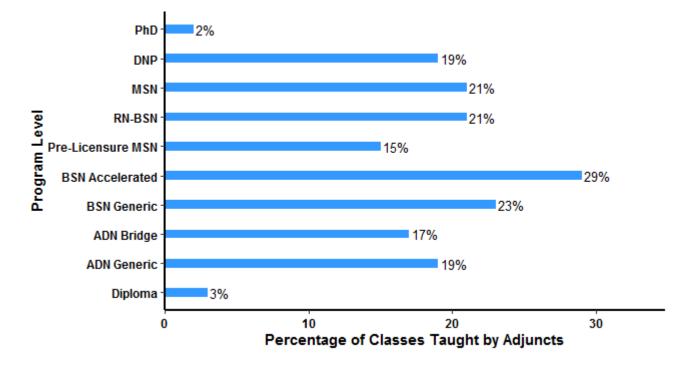


Figure 1.2: Percentage of RN Classes Taught by Adjuncts in 2021

Demographics

Tables in this section show demographic data for full-time faculty at pre-licensure and post-licensure schools. **Table 1.37** shows that Diploma and ADN faculty are primarily prepared at the Master's level, and faculty for Baccalaureate and Higher programs are primarily prepared at the DNP or PhD level.

 Table 1.37: Highest level of education of RN program faculty

| DIP N=72 | ADN N=156 | BSN & Higher N=374 |
|-------------|--|--|
| | | 0 (0%) |
| 0 (0%) | 0 (0%) | 0 (0%) |
| 54 (75%) | 126 (81%) | 76 (20%) |
| 0 (0%) | 0 (0%) | 0 (0%) |
| 0 (0%) | 2(1%) | 0 (0%) |
| 12 (17%) | 20 (13%) | 125 (33%) |
| 4(6%) | 3(2%) | 127 (34%) |
| 2(3%) | 5(3%) | 46 (12%) |
| 0 (0%) | 0 (0%) | 0 (0%) |
| | N=72 0 (0%) 0 (0%) 54 (75%) 0 (0%) 0 (0%) 12 (17%) 4 (6%) 2 (3%) | N=72N=156 $0 (0\%)$ $0 (0\%)$ $0 (0\%)$ $0 (0\%)$ $54 (75\%)$ $126 (81\%)$ $0 (0\%)$ $0 (0\%)$ $0 (0\%)$ $2 (1\%)$ $12 (17\%)$ $20 (13\%)$ $4 (6\%)$ $3 (2\%)$ $2 (3\%)$ $5 (3\%)$ |

N is the number of faculty.

Table 1.38 shows demographics for faculty teaching in pre- and post-licensure RN education programs. Table 1.39 on the following page shows that faculty continue to be primarily White, female, and in the higher age brackets.

| | DIP | ADN | BSN & Higher |
|-----------------------|-------------|-----------|--------------|
| | N=72 | N=156 | N=374 |
| Gender | | | |
| Female | 69 (96%) | 151 (97%) | 345 (92%) |
| Male | 3(4%) | 5(3%) | 29 (8%) |
| Transgender | 0 (0%) | 0 (0%) | 0 (0%) |
| DND | 0 (0%) | 0 (0%) | 0 (0%) |
| | | | |
| Race/Ethnicity | | | |
| American Indian | $0 \ (0\%)$ | 0~(0%) | 0 (0%) |
| Asian | 6 (8%) | 14 (8%) | 32 (8%) |
| Black/African Am. | 15~(21%) | 19~(12%) | 38~(10%) |
| Hawaiian/Pacific Isl. | 0 (0%) | 0 (0%) | 3 (1%) |
| White | 49 (68%) | 116 (74%) | 265 (71%) |
| Hispanic/Latino | 1 (1%) | 5(3%) | 12 (3%) |
| Other | 0 (0%) | 1 (1%) | 0 (0%) |
| 2+ Races | 0 (0%) | 1 (1%) | 21 (6%) |
| DND | 1 (1%) | 0 (0%) | 3 (1%) |
| | | | |
| Age | | | |
| 30 or younger | 0 (0%) | 1(1%) | 2 (1%) |
| 31-40 | 19(26%) | 22~(14%) | 38 (10%) |
| 41-50 | 11 (15%) | 40 (26%) | 77 (20%) |
| 51-55 | 17 (24%) | 18 (12%) | 57 (15%) |
| 56-60 | 8 (11%) | 18 (12%) | 68 (18%) |
| 61-65 | 13 (18%) | 40 (26%) | 70 (19%) |
| 66-70 | 4 (6%) | 10 (6%) | 38 (10%) |
| 71+ | 0 (0%) | 5 (3%) | 24 (6%) |
| DND | 0 (0%) | 2 (1%) | 0 (0%) |
| Mean Age | 50 | 53 | 55 |

Table 1.38: RN program faculty demographics

N is the number of faculty.

| | 2018 | 2019 | 2020 | 2021 |
|------------------------|------------------|-----------|----------|----------|
| | N (%) | N (%) | N (%) | N (%) |
| C I | | | | |
| Gender | 5 40 (05) | FCO (0.1) | 401 (01) | FOF (00) |
| Female | 548 (95) | 560 (94) | 481 (81) | 565 (93) |
| Male | 31 (5) | 30(5) | 31 (5) | 37 (6) |
| Transgender | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| DND | 0 (0) | 3(1) | 80 (14) | 0 (0) |
| $\operatorname{Race}/$ | | | | |
| Ethnicity | | | | |
| American Indian (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Asian | 37(6) | 39(7) | 60(10) | 52 (9) |
| Black/African Am. | 61 (1) | 67(11) | 76(13) | 72 (12) |
| Hawaiian/Pacific Isl. | 3(1) | 6(1) | 3(1) | 3(0) |
| White | 432 (75) | 432(73) | 327(55) | 430 (71) |
| Hispanic/Latino | 19(3) | 21(4) | 51(9) | 18 (3) |
| Other | 2(0) | 1(0) | 3(1) | 1(0) |
| 2 or more Races | 4 (1) | 9(2) | 25(4) | 22(4) |
| DND | 21(4) | 18(3) | 47(8) | 4 (1) |
| Age | | | | |
| 30 or younger | 3 (1) | 1 (0) | 1 (0) | 3(0) |
| 31-40 | 35 (6) | 57 (10) | 44 (7) | 79 (13) |
| 41-50 | 117 (20) | 120 (20) | 120 (20) | 128 (21) |
| 51-55 | 96 (17) | 103 (17) | 100 (18) | 92 (15) |
| 56-60 | 114 (20) | 101 (17) | 109 (18) | 94 (16) |
| 61-65 | 115 (20) | 129 (22) | 111 (19) | 123 (21) |
| 66-70 | 61 (11) | 62 (10) | 55 (9) | 52 (9) |
| 71+ | 22 (4) | 20(3) | 29(5) | 29(5) |
| DND | 16(3) | 0 (0) | 23(4) | 2(0) |
| Total Faculty | 579 | 593 | 592 | 602 |

Table 1.39:RN program faculty demographics trend 2018-2021

Faculty for LPN Schools

Employment

This section describes the employment of full-time (FT) faculty for LPN programs. Table 1.40 and Table 1.41 reflects full-time vacancies only.

 Table 1.40: Positions and Vacancies for Faculty in LPN schools

| | \mathbf{LPN} | (%) |
|-------------------------------|----------------|-------|
| Full-time positions available | 114 | |
| Full-time faculty employed | 91 | |
| Full-time position vacancies | 23 | (20%) |

The vacancy rate in **Table 1.41** has increased.

Table 1.41: Vacancy Trend for Faculty in LPN schools 2018-2021

| 2018 N=27 | $\begin{array}{c} 2019 \\ \mathrm{N=}25 \end{array}$ | $\begin{array}{c} 2020 \\ \mathrm{N=}25 \end{array}$ | $\begin{array}{c} 2021 \\ \mathrm{N=}27 \end{array}$ | | |
|--|--|--|--|--|--|
| 11 12 13 23 | | | | | |
| N is the number of respondent schools. | | | | | |

Table 1.42 shows the number of full-time faculty employed.

Table 1.42: LPN Program Faculty Employment Trend 2018-2021

| 2018 | 2019 | 2020 | 2021 |
|------|------|------|------|
| N=27 | N=25 | N=25 | N=27 |
| 86 | 95 | 90 | 91 |

Demographics

This section shows demographic data for LPN programs for full-time faculty members. **Table 1.43** shows that faculty are primarily prepared at the Baccalaureate or Master's level in nursing.

| | N=91 | |
|-----------------------------------|----------|--|
| ADN | 0 (0%) | |
| BSN | 43 (47%) | |
| Non-Nursing Baccalaureate | 2(2%) | |
| MSN | 44 (48%) | |
| Non-Nursing Masters | 1 (1%) | |
| DNP | 1 (1%) | |
| PhD | 0 (0%) | |
| Non-Nursing Doctorate | 0 (0%) | |
| Missing/Unknown | 0 (0%) | |
| N is the total number of faculty. | | |

 Table 1.43: Highest level of education for Faculty in LPN schools

Table 1.44 shows four years of demographic data for faculty teaching in LPN programs. Data for 2021 shows that faculty are primarily female and White. The mean age for full-time faculty is 53.

| | 2018 N (07) | 2019 N (07) | 2020 N (07) | 2021 |
|-----------------------|----------------------|---|----------------------|-------------|
| | N (%) | N (%) | N (%) | N (%) |
| Gender | | | | |
| Female | 86 (89) | 89 (91) | 78 (87) | 84 (92) |
| Male | 11(11) | 9(9) | 10(01) 11(12) | 7 (8) |
| Transgender | 0(0) | $ \begin{array}{c} 0 & (0) \\ 0 & (0) \end{array} $ | 0(0) | 0 (0) |
| DND | 0 (0) | 0 (0) | 1(1) | 0 (0) |
| Race/ | | | | |
| Ethnicity | | | | |
| American Indian | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Asian | 9 (9) | 9 (9) | 6 (7) | 13 (14) |
| Black/African Am. | 23 (24) | 30 (31) | 25 (28) | 23 (25) |
| Hawaiian/Pacific Isl. | 3(3) | 3 (3) | 1 (1) | 0 (0) |
| White | 55 (57) | 49 (50) | 53 (59) | 47 (52) |
| Hispanic/Latino | 7 (7) | 7 (7) | 4 (4) | 7 (8) |
| Other | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| 2+ Races | 0 (0) | 0 (0) | 1 (1) | 1 (1) |
| Missing/Unknown | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| | | | | |
| Age | | | | |
| 30 or younger | 3(3) | 0 (0) | 3(3) | 1(1) |
| 31-40 | 9(9) | 12 (9) | 9(10) | 16(18) |
| 41-50 | 23(24) | 26(24) | 17(19) | 16(18) |
| 51-55 | 22(23) | 18(23) | 17(19) | 16(18) |
| 56-60 | 9(9) | 15(9) | 16(18) | 13(14) |
| 61-65 | 21(22) | 20(22) | 22(24) | 21(23) |
| 66-70 | 7(7) | 5(7) | 2(2) | 7(8) |
| 71+ | 3(3) | 2(3) | 2(2) | 1 (1) |
| DND | 0 (0) | 0 (0) | 2(2) | 0 (0) |
| Total Faculty | 135 | 98 | 90 | 91 |

 Table 1.44:
 LPN Faculty Demographic Trend 2018-2021

Impact of COVID-19 on Nursing Educational Programs

In 2021, the final question of the NJCCN Nursing Education Survey was: *How has COVID-19 impacted your programs?*

The nursing program leaders indicated they quickly transitioned to virtual learning due to the COVID-19 pandemic. Specific comments included 1) Decreased NCLEX pass rates by at least one program leader from associate degree and baccalaureate programs, 2) Increased life issues for students and challenges with virtual learning in maintaining academic integrity and security reported by at least one program leader from the practical nurse and associate degree programs, and 3) Technology issues in that some students had technology and connectivity challenges and others lacked a personal computer with a camera from at least one program leader from the practical nurse, associate degree and baccalaureate programs.

Below are the aggregated responses to *How has COVID-19 impacted your programs?* The table displays the predominant categories with supporting quotations.

| Program | Categories | Quotes |
|---|--|--|
| Practical Nurse Programs (n = 26) | Lack of clinical sites, particularly long-term care | "Increased number of sections of clinical placement and decreased availability of clinical sites related to COVID-19 pandemicWe have been able to secure alternate opportunities." |
| | Challenges with virtual learning | "COVID has impacted our on-campus program due to having to go 100% remote and online in days. We needed new software and technology resources in many areas to meet the needs of online technology. We were utilizing numerous new products such as Zoom, a new Learning Management System, and Assessment software that had remote proctoring capabilities. This was challenging teaching students and faculty how to utilize successfully operate software and use the new technology." |
| Diploma Programs $(n = 5)$ | Adapting quickly to virtual learning | "Transitioned to remote didactic learning and virtual simulation for clinical." |

| Associate Degree Programs (n = 19) | Decreased faculty-to- student ratio in clinicals | "We are not permitted to have more than 5 on a clinical floor, and this has impacted placements as well as finances (as we previously could place 8 to 10 with one faculty member)." |
|---|---|---|
| | Compensated by increasing simulation experiences | "Used more simulations, more web-ex remote learning, on-line learning." |
| | Increase in faculty shortage | "I lost several faculty and the nursing director and currently have NO applicants for nursing director after a year of advertising." |
| | Less faculty willing to teach in clinical setting | "Resilience of students was demonstrated during the pandemic, faculty flexibility and willingness to follow students in clinical is lower/reduced." |
| Baccalaureate and post-Licensure Programs (n = 19) | Adapting quickly to virtual learning | "Face-to-face classes and on-ground simulation were converted to a virtual format in spring 2020." |
| | Decrease in enrollment in the post-Licensure programs | "COVID-19 impacted our program by declining enrollment, especially in the graduate program. Students are now showing a preference for online and hybrid learning modality after exposure to online learning during COVID." |

| Difficulty obtaining clinical site | "We have had difficulty in placing students in hospital settings. Faculty have been diligent in seeking alternative opportunities to master program outcomes." |
|---|--|
| Decreased faculty-to- student ratio in clinicals | "COVID has resulted in smaller clinical groups being sent to onsite clinical agencies. Whereas the usual clinical size was 10 students per group, we have now created rotations to permit students to go to clinical every other week and remain virtual the opposite week, working with a clinical adjunct faculty to complete objectives for remote clinical experiences." |
| Accommodating ill/quarantined students | "We provide students with a link to the labs as needed in the event that they are ill/quarantined and unable to attend face-to-face labs. For students who may need to be absent from clinical due to illness or quarantine, we have them join in with the virtual clinical experience, which is taught by an adjunct faculty member." |

n = number of program leaders who responded

Chapter 2

Workforce Supply Data

The data for this chapter were acquired from the 2021 and 2022 New Jersey Board of Nursing (NJBON) Nursys $\widehat{\mathbb{R}}$ license renewal surveys. Nurses renew their licenses every two years, so this two-year reporting period is representative of New Jersey's entire nursing workforce. Data are only reported if there were sufficient responses to be representative of the response pool. Percentage calculations are based on the total number of respondents to the specific survey question, not the total number of nurses in the workforce. The data in this chapter are inclusive of **active** and **inactive** licenses (see **Table 2.1**).

Registered Nurse (RN) Profile

In the 2021-2022 survey period, 113,719 RNs responded out of New Jersey's 173,153 licensed RNs. Of those 173,153 licensed RNs, 141,079 were active while 32,074 were inactive. RN respondents account for 66% of the RN workforce in New Jersey. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 113,719.

License Status

According to **Table 2.1**, 95% of 113,719 RN respondents have an active RN license, which renders them eligible to practice as a RN in New Jersey.

| | N=113,719 | % |
|----------|-----------|----|
| Active | 107,786 | 95 |
| Inactive | 5,933 | 5 |

| Table 2 | 2.1: | RN | License | Status |
|---------|------|----|---------|--------|
| | | | | |

Table 2.2 describes the method by which 113,719 RN respondents attained their licensure. Those who attained their licensure via exam (67%) have graduated from an approved school of nursing and taken the NCLEX-RN examination in New Jersey. Those who attained their license via endorsement (32%) have first been licensed in another state.

| Table 2.2: | Basis | for | RN | Licensure |
|------------|-------|-----|----|-----------|
|------------|-------|-----|----|-----------|

| | N = 113,719 | % |
|-----------------|-------------|----|
| Exam | 76,374 | 67 |
| Endorsement | $36,\!574$ | 32 |
| Missing/No Data | 771 | <1 |

Demographics

Table 2.3 shows the demographic characteristics of 113,719 RN respondents. RN respondents are primarily female (91%), White (60%), and between 46-65 years of age (45%). The mean age of the RN respondents is 49.

Table 2.3: RN Demographic Characteristics

| Gender | | N=113,719 | % |
|----------------|------------------------|------------|----|
| | Female | 103,206 | 91 |
| | Male | 10,503 | 9 |
| | Missing/No Data | 10 | 0 |
| Race/Ethnicity | | | |
| | White | 68,026 | 60 |
| | Asian | $15,\!917$ | 14 |
| | Black/African American | 10,887 | 10 |
| | Hispanic/Latino | 6,615 | 6 |
| | Pacific Islander | 751 | <1 |
| | American Indian | 122 | <1 |
| | Other | 3,639 | 3 |
| | Missing/No Data | 7,762 | 7 |
| Age | | | |
| | 19-25 | 2,581 | 2 |
| | 26-35 | 22,039 | 19 |
| | 36-45 | 20,743 | 18 |
| | 46-55 | $23,\!525$ | 21 |
| | 56-65 | 27,529 | 24 |
| | 66-75 | 14,975 | 13 |
| | 76-85 | 2,174 | 2 |
| | 86+ | 151 | <1 |
| | Missing/No Data | 2 | <1 |

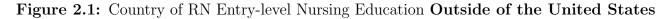
Education

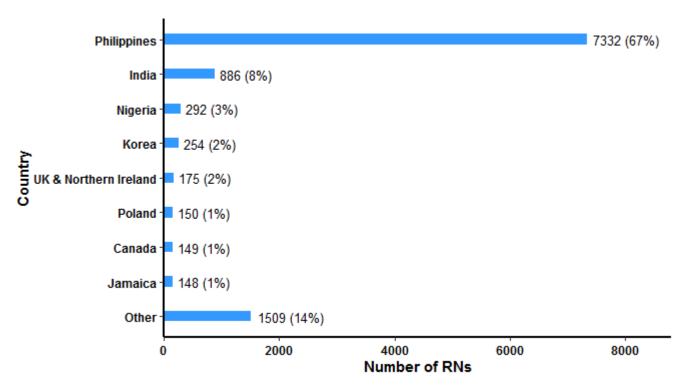
Table 2.4 describes the highest degree of nursing education held by 99,259 respondents. The National Academy of Medicine (formerly the Institute of Medicine) recommended that 80% of nurses be prepared at the baccalaureate or higher level by 2020. Of the 99,259 RN respondents, excluding those who did not provide data (missing/invalid), 70% have a Baccalaureate or higher degree in nursing, and 30% have a Diploma or an Associate's Degree in nursing.

| | N = 99,259 | % |
|---|------------|----|
| Diploma in Nursing | 4,712 | 5 |
| Associate's Degree in Nursing | 25,107 | 25 |
| Baccalaureate Degree in Nursing | 58,762 | 59 |
| Master's Degree in Nursing | 9,577 | 10 |
| DNP, PhD, or Other Doctoral Degree in Nursing | 1,101 | 1 |
| *The 14,460 missing/invalid data are ex | cluded. | |

 Table 2.4: RN Highest Level of Education*

RN respondents were asked to report the country in which they received their entry-level nursing education. Of the 99,835 RN respondents, 88,940 were from the United States. Of the remaining 10,895 respondents, the Philippines (67%) were the most common source of entry-level nursing education outside of the United States. Figure 2.1 describes the 10,895 RN respondents who received their entry-level nursing education outside of the United States.





*The 13,884 missing data are excluded.

Employment Characteristics

Table 2.5 describes there were 99,957 RN respondents who reported their employment status. The table shows that 74% respondents were employed in nursing full-time, and 9% were employed in nursing part-time. "Employed in nursing" is defined as being employed in a position that requires an RN license.

| | N = 99,957 | % |
|--|------------|----|
| Employed in nursing full-time | 73,863 | 74 |
| Employed in nursing part-time | 8,989 | 9 |
| Retired | $5,\!586$ | 6 |
| Employed in nursing per diem | 5,320 | 5 |
| Unemployed, seeking work in nursing | 3,082 | 3 |
| Employed in a field other than nursing | 2,435 | 2 |
| Volunteering (only) in nursing | 682 | <1 |

 Table 2.5: RN Employment Status*

*The 13,762 missing data are excluded.

RN respondents were asked to report the number of positions that they were employed as a nurse during that time period. Table 2.6 shows that 17% of 91,026 RN respondents held multiple nurse positions.

Table 2.6: Number of Nurse Positions Held by RNs*

| _ | | N = 91,026 | % | |
|---|-------------|------------|----|-----|
| | 1 position | 76,232 | 84 | - |
| | 2 positions | 13,378 | 15 | _ |
| | 3 positions | 1,416 | 2 | |
| | | | | · • |

*The 22,693 missing data are excluded.

Figure 2.2 depicts the primary employment setting of 95,959 RN respondents. The figure shows 54% of the respondents reported the hospital as their primary employment setting.

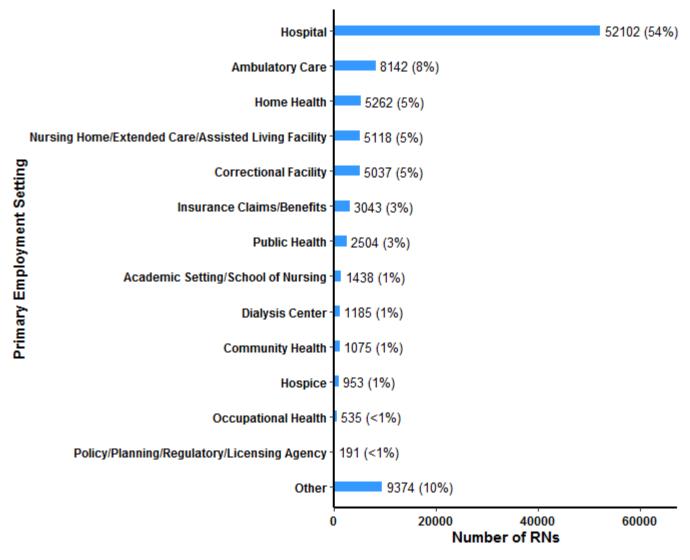


Figure 2.2: RN Primary Employment Setting*

*The 17,760 missing data are excluded.

Figure 2.3 depicts the primary employment position of 96,781 RN respondents. The figure shows 70% of the respondents reported that their primary employment position was as a staff nurse.

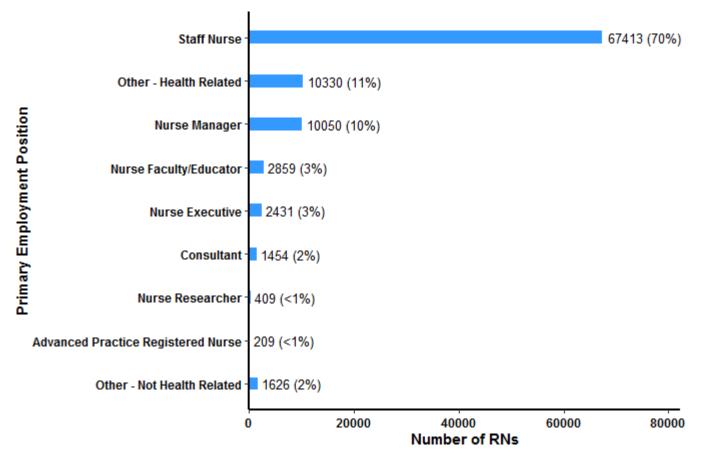


Figure 2.3: RN Primary Employment Position*

*The 16,938 missing data are excluded.

Figure 2.4 depicts the primary employment position specialty of 93,854 RN respondents. The figure shows 16% of the respondents classified their primary employment specialty as acute care/critical care.

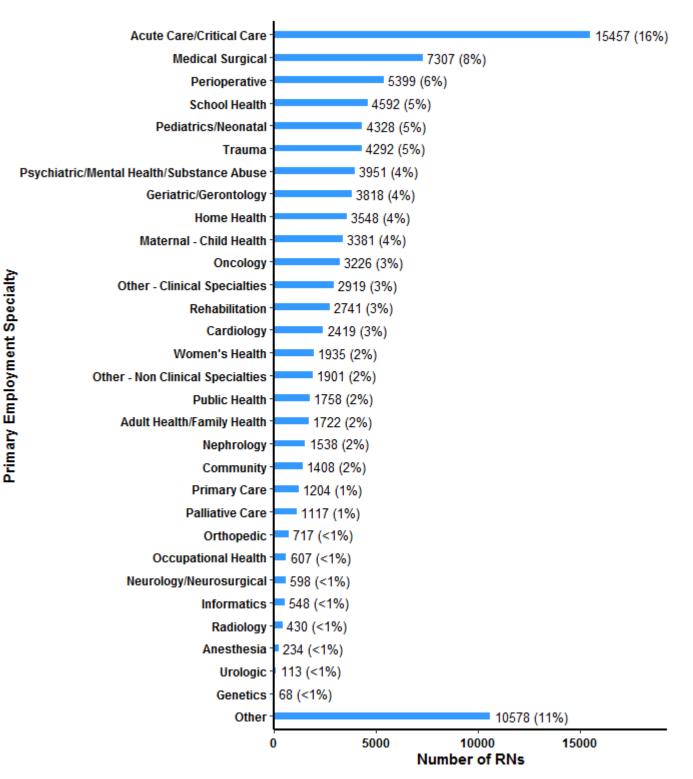


Figure 2.4: RN Primary Employment Position Specialty*

*The 19,865 missing data are excluded.

Unemployment

Figure 2.5 shows that there were 11,703 RNs who reported a reason for not being employed. Of those, 29% identified "taking care of home and family" as their primary reason.

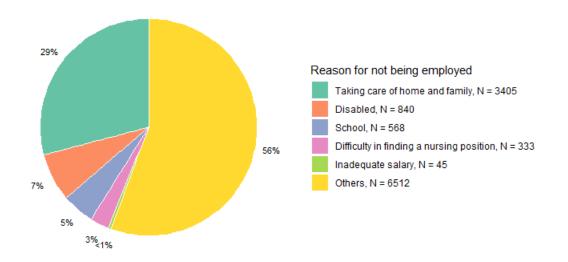


Figure 2.5: RN Reason for Not Being Employed

Retirement

NJCCN asked survey participants about their intention to retire within two years, prior to the next license renewal. In response, 6% of RN respondents indicated a plan to retire within this timeframe (not inclusive of missing data).

Table 2.7 identifies RN respondents who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 27% intend to retire; of nurses who are 76-85 year old, 28% intend to retire. The number of RN respondents in each age bracket is different from the numbers in Table 2.3 because Table 2.7 only includes RNs who reported their age (18 or greater) and their intent to retire.

| Age | RN Respondents | Intent to Retire | *% |
|-------|-----------------------|------------------|----|
| | N = 89,002 | N = 4,986 | |
| 19-25 | $1,\!159$ | 32 | 3 |
| 26-35 | 16,199 | 171 | 1 |
| 36-45 | 16,445 | 95 | <1 |
| 46-55 | 19,466 | 125 | <1 |
| 56-65 | 23,060 | 1,143 | 5 |
| 66-75 | 11,282 | 3,019 | 27 |
| 76-85 | 1,322 | 376 | 28 |
| 86+ | 69 | 25 | 36 |

 Table 2.7: RN Intent to Retire according to Age

*Percentages are calculated as intent to retire over the number of RN respondents.

Advanced Practice Nurse (APN) Profile

Advanced Practice Nurses are RNs with advanced degrees and specialty certification approved by a national certifying agency. NJCCN added a question to the Nursys^(R) survey that inquired about respondent specialities (CRNA/CNS/CNM/NP). RNs who indicated one of these specialities were identified as APNs.

In the 2021-2022 survey period, 13,119 APNs responded out of New Jersey's 16,598 licensed APNs. Of those 16,598 licensed APNs, 13,581 were active while 3,017 were inactive. APN respondents accounted for 79% of the APN workforce in New Jersey. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 13,119.

License Status

According to Table 2.8, 97% of 13,119 APN respondents are active APNs.

| | N = 13,119 | % |
|------------|------------|----|
| Active | 12,775 | 97 |
| Not Active | 344 | 3 |

APN survey respondents were identified by their indication of one or more certifications. An APN may have multiple certifications; for example, a Nurse Practitioner may also be a Clinical Nurse Specialist. **Table 2.9** shows the specialty of 13,119 APN respondents. Note: since an APN may have more than one specialty, the total number in the table is greater than the number of APN respondents.

Table 2.9: APN Specialty

| Nurse Practitioner (NP) | 10,829 |
|---|--------|
| Certified Registered Nurse Anesthetist (CRNA) | 1,367 |
| Clinical Nurse Specialist (CNS) | 767 |
| Certified Nurse Midwife (CNM) | 368 |

Demographics

Table 2.10 shows the demographic characteristics of 13,119 APN respondents. APN respondents are primarily female (90%), White (61%), and between 36-55 years of age (50%). The mean age of APN respondents is 48.

| Gender | | N=13,119 | % |
|----------------|------------------------|-----------|----|
| | Female | 11,773 | 90 |
| | Male | 1,344 | 10 |
| | Missing/No Data | 2 | <1 |
| Race/Ethnicity | | | |
| | White | 8,062 | 61 |
| | Asian | 1,628 | 12 |
| | Black/African American | 1,527 | 12 |
| | Hispanic/Latino | 646 | 5 |
| | Pacific Islander | 71 | <1 |
| | American Indian | 18 | <1 |
| | Other | 500 | 4 |
| | Missing/No Data | 667 | 5 |
| Age | | | |
| - | 19-25 | 5 | <1 |
| | 26-35 | 2,405 | 18 |
| | 36-45 | 3,588 | 27 |
| | 46-55 | 3,059 | 23 |
| | 56-65 | $2,\!655$ | 20 |
| | 66-75 | 1,239 | 9 |
| | 76-85 | 164 | 1 |
| | 86+ | 4 | <1 |
| | Missing/No Data | 0 | 0 |

| Table 2.10: | APN Demo | ographic | Characteristics |
|-------------|----------|----------|-----------------|
|-------------|----------|----------|-----------------|

Education

Table 2.11 describes the highest degree of nursing education held by 12,118 APN respondents. Of those, 86% have a Master's Degree and 12% have a DNP.

Table 2.11: APN Highest Level of Nursing Education*

| | N = 12,118 | % |
|----------------------------------|--------------|----|
| Master's Degree in Nursing | 10,361 | 86 |
| Doctor of Nursing Practice | 1,502 | 12 |
| PhD | 166 | 1 |
| Other Doctoral Degree in Nursing | 89 | <1 |
| *The 1 001 missing (involid date | ana avaludad | |

*The 1,001 missing/invalid data are excluded.

Employment Characteristics

Table 2.12 shows that there were 12,025 APN respondents who reported their employment status. The table shows that 82% of the respondents were employed in nursing full-time, and 9% were employed in nursing part-time. "Employed in nursing" is defined as being employed as a nurse and in a position that requires an APN credential.

| | N = 12,025 | % |
|--|------------|----|
| Employed in nursing full-time | 9,845 | 82 |
| Employed in nursing part-time | 1,142 | 9 |
| Employed in nursing per diem | 432 | 4 |
| Unemployed, seeking work in nursing | 216 | 2 |
| Retired | 212 | 2 |
| Employed in a field other than Nursing | 127 | 1 |
| Volunteering (only) in nursing | 51 | <1 |

| Table 2.12: | APN | Employment | Status^* |
|-------------|-----|------------|---------------------|
|-------------|-----|------------|---------------------|

*The 1,094 missing data are excluded.

APN respondents were asked to report the number of positions that they were employed as a nurse during that time period. **Table 2.13** indicates that 25% of 11,357 APN respondents held multiple nurse positions.

| Table 2.13: | Number | of Nurse | Positions | Held by | APNs* |
|-------------|--------|----------|-----------|---------|-------|
| | | | | | |

| | N = 11,357 | % |
|-------------|------------|----|
| 1 position | 8,533 | 75 |
| 2 positions | 2,370 | 21 |
| 3 positions | 454 | 4 |

*The 1,762 missing data are excluded.

Figure 2.6 depicts the primary employment setting of 12,039 APN respondents. The figure shows 44% of the respondents reported the hospital as their primary employment setting.

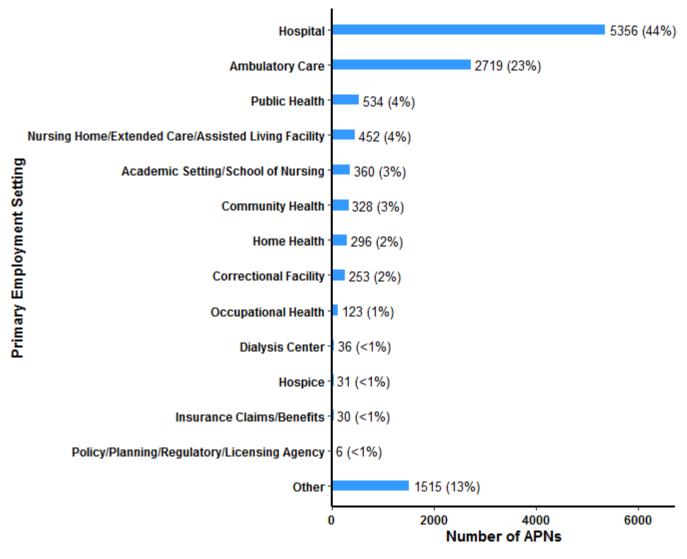


Figure 2.6: APN Primary Employment Setting*

*The 1,080 missing data are excluded.

Figure 2.7 depicts the primary employment position of 12,131 APN respondents. The figure shows 78% of the respondents reported that their primary employment position was as an APN.

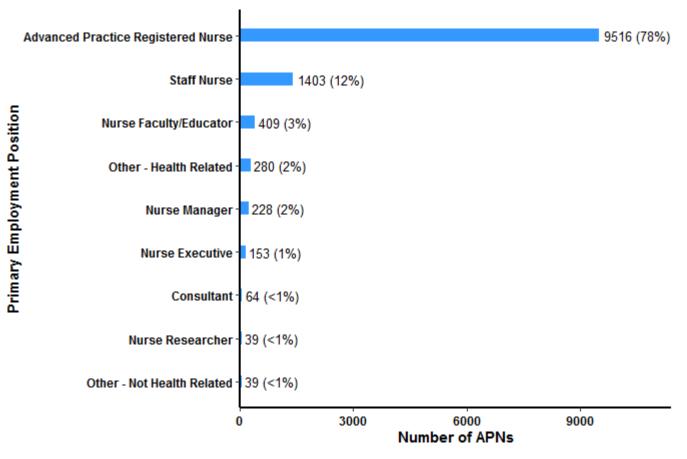


Figure 2.7: APN Primary Employment Position*

*The 988 missing data are excluded.

Figure 2.8 depicts the primary employment position specialty of 11,438 APN respondents. The figure shows 13% of the respondents classified their primary employment specialty as acute care/critical care.

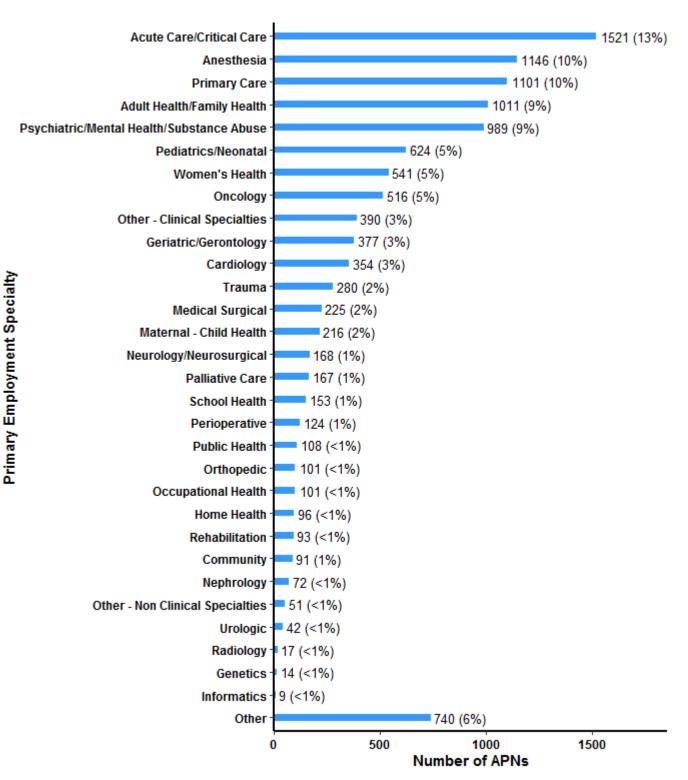


Figure 2.8: APN Primary Employment Position Specialty*

*The 1,681 missing data are excluded.

Nurse Practitioners

The majority of APNs are identified as NPs. In this 2021-2022 survey period, there were 10,829 out of 13,119 APN respondents reported that they have a nurse practitioner certification.

There were 9,369 out of 10,829 NPs reported their NP primary area of focus. Table 2.14 shows the nurse practitioner specialties of 9,369 NPs.

| | N = 9,369 | % |
|--------------------|-----------|-----|
| Family | 2,997 | 32 |
| Adult/Gero Primary | 2,457 | 26 |
| Adult/Gero Acute | 1,246 | 13 |
| Pediatrics | 799 | 9 |
| Psych | 782 | 8 |
| Women's Health | 428 | 5 |
| Other | 660 | 7 |
| *[1] 1 400 1 | 4 1 | 1 1 |

| Table 2.14: | Nurse | Practitioner | $specialty^*$ |
|-------------|-------|--------------|---------------|
|-------------|-------|--------------|---------------|

*The 1,460 missing data are excluded.

In **Table 2.15**, a total of 2,512 of the 10,829 NPs indicated that they are active in states other than New Jersey.

| | N = 2,512 | % |
|--------------|-----------|----|
| New York | 1,038 | 41 |
| Pennsylvania | 977 | 39 |
| Delaware | 65 | 3 |
| Connecticut | 18 | <1 |
| Other | 383 | 15 |
| Missing | 31 | 1 |

 Table 2.15:
 NPs active in other states

Unemployment

Figure 2.9 shows that there were 769 APNs who reported a reason for not being employed. Of those, 23% identified "taking care of home and family" as their primary reason.

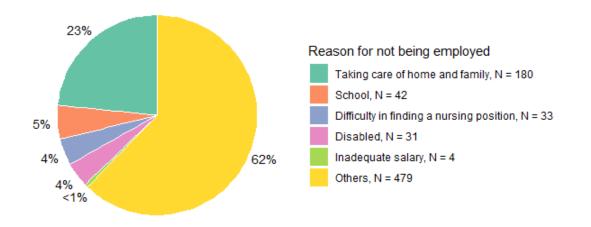


Figure 2.9: APN Reason for Not Being Employed

Retirement

NJCCN asked survey participants about their intention to retire within two years, prior to the next license renewal. In response, 3% of APN respondents indicated a plan to retire within this time frame (not inclusive of missing data).

Table 2.16 identifies APN respondents who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 16% intend to retire; of nurses who are 76-85 year old, 22% intend to retire. The number of APN respondents in each age bracket is different from the numbers in Table 2.10 because Table 2.16 only includes APNs who reported their age and their intent to retire.

| Age | APN Respondents N=11,597 | Intent to Retire N=310 | % |
|-------|-----------------------------|---------------------------|----|
| 19-25 | 2 | 0 | 0 |
| 26-35 | 2,062 | 12 | <1 |
| 36-45 | 3,120 | 14 | <1 |
| 46-55 | 2,737 | 11 | <1 |
| 56-65 | 2,427 | 65 | 3 |
| 66-75 | 1,112 | 178 | 16 |
| 76-85 | 134 | 30 | 22 |
| 86+ | 3 | 0 | 0 |

 Table 2.16:
 APN Intent to Retire according to Age

Percentages are calculated as intent to retire over the number of APN respondents.

Licensed Practical Nurse (LPN) Profile

In the 2021-2022 survey period, 21,329 LPNs responded out of New Jersey's 29,328 licensed LPNs. Of those 29,328 licensed LPNs, 23,511 were active while 5,817 were inactive. LPN respondents accounted for 73% of the LPN workforce in New Jersey. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 21,329.

License Status

According to **Table 2.17**, 96% of 21,329 LPN respondents have an active LPN license, which renders them eligible to practice as a LPN in New Jersey.

| | N = 21,329 | % |
|----------|------------|----|
| Active | 20,539 | 96 |
| Inactive | 790 | 4 |

Table 2.18 describes the method by which LPN respondents attained their licensure. Those who attained their licensure via exam (88%) have graduated from an approved school of practical nursing and taken the NCLEX-PN examination in New Jersey. Those who attained their license via endorsement (12%) have first been licensed in another state.

| Table 2.18: | Basis for LPN | Licensure |
|-------------|---------------|-----------|
|-------------|---------------|-----------|

| | N = 21,329 | % |
|-----------------|------------|----|
| Exam | 18,809 | 88 |
| Endorsement | 2,463 | 12 |
| Missing/No Data | 57 | <1 |

Demographics

Table 2.19 shows the demographic characteristics of 21,329 LPN respondents. LPN respondents are primarily female (90%), over 48% are from diverse racial/ethnic backgrounds, and between 36-65 years of age (70%). The mean age of the LPN respondents is 50.

| Gender | | N=21,329 | % |
|----------------|------------------------|-----------|----|
| | Female | 19,122 | 90 |
| | Male | 2,207 | 10 |
| | Missing/No Data | 0 | 0 |
| Race/Ethnicity | | | |
| | White | 8,168 | 38 |
| | Black/African American | 6,865 | 32 |
| | Hispanic/Latino | 1,889 | 9 |
| | Asian | 1,387 | 7 |
| | Pacific Islander | 103 | <1 |
| | American Indian | 42 | <1 |
| | Other | 1,217 | 6 |
| | Missing/No Data | $1,\!658$ | 8 |
| Age | | | |
| | 19-25 | 318 | 1 |
| | 26-35 | 3,463 | 16 |
| | 36-45 | 4,939 | 23 |
| | 46-55 | 5,063 | 24 |
| | 56-65 | 4,930 | 23 |
| | 66-75 | 2,327 | 11 |
| | 76-85 | 276 | 1 |
| | 86+ | 13 | <1 |

 Table 2.19:
 LPN Demographic Characteristics

Employment Characteristics

Table 2.20 shows that there were 17,615 LPN respondents who reported their employment status. The table shows that 73% respondents were employed in nursing full-time, and 9% were employed in nursing part-time. "Employed in nursing" is defined as being employed as a nurse or in a position that requires an LPN license.

| | $N = 17,\!615$ | % |
|--|----------------|----|
| Employed in nursing full-time | 12,922 | 73 |
| Employed in nursing part-time | 1,528 | 9 |
| Unemployed, seeking work in nursing | 938 | 5 |
| Employed in nursing per diem | 891 | 5 |
| Employed in a field other than Nursing | 659 | 4 |
| Retired | 576 | 3 |
| Volunteering (only) in nursing | 101 | <1 |

 Table 2.20:
 LPN Employment Status*

*The 3,714 missing data are excluded.

LPN respondents were asked to report the number of positions that they were employed as a nurse during that time period. Table 2.21 indicates that 17% of 15,682 LPN respondents held multiple positions.

 Table 2.21:
 Number of LPN Positions*

| | $N = 15,\!682$ | % |
|-------------|----------------|----|
| 1 position | 12,977 | 83 |
| 2 positions | 2,482 | 16 |
| 3 positions | 223 | 1 |

*The 5,647 missing data are excluded.

Figure 2.10 depicts the primary employment setting of 16,180 LPN respondents. The figure shows 42% of the respondents reported a nursing home/extended care/assisted living facility as their primary employment setting.

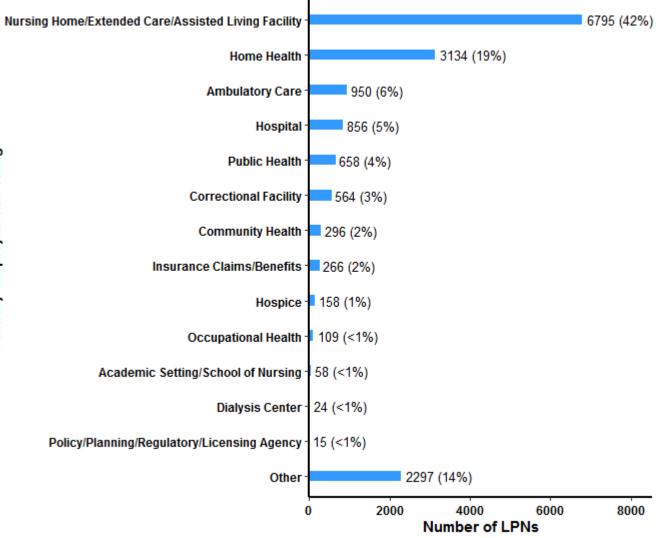
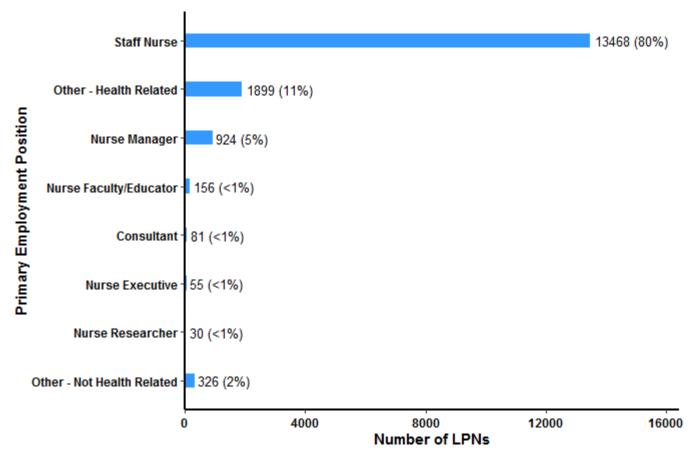


Figure 2.10: LPN Primary Employment Setting*

*The 5,149 missing data are excluded.

Figure 2.11 depicts the primary employment position of 16,939 LPN respondents. The figure shows 80% of the respondents reported their primary employment position was a staff nurse.





*The 4,390 missing/invalid data are excluded.

Figure 2.12 depicts the primary employment position specialty of 16,061 LPN respondents. The figure shows 26% of the respondents classified their primary employment specialty as geriatric/gerontology.

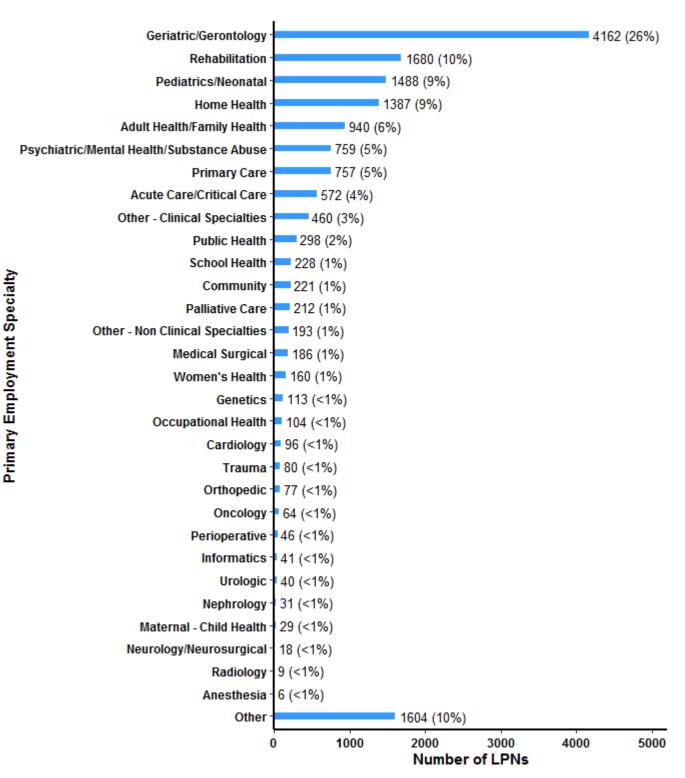


Figure 2.12: LPN Primary Employment Position Specialty*



Unemployment

Figure 2.13 shows that there were 3,083 LPNs who reported a reason for not being employed. Of those, 26% identified "taking care of home and family" as their primary reason.

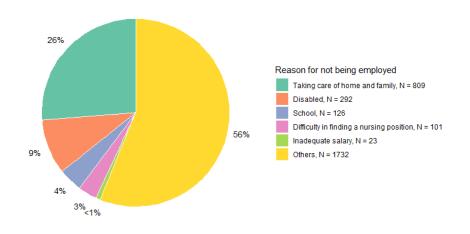


Figure 2.13: LPN Reason for Not Being Employed

Retirement

NJCCN asked survey participants about their intention to retire within two years, prior to the next license renewal. In response, 4% of LPN respondents indicated a plan to retire within this time frame (not inclusive of missing data).

Table 2.22 identifies LPN respondents who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 17% intend to retire; of nurses who are 76-85 year old, 21% intend to retire. The number of LPN respondents in each age bracket is different from the numbers in Table 2.19 because Table 2.22 only includes LPNs who reported their age and their intent to retire.

| Age | LPN Respondents | Intent to Retire | % |
|-------|-----------------|------------------|----|
| | N = 15,488 | N=564 | |
| 19-25 | 139 | 4 | 3 |
| 26-35 | 2,269 | 34 | 1 |
| 36-45 | 3,631 | 41 | 1 |
| 46-55 | 3,853 | 38 | 1 |
| 56-65 | 3,767 | 124 | 3 |
| 66-75 | $1,\!655$ | 286 | 17 |
| 76-85 | 165 | 34 | 21 |
| 86+ | 9 | 3 | 33 |

 Table 2.22:
 LPN Intent to Retire according to Age

Percentages are calculated as intent to retire over the number of LPN respondents.

Nurse Licensure Compact*

New Jersey is a member of the Nurse Licensure Compact (NLC), which is an agreement among states that allows nurses to have one license but have the right to practice in any other states partaking in the agreement. Nurses who hold active, unencumbered nursing licenses issued by members of the NLC may practice in NJ. New Jersey licensed nurses may apply for a multistate license with the authority to practice in other Compact states by submitting an application for a License by Upgrade. A multistate Compact license will be issued if you meet the requirements. A single state NJ license may be issued if you do not meet the requirements for a Compact license. In short, a multi-state license allows the nurse to practice in the home state (the nurse's primary state of residence) and all compact states with one license issued by the home state.

To be eligible for a New Jersey (New Jersey as the home state) issued multistate license, you must:

- Meet the requirements for licensure in New Jersey (state of residency);
- Have graduated from a board-approved education program; or has graduated from an international education program (approved by the authorized accrediting body in the applicable country and verified by an independent credentials review agency);
- Have passed an English proficiency examination (applies to graduates of an international education program not taught in English or if English is not the individual's native language);
- Have passed an NCLEX-RN(R) or NCLEX-PN(R) Examination or predecessor exam;
- Be eligible for or holds an active, unencumbered license (i.e., without active discipline);
- Have submitted to state and federal fingerprint-based criminal background checks;
- Have not been convicted or found guilty, or has entered into an agreed disposition, of a felony offense under applicable state or federal criminal law;
- Have no misdemeanor convictions related to the practice of nursing (determined on a case-bycase basis);
- Not currently a participant in an alternative program;
- Be required to self-disclose current participation in an alternative program; and
- Have a valid United States Social Security number.

*Above information was obtained from NJBON (2022) Nurse Licensure Compact Please visit: https://www.njconsumeraffairs.gov/nur/Pages/Nurse-Licensure.aspx

Figure 2.14 shows the map of 39 states which have enacted the Nurse Licensure Compact.*

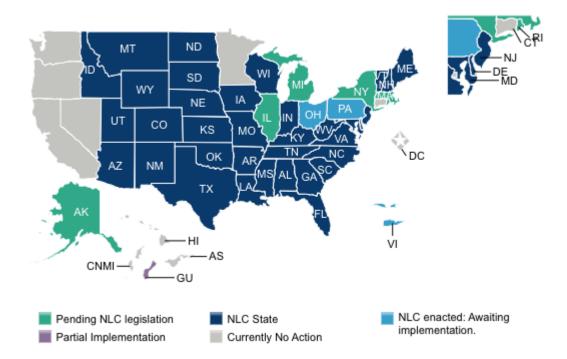


Figure 2.14: NLC Map

*This figure was obtained from National Council of State Boards of Nursing (NCSBN) website. Please visit: https://www.ncsbn.org/compacts/nurse-licensure-compact.page

Table 2.23 shows the state license status and primary state of residency of 10,321 LPN, 56,213 RN, and 6,890 APN respondents. Note: This new question was first added to the 2022 survey, so we only have 2022 data.

| Table 2.23: State license status | and primary state | of residency of LPN, | RN, APN respondents |
|--|-------------------|----------------------|---------------------|
|--|-------------------|----------------------|---------------------|

| State license status and residency | LPN RN | | APN | |
|---|-------------|--------------|-------------|--|
| | N = 10,321 | N = 56,213 | N=6,890 | |
| (1)Single state, declared residency | 9,650~(93%) | 47,636 (85%) | 5,160 (75%) | |
| (2)Single state, didn't declare residency | 615 (6%) | 7,810 (14%) | 1,693~(25%) | |
| (3)Multi-state compact license | 56 (< 1%) | 767~(1%) | 37~(<1%) | |
| | C / · /1 | (0) 1(0) | | |

See below to find explanation of categories (1), (2), and (3).

Definition of (1), (2), and (3):

(1) Those who hold a single state license and declared NJ as their primary state of residency.

(2) Those who hold a single state license and did not declare NJ as their primary state of residency - they are looking for a primary license in a non-compact state.

(3) Those who hold a multi-state compact license. Note: APNs have to apply as an RN in NJ for multi-state licensure.

Chapter 3

Workforce Demand Data

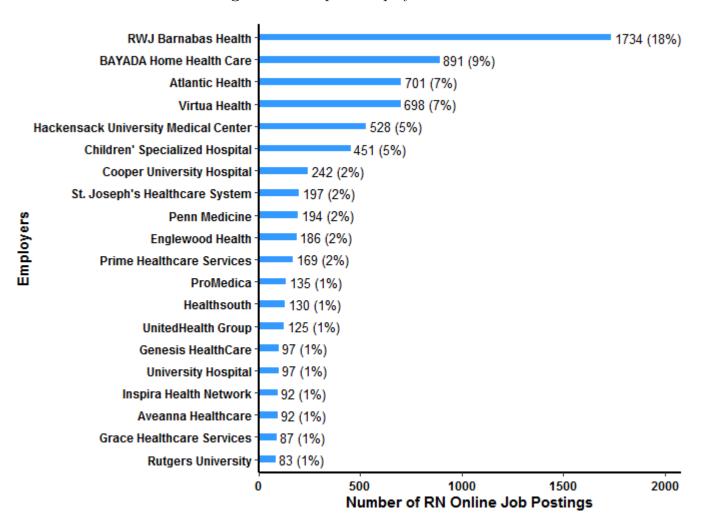
This year, NJCCN used data mined from LightcastTM to determine demand for nurses in the State of New Jersey. All tables and figures in this chapter are attributed to LightcastTM. The O*Net-SOC taxonomy was used to standardize the occupation-specific indicators. The job advertisements were reviewed to eliminate any per diem positions, temporary positions, staffing agencies, and postings that had job openings outside of New Jersey. Turnover rate gives context for how often employees in a given occupation are moving to different employers. Turnover rate is calculated by comparing total separations to total jobs (separations divided by jobs). This table shows high turnover in all 3 occupations which then translates to high demand.

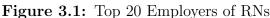
| | Category | Demand and Employment | | | | Salary |
|----------|---|-----------------------|---------|-----------------------|----------|---------|
| SOC | Occupation | Number | Number | % Change | Turnover | Mean |
| Code | Title | of jobs | of jobs | \mathbf{in} | Rate | Salary |
| (ONET-6) | | 2021 | 2031 | $\mathbf{Employment}$ | 2021 | |
| | | | | 2021-2031 | | |
| | | | | | | |
| 29-1141 | Registered Nurses | 78,633 | 88,660 | 13% | 24% | 81,200 |
| 29-2061 | Licensed Practical & Licensed Vocational Nurses | 17,263 | 18,883 | 9% | 50% | 58,100 |
| 29-1171 | Nurse Practitioners | 6,757 | 10,348 | 53% | 29% | 122,400 |

 Table 3.1: Summary Demand and Requirements Table by Occupation - 2021

Registered Nurse (RN) Demand Profile

Figure 3.1 shows the top 20 employers who produced the greatest number of online job postings for RNs in 2021. Hospital employers were combined under their healthcare system where applicable. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. The top 20 employers accounted for 6,929 (61%) of the 11,328 qualified total postings.





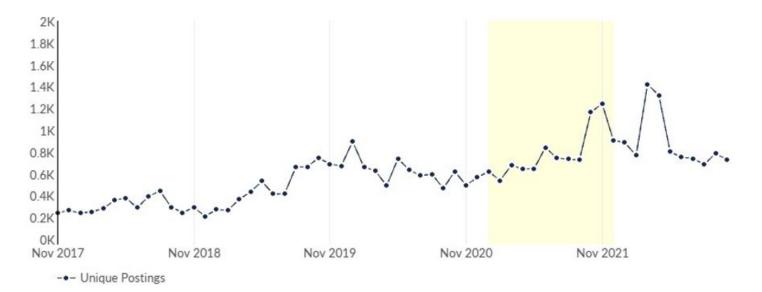
According to **Figure 3.2**, there were 44,105 total postings and 9,511 unique postings. The job posting intensity of 5:1 means that for every 1 unique position, there were 5 postings.

Figure 3.2: RN Posting Overview



According to **Figure 3.3**, shows the unique postings from 2017-2022. The section of the table in yellow highlights January 2021-December 2021.

Figure 3.3: RN Time Series Analysis 2017-2022

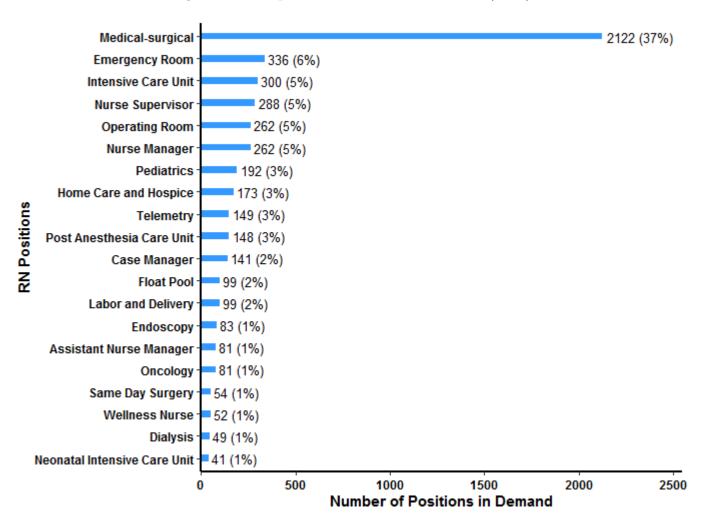


According to **Figure 3.4**, the number of unique postings was highest in March and April of 2022. The 12 month posting trend uses a different time frame to provide the most current posting trend data.

| Month | Unique Postings | Posting Intensity |
|----------|-----------------|-------------------|
| Oct 2022 | 733 | 2:1 |
| Sep 2022 | 788 | 4:1 |
| Aug 2022 | 688 | 4:1 |
| Jul 2022 | 742 | 4:1 |
| Jun 2022 | 753 | 5:1 |
| May 2022 | 804 | 4:1 |
| Apr 2022 | 1,323 | 3:1 |
| Mar 2022 | 1,421 | 4:1 |
| Feb 2022 | 769 | 5:1 |
| Jan 2022 | 890 | 4:1 |
| Dec 2021 | 907 | 4:1 |
| Nov 2021 | 1,246 | 4:1 |

Figure 3.4: 12 Month Posting Trend

Figure 3.5 and Figure 3.6, lists the top RN positions in most demand. In 2021, Intensive Care Unit postings accounted for 12% of the top 20 postings.





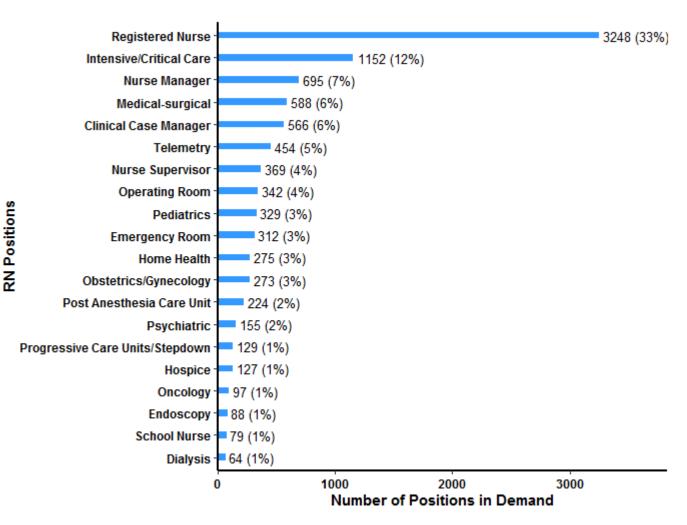
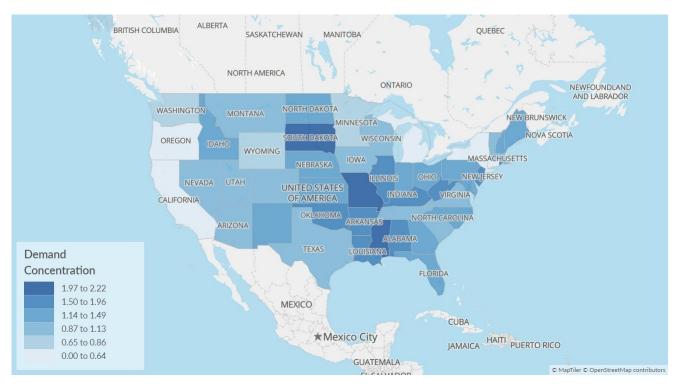
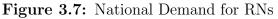


Figure 3.6: Top 20 RN Positions in Demand (2021)

National Demand Comparison

Figure 3.7 shows the level of demand for RNs across the United States from January 1, 2021 through December 31, 2021. Demand Concentration shows the concentration of job postings in a region relative to the national average. This can be used to determine if job posting concentration is high or low in a region compared to the nation. Demand Concentration is calculated by comparing the share of regional job postings for a search with the share of national job postings for that search.





When compared to this rate, **New Jersey has a Demand Concentration of 1.63**. The states with highest demand concentration are Mississippi (2.22), South Dakota (2.21), Missouri (1.97), Louisiana (1.84), and Alabama (1.73). The states with lowest demand concentration are Michigan (0.20), Connecticut (0.27), California (0.29), New York (0.33), and Oregon (0.43).

Job Postings by County*

January 1, 2021 - December 31, 2021

There were 9,504 qualified postings available with the current filters applied.

| County | Job Postings | Demand Concentration |
|------------|--------------|----------------------|
| Atlantic | 129 | 1.42 |
| Bergen | 655 | 0.95 |
| Burlington | 621 | 1.96 |
| Camden | 943 | 2.63 |
| Cape May | 38 | 1.63 |
| Cumberland | 82 | 1.67 |
| Essex | 1,119 | 2.06 |
| Gloucester | 182 | 1.09 |
| Hudson | 650 | 1.13 |
| Hunterdon | 68 | 1.30 |
| Mercer | 436 | 1.24 |
| Middlesex | 782 | 1.18 |
| Monmouth | 524 | 1.73 |
| Morris | 690 | 1.57 |
| Ocean | 792 | 5.41 |
| Passaic | 553 | 2.09 |
| Salem | 47 | 1.94 |
| Somerset | 419 | 1.28 |
| Sussex | 116 | 3.09 |
| Union | 562 | 1.54 |
| Warren | 96 | 2.78 |

 Table 3.2: Demand for RNs by NJ County

*7 unclassified postings

Table 3.2 shows county-level data for the raw number of job postings and Demand Concentration. The counties with the highest Demand Concentration are Ocean (5.41), Sussex (3.09), and Warren (2.78). The counties with the lowest demand concentration are Bergen (0.95), Gloucester (1.09), and Hudson (1.13). The counties with the most job postings include Essex (1,119), Camden (943), and Ocean (792).

Nurse Practitioner (NP) Demand Profile

Figure 3.8 shows the top 20 employers with the greatest number of online job postings for Nurse Practitioners (NP) in 2021. Hospital employers were combined under their healthcare system where applicable. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. The top 20 employers accounted for 1,361 (64.7%) of the 2,102 total qualified postings.

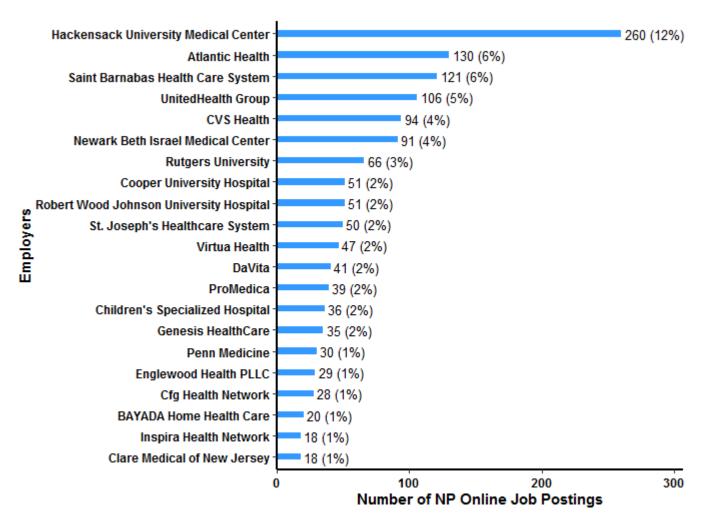


Figure 3.8: Top 20 Employers of NPs

According to **Figure 3.9**, there were 6,002 total postings and 2,027 unique postings. The job posting intensity of 3:1 means that for every 1 unique position, there were 3 postings.

Figure 3.9: NP Posting Overview

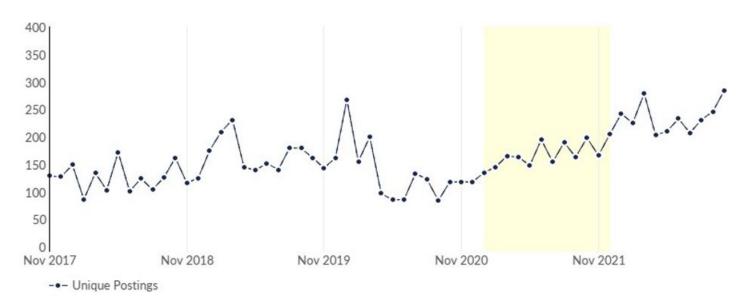
Unique Postings 6,002 Total Postings 3:1 Posting Intensity Regional Average: 3:1

32 days

Median Posting Duration Regional Average: 34 days

According to **Figure 3.10**, shows postings from 2017-2022. The section of the table in yellow highlights January 2021-December 2021.





According to **Figure 3.11**, the number of unique postings was highest in October of 2022. The 12 month posting trend uses a different time frame to provide the most current posting trend data.

| Month | Unique Postings | Posting Intensity |
|----------|-----------------|-------------------|
| Nov 2022 | 267 | 1:1 |
| Oct 2022 | 284 | 2:1 |
| Sep 2022 | 246 | 3:1 |
| Aug 2022 | 231 | 3:1 |
| Jul 2022 | 207 | 3:1 |
| Jun 2022 | 233 | 3:1 |
| May 2022 | 210 | 2:1 |
| Apr 2022 | 203 | 3:1 |
| Mar 2022 | 279 | 2:1 |
| Feb 2022 | 225 | 2:1 |
| Jan 2022 | 242 | 2:1 |
| Dec 2021 | 205 | 2:1 |

Figure 3.11: 12 Month Posting Trend

National Demand Comparison

Figure 3.12 shows the level of demand for NPs across the United States from January 1, 2021 through December 31, 2021. Local area demand is calculated relative to national demand. Demand Concentration shows the concentration of job postings in a region relative to the national average. This can be used to determine if job posting concentration for NPs is high or low in a region compared to the nation. Demand Concentration is calculated by comparing the share of regional job postings for a search with the share of national job postings for that search.

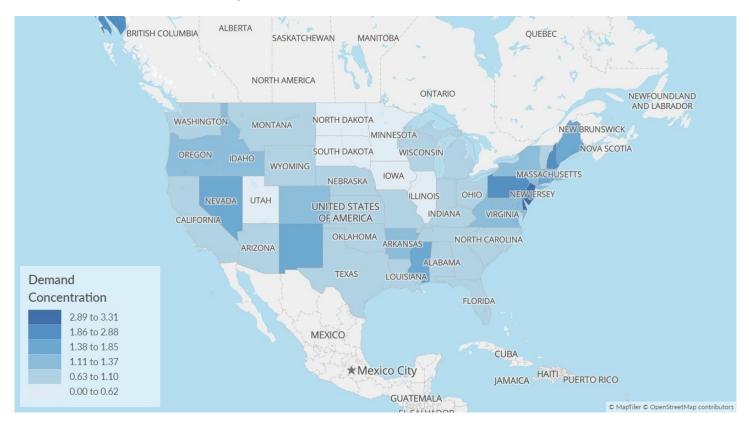


Figure 3.12: National Demand for NPs

New Jersey has the highest Demand Concentration at 3.31. States that follow with the highest Demand Concentration are Delaware (2.69), Pennsylvania (2.29), and New Hampshire (2.00). The three states with the lowest Demand Concentration are North Dakota (0.25), South Dakota (0.27), and Minnesota (0.39).

Job Postings by County

January 1, 2021 - December 31, 2021

There were 2,021 qualified postings available with the current filters applied.

| County | Job Postings | Demand Concentration |
|------------|--------------|----------------------|
| Atlantic | 44 | 4.60 |
| Bergen | 216 | 2.99 |
| Burlington | 103 | 3.10 |
| Camden | 172 | 4.57 |
| Cape May | 5 | 2.04 |
| Cumberland | 25 | 4.84 |
| Essex | 256 | 4.48 |
| Gloucester | 48 | 2.73 |
| Hudson | 91 | 1.50 |
| Hunterdon | 11 | 2.00 |
| Mercer | 77 | 2.08 |
| Middlesex | 183 | 2.64 |
| Monmouth | 246 | 7.75 |
| Morris | 139 | 3.02 |
| Ocean | 89 | 5.78 |
| Passaic | 120 | 4.32 |
| Salem | 2 | 0.79 |
| Somerset | 79 | 2.29 |
| Sussex | 12 | 3.05 |
| Union | 93 | 2.42 |
| Warren | 10 | 2.76 |

 Table 3.3: Demand for NPs by NJ County

*6 unclassified postings.

Table 3.3 shows county-level data for the raw number of job postings and Demand Concentration. The counties with the highest Demand Concentration are Monmouth (7.75), Ocean (5.78), and Cumberland (4.84). The counties with the lowest Demand Concentration are Salem (0.79), Hudson (1.50), and Hunterdon (2.00). The counties with the most job postings include Essex (256), Monmouth (246), and Bergen (216).

Licensed Practical Nurse (LPN) Demand Profile

Figure 3.13 shows the top 20 employers with the greatest number of online job postings for LPNs in 2021. Hospital employers were combined under their healthcare system where applicable. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. The top 20 employers accounted for 811 (55.2%) of the 1,469 total qualified postings. Top employers included nursing homes, home health care providers, and hospital systems.

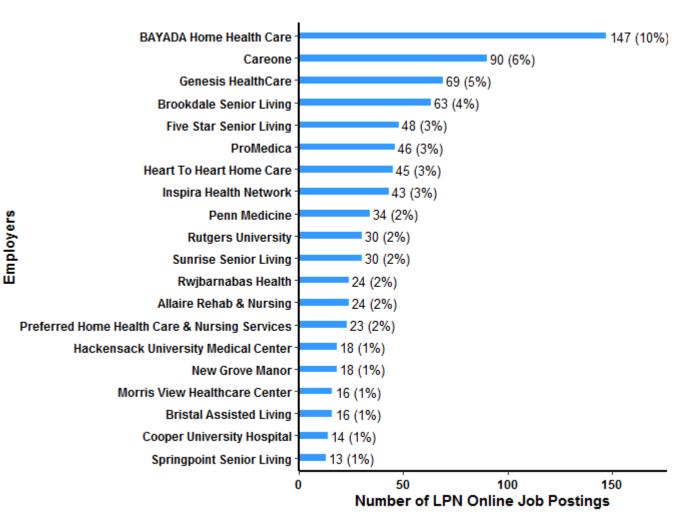


Figure 3.13: Top 20 Employers of LPNs

According to **Figure 3.14**, there were 6,319 total postings and 1,469 unique postings. The job posting intensity of 4:1 means that for every 1 unique position, there were 4 postings.

Figure 3.14: LPN Posting Overview

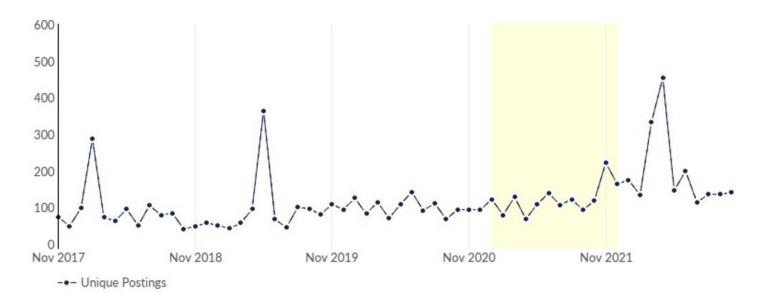
Unique Postings 6,319 Total Postings 4:1 Posting Intensity Regional Average: 3:1

26 days

Median Posting Duration Regional Average: 34 days

According to **Figure 3.15**, shows postings from 2017-2022. The section of the table in yellow highlights January 2021-December 2021.

Figure 3.15: LPN Time Series Analysis 2017-2022



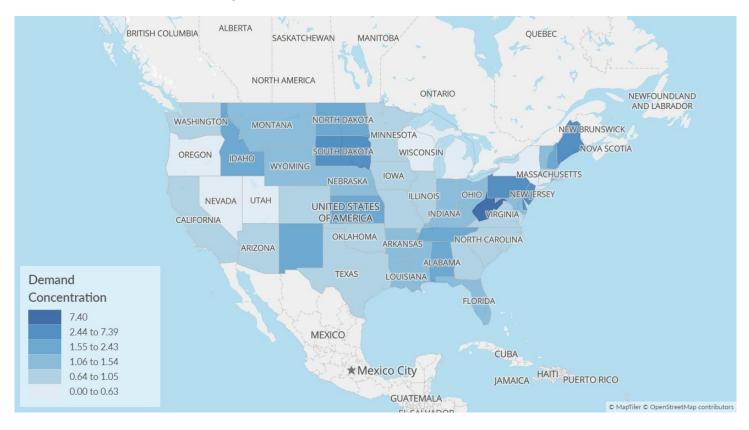
According to **Figure 3.16**, the number of unique postings was highest in March and April of 2022. The 12 month posting trend uses a different time frame to provide the most current posting trend data.

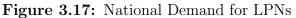
| Month | Unique Postings | Posting Intensity |
|----------|-----------------|-------------------|
| Nov 2022 | 124 | 1:1 |
| Oct 2022 | 141 | 2:1 |
| Sep 2022 | 135 | 4:1 |
| Aug 2022 | 136 | 3:1 |
| Jul 2022 | 113 | 3:1 |
| Jun 2022 | 199 | 2:1 |
| May 2022 | 146 | 4:1 |
| Apr 2022 | 454 | 2:1 |
| Mar 2022 | 332 | 2:1 |
| Feb 2022 | 133 | 3:1 |
| Jan 2022 | 175 | 3:1 |
| Dec 2021 | 163 | 3:1 |

Figure 3.16: 12 Month Posting Trend

National Demand Comparison

Figure 3.17 shows the level of demand for LPNs across the United States from January 1, 2021 through December 31, 2021. The demand for LPNs is identified here as the ratio of LPN job postings per employed persons. Demand Concentration shows the concentration of job postings in a region relative to the national average. This can be used to determine if job posting concentration for LPNs is high or low in a region compared to the nation. Demand Concentration is calculated by comparing the share of regional job postings for a search with the share of national job postings for that search.





New Jersey has a high Demand Concentration at 3.09. States that have the highest Demand Concentration are West Virginia (7.40), Delaware (2.65), and Pennsylvania (2.64). The three states with the lowest Demand Concentration are Utah (0.28), Hawaii (0.28), and New York (0.30).

Job Postings by County

January 1, 2021 - December 31, 2021

There were 1,466 qualified postings available with the current filters applied.

| County | Job Postings | Demand Concentration |
|------------|--------------|----------------------|
| Atlantic | 33 | 4.45 |
| Bergen | 134 | 2.39 |
| Burlington | 74 | 2.87 |
| Camden | 129 | 4.42 |
| Cape May | 31 | 16.31 |
| Cumberland | 43 | 10.75 |
| Essex | 144 | 3.25 |
| Gloucester | 84 | 6.17 |
| Hudson | 40 | 0.85 |
| Hunterdon | 20 | 4.70 |
| Mercer | 44 | 1.54 |
| Middlesex | 112 | 2.08 |
| Monmouth | 121 | 4.92 |
| Morris | 103 | 2.89 |
| Ocean | 107 | 8.97 |
| Passaic | 67 | 3.11 |
| Salem | 16 | 8.12 |
| Somerset | 63 | 2.36 |
| Sussex | 11 | 3.60 |
| Union | 65 | 2.18 |
| Warren | 25 | 8.90 |

 Table 3.4:
 Demand for LPNs by NJ County*

*3 unclassified postings.

Table 3.4 shows county-level data for the raw number of job postings and Demand Concentration. The counties with the highest Demand Concentration are Cape May (16.31), Cumberland (10.75), and Ocean (8.97). The counties with the lowest Demand Concentration are Hudson (0.85), Mercer (1.54), and Middlesex (2.08). The counties with the most job postings include Essex (144), Bergen (134), and Camden (129).

Chapter 4

Nurse Retirement Projections

Overview

This chapter reflects the projection of nurse retirements for New Jersey through 2025. In order to maintain an adequate supply of nurses in the workforce, the number of new graduates must be equal to or greater than the number of retirees each year. If current graduation rates are sustained over the years, the gap in the RN/APN workforce due to expected retirement will be reduced. For LPNs, sustaining current graduation rates will lead to an excess supply of LPNs. The following tables in each section outline how workforce projections of LPNs, RNs, and APNs are calculated.

Note: We cannot account for all of the possibilities in projecting retirement due to the volatility of the work environment.

Nurse Retirement Projections Through 2025 - Summary

Table 4.1 shows the projected trend of the nursing workforce through 2025. Our projection suggests a 9% increase in the LPN workforce, a 5% decrease in the RN workforce, and a 2% decrease in the APN workforce between 2022 and 2025. A detailed explanation is provided in Section 4.

| | LPN | \mathbf{RN} | APN |
|---|---------------|----------------|----------------|
| Number of respondents in the survey period | 21,329 | 113,719 | 13,119 |
| Expected number of retirements by 2025^* | 1,935 | 16,899 | 759 |
| Active workforce after retirements by 2025* | 19,394 | 96,820 | 12,360 |
| % change w/o including new graduates from 2022^* | -9% | -15% | -6% |
| Expected new graduates entering workforce [*] | 3,885 | 11,505 | 480 |
| Active workforce after considering new graduates [*] | 23,279 | 108,325 | 12,840 |
| % change in the workforce from 2022^* | +9% | -5% | -2% |
| 95% CI for percent change in the workforce | (7.1%, 11.4%) | (-6.9%, -2.7%) | (-3.6%, -0.6%) |

 Table 4.1: Projected Trends Through 2025

(Source: NJBON Survey 2021-2022)

Section 1: Retirement Risk Based on Age

Table 4.2 describes the age distribution of LPN, RN, and APN respondents in the 2021-2022 survey period. We assumed ages 56 and higher are at risk of retirement. The last row in this table is the sum of the percentages in the age group 56-65, 66-75, and 76-85. This table corresponds to Table 2.19, Table 2.3, and Table 2.10.

| Table 4.2: Age Distribution | of RNs, LPNs, and APNs in | n 2021-2022 Survey Period |
|-----------------------------|---------------------------|---------------------------|
|-----------------------------|---------------------------|---------------------------|

| | LPN | \mathbf{RN} | APN |
|-------------------------------------|----------|---------------|------------|
| | N=21,329 | N=113,719 | N = 13,119 |
| Age | (%) | (%) | (%) |
| 18-25 | 1.5 | 2.3 | 0.0 |
| 26-35 | 16.2 | 19.4 | 18.3 |
| 36-45 | 23.2 | 18.2 | 27.3 |
| 46-55 | 23.7 | 20.7 | 23.3 |
| 56-65 | 23.1 | 24.2 | 20.2 |
| 66-75 | 10.9 | 13.2 | 9.4 |
| 76-85 | 1.3 | 1.9 | 1.3 |
| 86+ | 0.1 | 0.1 | 0.0 |
| Total at risk of retirement (56-85) | 35.3 | 39.3 | 30.9 |

(Source: NJBON Survey 2021-2022)

Note 1: In this section, we used 56 and above as the projected retirement age.

Note 2: Based on the assumptions, these data are the basis for establishing how many nurses will be at risk of retirement in 2025.

Section 2: Nurse Retirement Rates 2020-2022

Table 4.3 shows the percentages of LPN, RN, and APN respondents who answered 'Retired' to the survey question "What is your employment status?" in NJBON 2020 - 2022 survey period by age brackets.

| | | \mathbf{LPN} | | RN | | | RN APN | | | |
|-------|-------|----------------|---------|---------|-----------|-----------|--------|---------|------|--|
| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | |
| | N=305 | N=253 | N = 323 | N=2,208 | N = 2,998 | N = 2,588 | N=88 | N = 117 | N=95 | |
| Age | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | |
| 46-50 | 0.2 | 0.1 | - | 0.1 | 0.1 | 0.1 | - | - | - | |
| 51-55 | 0.5 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | - | - | 0.1 | |
| 56-60 | 1 | 0.9 | 0.9 | 1 | 1 | 1 | 0.4 | 0.2 | 0.2 | |
| 61-65 | 4 | 4 | 4 | 6 | 6 | 6 | 3 | 3 | 2 | |
| 66-70 | 15 | 15 | 14 | 21 | 21 | 22 | 9 | 10 | 9 | |
| 71-75 | 17 | 19 | 20 | 29 | 32 | 33 | 18 | 20 | 19 | |
| 76-80 | 16 | 20 | 28 | 29 | 33 | 33 | 21 | 22 | 19 | |
| 81-85 | 23 | 24 | 18 | 33 | 35 | 36 | 14 | 8 | 12 | |
| 86+ | 21 | 31 | 38 | 38 | 42 | 42 | 67 | 40 | 25 | |

Table 4.3: Rate of Nurse Retirement by Age Bracket

(Source: NJBON Survey 2020-2022)

Note: This table help calculates the projections for potential nurse retirement through 2025.

Section 3: Graduation Rates 2017-2021

Table 4.4 shows the number of new graduates from all schools in New Jersey from 2017 to 2021. Based on the NJCCN Educational Capacity Survey, the average number of graduates in 2017-2021 was LPN 1,295, RN 3,835, and APN 160. We assume this is the number of nurses entering the workforce every year until 2025. Therefore, from 2022 to 2025, there may be a total of 3,885 LPN graduates, 11,505 RN graduates, and 480 APN graduates entering the workforce.

| | 2017 | 2018 | 2019 | 2020 | 2021 | Average |
|-----|-------|-------|-------|-------|-------|---------|
| LPN | 1,220 | 1,323 | 1,340 | 1,412 | 1,180 | 1,295 |
| RN | 3,122 | 3,374 | 3,889 | 4,496 | 4,294 | 3,835 |
| APN | 116 | 137 | 190 | 155 | 204 | 160 |

| Table 4.4: | Number | of | Graduates | 2017-2021 |
|-------------|------------|----------|-------------|-----------|
| 101010 1011 | 1.01110.01 | <u> </u> | 0.10.40.000 | -011 -0-1 |

(Source: NJCCN Survey 2017-2021)

Note 1: The number of APNs only includes DNP graduates.

Note 2: The maximum and minimum number of graduates across years helped calculate the confidence interval in **Table 4.5**.

Section 4: Projected Percent Change in Nursing Workforce - Results

Table 4.5 shows the projected trend of the nursing workforce through 2025.

Our projection suggests a 9% decrease in the LPN workforce, a 15% decrease in the RN workforce, and a 6% decrease in the APN workforce between now and 2025, after taking into account the retirements (before considering the number of new graduates).

Our projection suggests a 9% increase in the LPN workforce, a 5% decrease in the RN workforce, and a 2% decrease in the APN workforce between 2022 and 2025, after considering the number of new graduates entering the workforce.

| LPN | RN | APN |
|---------------|---|---|
| 21,329 | 113,719 | 13,119 |
| 1,935 | 16,899 | 759 |
| 19,394 | 96,820 | 12,360 |
| -9% | -15% | -6% |
| 3,885 | 11,505 | 480 |
| 23,279 | 108,325 | 12,840 |
| +9% | -5% | -2% |
| (7.1%, 11.4%) | (-6.9%, -2.7%) | (-3.6%, -0.6%) |
| | $\begin{array}{r} 21,329 \\ 1,935 \\ 19,394 \\ -9\% \\ 3,885 \\ 23,279 \\ +9\% \end{array}$ | $\begin{array}{c ccccc} 21,329 & 113,719 \\ \hline 1,935 & 16,899 \\ \hline 19,394 & 96,820 \\ \hline -9\% & -15\% \\ \hline 3,885 & 11,505 \\ \hline 23,279 & 108,325 \\ \hline +9\% & -5\% \end{array}$ |

Table 4.5: Projected Trends Through 2025

Asterisk indicates the data is projected.

(Source: NJBON Survey 2021-2022)

(1): The number of respondents from the 2021-2022 survey period. It was used to estimate the total number of nurses in the workforce for purposes of projection. The actual number of nurses in the state is higher than this estimate since not all nurses have completed the surveys.

(2): The expected number of retirements by 2025. We estimate the risk of retirement for nurses in each age bracket by calculating their age in subsequent years based on the data in the 2021 - 2022 survey period.

(3): The workforce after taking into account the retirements. (3) = (1) - (2)

(4): The percent change in the workforce, before taking into account the number of new graduates entering the workforce (only considering the retirements). (4) = (3) / (1) - 1

(5): The expected number of new graduates entering the workforce from 2022 - 2025. The numbers were calculated by multiplying the average number of graduates from 2017 to 2021 by 3.

(6): The workforce after considering new graduates getting into the workforce. (6) = (3) + (5)

(7): The percent change in the workforce, after considering the number of new graduates entering the workforce. The percent change in the nursing workforce represents the compounded increase/decrease over a three-year period. (7) = ((3 + (5))/(1) - 1

(8): The approximated 95% confidence intervals demonstrate the best and worst-case scenarios and inform the level of confidence in estimates.

Note: The annual percent change can be approximated by dividing by 3 because we projected from 2022 through 2025. For example, the annual percent change for LPNs in the workforce is 9% divided by 3, which is 3%.

Additional Resources

Risk of Retirement in Nurse Employment Setting 2021-2022

Table 4.6 shows the percentage distribution of employment settings of 16,180 LPNs, 95,959 RNs, and 12,039 APNs who responded to the question "What is your employment setting" in the NJBON 2021 - 2022 survey period. This table corresponds to Figure 2.10, Figure 2.2, and Figure 2.6.

| | LPN | \mathbf{RN} | APN |
|---|----------|---------------|----------|
| | N=16,180 | N=95,959 | N=12,039 |
| Employment Setting | (%) | (%) | (%) |
| Hospital | 5 | 54 | 44 |
| Ambulatory Care Setting | 6 | 8 | 23 |
| Home Health | 19 | 5 | 2 |
| Nursing Home/Extended Care/Assisted Living Facility | 42 | 5 | 4 |
| Correctional Facility | 3 | 5 | 2 |
| Insurance Claims/Benefits | 2 | 3 | 0.2 |
| Public Health | 4 | 3 | 4 |
| Academic Setting/School of Nursing | 0.4 | 1 | 3 |
| Dialysis Center | 0.1 | 1 | 0.3 |
| Community Health | 2 | 1 | 3 |
| Hospice | 1 | 1 | 0.3 |
| Occupational Health | 0.7 | 0.6 | 1 |
| Policy/Planning/Regulatory/Licensing Agency | 0.1 | 0.2 | 0.0 |
| Other | 14 | 10 | 13 |

 Table 4.6:
 Percentage Distribution of Employment Setting

(Source: NJBON Survey 2021-2022)

Table 4.7 shows the percentage distribution of LPNs, RNs, and APNs in each of the employment settings by three age brackets. Since we assume age 56 and above is at risk of retirement, the age is divided into three groups: 18-55, 56-65, and 66+.

Cells shaded in blue indicate a higher risk of workforce shortage because the number of nurses in the two age groups (56-65 & 66+) are high in combination. For example, there is a foreseeable workforce shortage of RNs in the Hospital and APNs in the correctional facility.

| | | \mathbf{LPN} | | | \mathbf{RN} | | | APN | |
|----------------------------|-------|----------------|-----|-------|---------------|-----|-------|-------|-----|
| | 18-55 | 56-65 | 66+ | 18-55 | 56-65 | 66+ | 18-55 | 56-65 | 66+ |
| Employment Setting | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Hospital | 57 | 24 | 19 | 44 | 23 | 33 | 59 | 20 | 20 |
| Ambulatory Care Setting | 55 | 30 | 15 | 73 | 20 | 7 | 75 | 19 | 6 |
| Public Health | 61 | 27 | 11 | 60 | 28 | 13 | 70 | 21 | 9 |
| Occupational Health | 72 | 20 | 8 | 55 | 27 | 18 | 72 | 17 | 10 |
| Insurance Claims/Benefits | 67 | 25 | 8 | 43 | 32 | 25 | 59 | 21 | 20 |
| Nursing Home/Extended Care | 62 | 27 | 11 | 62 | 29 | 10 | 73 | 17 | 10 |
| Home Health | 72 | 21 | 7 | 58 | 29 | 13 | 72 | 21 | 7 |
| Academic Setting | 66 | 23 | 12 | 51 | 30 | 20 | 56 | 30 | 14 |
| Correctional Facility | 64 | 17 | 19 | 37 | 33 | 31 | 39 | 30 | 31 |
| Community Health | 65 | 24 | 11 | 46 | 33 | 21 | 54 | 31 | 15 |
| Policy/Planning/Regulatory | 72 | 20 | 8 | 54 | 26 | 20 | 72 | 14 | 14 |
| Dialysis Center | 73 | 20 | 7 | 51 | 31 | 18 | 17 | 17 | 67 |
| Hospice | 63 | 25 | 13 | 75 | 20 | 6 | 67 | 25 | 8 |
| Other | 60 | 27 | 13 | 56 | 30 | 14 | 52 | 19 | 29 |

Table 4.7: Distribution of Nurses by Age Across Employment Settings in 2021-2022

(Source: NJBON Survey 2021-2022)

Appendices

Glossary

- Accelerated BSN Nursing Program (2nd Degree): A program of instruction that admits students who have already completed a bachelors or graduate degree in non-nursing discipline, and at completion, awards a baccalaureate degree in nursing and eligibility to apply for licensure as an RN. These fast-track entry-level baccalaureate programs take between 11 and 18 months to complete. (American Association of Colleges of Nursing)
- Admitted Applicants: A count of the individuals who received official notice from the program that they were invited to begin the nursing program during the reporting period.
- ADN Bridge, LPN to RN Program A program of instruction that is specifically designed to admit individuals licensed as practical nurses and, at completion, awards an associate degree in nursing or baccalaureate degree in nursing and eligibility to apply for licensure as a RN.
- ADN Program, Generic: A program of instruction that requires at least two years of fulltime college academic work generally within a junior or community college, the completion of which results in an associate degree (e.g., AS, AA, AAS, ADN, etc.) with a major in nursing and eligibility to apply for licensure as a RN.
- Available Seats: A count of the total number of seats available for newly admitted students.
- **Diploma Nursing Program:** A program of instruction that requires two to three years of full-time coursework, usually within a hospital-based structural unit, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as a RN.
- **DNP Program:** Practice-focused doctoral programs are designed to prepare experts in specialized advanced nursing practice. They focus heavily on practice that is innovative and evidencebased, reflecting the application of credible research findings. (American Association of Colleges of Nursing)
- Enrollees: A count of the Admitted Applicants who subsequently enrolled for the first time in the nursing program during the reporting period. This count should include only individuals who were still enrolled in a nursing course after the first two weeks of class.
- Enrollees (%): The percentage of Admitted Applicants who subsequently enrolled for the first time in the nursing program during the reporting period, relative to the total number of Admitted Applicants. This count should include only individuals who were still enrolled in a nursing course after the first two weeks of class.

- Faculty Vacancy: A vacant position for a faculty member that is being actively recruited as of the fall semester census date.
- Full-Time Faculty: Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed full-time as defined by the institution, hold academic rank, carry the full scope of faculty responsibility (e.g., teaching, advisement, committee work), and receive the rights and privileges associated with full time employment. These faculty may be tenured, tenure-track, or non-tenure track (given that there is a tenure system in the institution).
- **Graduates:** A count of the number of students who successfully completed the program requirements and were formally awarded the degree during the reporting period.
- License by Exam: A RN or LPN who has graduated from an approved school of nursing and has taken the NCLEX examination (either the NCLEX-RN or the NCLEX-PN respectively).
- LPN Program: A program of instruction that requires at least 44 weeks of full-time coursework, generally within a vocational/technical school or community/junior college setting, and the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an LPN.
- MSN Program, Clinical Track: A post-licensure master's program with emphasis on advanced clinical practice, including Nurse Practitioner, Nurse Anesthetist, Nurse Midwifery, and Clinical Nurse Specialist tracks.
- MSN Program, Non-Clinical Track: A post-licensure master's program with non-clinical emphasis, such as Nurse Educator and Management/Leadership tracks.
- PhD Program: Doctoral (Research-Focused) Program. A program of instruction that admits RNs and prepares nurse scientists and scholars, these programs focus heavily on scientific content and research methodology; and all require an original research project and the completion and defense of a dissertation or linked research papers. Most research-focused programs grant the Doctor of Philosophy degree (PhD), while a small percentage offers the Doctor of Nursing Science degree (DNS). (American Association of Colleges of Nursing).
- Post-licensure BSN Program (RN-BSN Program): A program of instruction that admits RNs with associate degrees or diplomas in nursing and awards a baccalaureate nursing degree.
- Pre-licensure BSN Program, Generic: A program of instruction to prepare registered nurses that admits students with no previous nursing education, the completion of which result in a baccalaureate degree (e.g., BA, BS, BSN, etc.) with a major in nursing and eligibility to apply for licensure as a RN. The program requires at least four years but not more than five years of full time college academic work within an educational institution or university.
- Pre-licensure MSN Program (Entry MSN): A program of instruction that admits students who have already completed a bachelor's degree in a non-nursing discipline. The program prepares graduates for entry into the profession, eligibility to apply for licensure as a RN, and upon completion awards a master's degree (e.g., MSN, MS, MA, etc.) in nursing.
- Qualified Applicants: A count of the individuals who submitted complete applications on time and who met all institutional requirements for formal admission to the nursing program during the reporting period.

• Total student enrollment: A count of the number of students enrolled in the fall semester, which include students at all points of the program's curriculum sequence, including newly enrolled, continuing, and students in their final semester or year.

Methodology

Supply

Supply data are derived both from the entrance of new nurses (educational capacity) into the system as well as the data on the current workforce.

Educational Capacity

An email letter describing the purpose of the New Jersey Educational Capacity Survey was sent to the dean of each nursing program in New Jersey with a portable document file (pdf) of the questionnaire and a glossary of terms. The questionnaire included all items from the nurse minimum dataset (N-MDS) as outlined by the National Forum of Nursing Workforce Centers. Additional questions were added to provide additional context. Data were reviewed for completeness and consistency and adjusted as appropriate. When discrepancies in the data were found, the school was contacted for clarification. This is self-reported data which can have errors in how the school interprets or completes the survey. In 2020, data were obtained for BSN and higher degree graduates using AACN as a source, and then merged with NJCCN data surveys. This was process was offered to baccalaureate and higher degrees as an option to reduce survey burden.

Current Workforce Data

Licensure is renewed for all nursing categories every two years. Thus, every year, half of the APN, RN, and LPN licensure data are collected through the New Jersey Board of Nursing (NJBON) licensure renewal using Nursys®. At the end of the two-year period, the data are merged and analyzed collectively. These data are voluntarily self-reported by the nurses in the state. The data are provided to the Center for analysis by the NJBON. Because it is self-reported, these data can have errors.

Demand

Demand data that determines workforce trends in real-time is important for predicting the job market. As such, the Center is using LightcastTM. LightcastTM draws on a comprehensive database of real-time demand on a national, state, and regional level. This database can track and analyze employer hiring activities by industry, occupation, education, and skills to help provide direction. LightcastTM obtains data on online job postings, which is mined and coded from each posting to describe skills, education, and experience. O*Net is the nation's primary source of occupational information and is developed under the sponsorship of the US Department of Labor/Employment and Training Administration. The O*Net Standard Occupational Classification (O*Net –SOC) is used to standardize the approach to postings for the data report.

The LightcastTM Occupation Taxonomy (LOT) is a proprietary taxonomy composed of four different levels (Career Area, Occupation Group, Occupation and Specialized Occupation). The Specialized Occupations within the taxonomy identify roles that are the same, across employers and geographies, regardless of job title. The next level up from Specialized Occupations are Occupations, which are composed of one or more Specialized Occupations that are slightly broader in nature and roughly equivalent to US O*NET-SOC detailed occupations and 4 digit ESCO codings. Occupation Groups combine similar Occupations in a logical group that are roughly equivalent to US SOC broad occupations and ESCO 3 digit codes. Finally Career Areas group occupation groups together into large

sectors with broad categories of labor. This is a great jumping off point to drill down if your aim is to understand broad labor market trends and patterns. Career Areas are roughly equivalent to US SOC major groups and ESCO 2 digit codes. This hierarchy allows you to start broad, but then "drill down" to a level of analysis that is far more granular and precise than most national occupation taxonomies can achieve. This level of granularity means that specific roles can be analyzed without the need to look at potentially confusing and messy job titles.

The Lightcast[™] Occupation Taxonomy is updated annually — infrequent enough to make it stable and useful for comparisons over time, but frequent enough to capture new, emerging roles as they formalize in the economy.

The Lightcast Occupation Taxonomy introduces several key benefits. Granular – The Lightcast Occupation Taxonomy provides significantly more granularity than federal taxonomies, while maintaining a level of aggregation that allows robust analysis. Users can create meaningful career ladders using Specialized Occupations, showing the skills and credentials required for each. Specific – The Specialized Occupations identify roles that are the same, across employers and geographies, regardless of job title. Job titles can cross occupations (as employers cast a wide net while advertising positions) so the Lightcast Occupation Taxonomy serves to close this language gap. Responsive – The Lightcast Occupation Taxonomy is updated annually — infrequent enough to make it stable and useful for comparisons over time, but frequent enough to capture new, emerging roles as they formalize in the economy. The O*Net –SOC taxonomy was used to standardize the occupation-specific indicators. The job ads were reviewed to eliminate any per diem positions, out-of-state commuters, temporary positions, and postings that had job openings outside of New Jersey.

Companies are labeled as a staffing company based on name, industry code, and qualitative research. For the purposes of job posting data, companies are labeled as staffing when they are a) true staffing companies, or b) job boards or brands maintained by staffing companies. This allows customers to filter results based on what they would like to see.

There are several limitations of LightcastTM data. A major limitation is that online job advertisements are only partially representative of the labor market and the demand for labor. Another limitation is that one job posting may advertise the need for multiple nurses, but will only register as a single post in the database. Duplicate postings are common and may be missed even though LightcastTM uses an algorithm to remove duplications. The use of O*Net-SOC also creates a limitation because it classifies most RNs under a single code (291141.00) and provides special codes only for Acute Care Nurses (291141.01) and Critical Care Nurses (291141.03), which creates challenges for breaking the codes down into more pinpointed specialties and subfields.

Projection of Nurse Retirement

The 2017 report had a complete analysis of projected nurse retirements, which can be found at http://www.njccn.org/wp-content/uploads/2019/08/11-Chapter-4-Projection.pdf. This year's publication builds on that report by providing an update based on 2021-2022 data.

References

American Association of Colleges of Nursing. (2021). Application, Baccalaureate, Masters, Doctoral, Faculty, Type of Nursing Program for the New Jersey Collaborating Center (SPSS v.28) [Data sets].

National Academies of Science, Engineering and Medicine. 2021. The future of nursing 2020-2030:charting a path to achieve health equity. Washington, D.C.: The National Academic Press. https://doi.org/10.17226/25982.

Lightcast[™]. (2022). https://www.lightcast.io.

NCSBN. (2022). 2021 NCLEX Examination Statistics. https://www.ncsbn.org/public-files/2021_NCLEXExamStats-final.pdf

NJ Administrative Code (N.J.A.C.), Title 13, Law and public safety, Chapter 37-6.4. (2021). Retrieved from https://www.njconsumeraffairs.gov/regulations/Chapter-37-New-Jersey-Board-of-Nursing.pdf

NJ Statutes Annotated, Title 45, Chapter 11, New Jersey Board of Nursing Statutes, 45:11-52 (1947 & amended 2019). https://www.njconsumeraffairs.gov/Statutes/nursinglaw.pdf

NSI nursing solutions (2022). 2022 NSI National Health Care Retention and RN Staffing Report. Retrieved from https://www.nsinursingsolutions.com/Documents/Library/NSI/National_Health_Care_Retention_Report.pdf

Nurses, Nursing Education, and Nursing Workforce: Definitions. (2016). http://www.iconsdata.org/definitions.html

Acknowledgements

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| Representing Practitioner of Direct Care |
| Christine Meny, BSN, RN, BC-NE |
| Representing the Home Care and Hospice Association of New Jersey |
| Tyla Minniear |
| Representing Consumer of Health- New Jersey Health Care Quality Institute |
| Mary Clare Smith, MSN, RN, CHSE |
| Representing the NJ State Nurses Association |
| Lauren Van Saders, DNP, GCNS-BC, APN-C |
| Representing the NJ State Nurses Association |
| Tracy Vitale DNP, RNC-OB, C-EFM, NE-BC |
| Representing the Organization of Nurse Leaders of New Jersey |
| Daria L. Waszak, DNP, RN, CNE, COHN-S, CEN |

Representing the NJ State Nurses Association

Special thanks to the New Jersey Board of Nursing

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