2022

Nursing Data & Analysis

Med/Surg N= 2122

rgency Room N= 336

ive Care Unit N= 300

se Supervisor N= 288

erating Room N= 262

rse Manager N= 262

Pediatrics N= 192

e and Hospice N= 173

Telemetry N=149

esia Care Unit N= 148

ase Manager N= 141

Float Pool N= 99

r and Delivery N= 99

Endoscopy N= 83

lurse Manager N=81

Oncology N= 81

e Day Surgery N= 54

Wellness Nurse N= 52

Dialysis N= 49

sive Care Unit N= 41

3

3%

3%

2%

2%

2%

1%

1%

1%

1%

1%

1%

1%

NJCCN

for nursing

Educational Capacity	**2019-2020**
Workforce Supply Data	**2020-2021**
Workforce Demand Data	**2020**

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. (2022). *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.

Contents

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

Executive Summary

The 2022 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 impacted the workforce now and into the future.

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 Nursing Workforce Projections

- The demand for nurses is outpacing supply. COVID-19 has stressed the labor market (NSI, 2021)

- Hospital turnover has increased this past year. In 2020, RN turnover in hospitals nationally is reported at 18.7% and in the Northeast, it is reported to be 13.2% (NSI,2021)

- National vacancy rates for RNs in 2020 is 9.9% (NSI, 2021)

- Due to COVID-19 travel nurse rates have jumped over 200%, placing a financial strain on hospitals and other settings (NSI, 2021)

- One-third of total baby boomer workforce began to retire in 2010. This is expected to continue through 2030 (Buerhaus et al., 2017)

- Rapid growth of the APN workforce has reduced the RN workforce 2010-2017 (Auerbach et al., 2020)

- Specialty nurse demand creating distribution inbalance such as in ICUs and emergency departments

- Number of RNs is expected to grow by 1 million through 2030

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 ad 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

Pre-Licensure

- ADN programs identifying lack of qualified faculty, clinical sites, and space greater than other programs

- BSN graduates find positions within 0-7 months; 59% of the LPNs find jobs within 12 months

- Pass rates for 1st time NCLEX RNs above US average; NCLEX LPNs below national average by 5%

- Diversity highest in LPN-RN bridge programs

Workforce

- RN workforce primarily White/Caucasian, 68% of the RN workforce have a BSN or higher and are hospital based.

- APNs primarily White/Caucasian, 45% hospital based

- LPNs more diverse and are working in nursing homes and home care primarily

- Retirements while still below the projected retirement percentage expected for 2021 shows a continued increase as compared to the 2018 baseline. This is consistent with the national data

Demand Projections for New Jersey

- RN and LPN postings have increased, and NP postings decreased between 2019-2020

- Demand has greatly increased for RNs especially in the medical-surgical areas

- Demand for NJ LPNs, RNs and APNs continue to be considered average as compared to the national average

Initiatives in New Jersey

New Graduate Residency Program

In 2020 and 2021 new graduates entered the workforce at an unprecedented time due to the pandemic. These nurses needed the support of organization as they transitioned into practice. In 2020, NJCCN initiated a Nurse Residency Collaborative with 19 hospitals in New Jersey. The Vizient/AACN model was the framework for this residency program. Fifteen of the 19 hospitals also were included in the US Department of Labor apprenticeship model. This program requires 144 hours of didactic, 2000 hours of mentored or precepted time. Funding for this program was provided by the NJDOL and workforce development apprenticeship office over the last 2 years. Over 700 nurses have been enrolled in the residency to date. From June 2020 to June of 2021 those residents entering into this program

had an 11% turnover rate, while the national turnover rate for the first year is 24% (NSI, 2021). This data shows that the residency program has helped retain new graduates at a higher rate and had cost savings to hospitals. Eighteen hospitals are continuing in the residency for 2021 at this time further analysis is pending.

Future of Nursing 2020-2030 Summit

A summit was held on November 5th, 2021 in NJ with a focus on several recommendations including workforce deficits, faculty shortages, health and well-being of nurses and the need to make permanent the executive orders and other practices that were successful during the pandemic. NJCCN/NJAC, and NJNI brought together professional nursing organizations, academic councils, trade organizations, the department of labor, unions and community organizations to develop shared agendas to create a strategic direction for NJ. This will be an ongoing process over the next 18 months and will be posted on the NJCCN website.

Licensed Practical Nurse Research

Licensed Practical Nurses (LPNs) are essential and demographically diverse members of the nursing workforce in the United States and New Jersey (NJ). To understand the current practice of LPNs in NJ, the NJCCN conducted a mixed method study funded by the National Council of State Board of Nursing. The purpose of this study was to 1) describe and compare the perceptions of LPNs and LPN employers about the LPN role and job functions across setting, and 2) describe the nursing activities and job satisfaction of LPNs in NJ and for LPNs working in nursing homes to examine their perception of Patient Safety Culture (PSC). Our qualitative findings have been published in the April 2021 issue of the *Journal of Nursing Regulation*.

For the quantitative study, 20,773 LPNs were sent a survey about their nursing activities, job satisfaction, and for LPNs working in nursing homes the Agency for Healthcare Research and Quality Nursing Home Survey on Patient Safety Culture (NHSPSC). The 804 LPN respondents were representative of the NJ LPN workforce, with no statistically significant difference in demographics of our respondents and the LPNs respondents in 2019–2020 NJ license renewal survey. The results revealed that LPNs are independently completing a comprehensive admission assessment (47%, n=379) and formulating careplans (34%, n=270). LPNs working in nursing homes were less satisfied compared with LPNs working in other settings (p<0.0001). For LPNs working in nursing homes, the NHSPSC average percent positive response for the 12 PSC composites were all lower than the 2019 national user database of nursing homes who used the NHSPSC, with staffing as the lowest composite.

As the mainstay in nursing homes LPNs indicated the PSC needs improvement. LPNs have expanded their role working beyond their scope of practice as written by the NJ Board of Nursing (BON). They are independently performing assessments and formulating careplans, despite the NJ BON administrative code clearly identifying these as non-delegable nursing tasks. To ensure a clear understanding of the LPN role and scope of practice, formal workshops discussing the nurse practice act should be conducted both at the state level through the BON and at practice settings. Now with the COVID-19 pandemic putting a spotlight on the issues in nursing homes, it is an opportune time to establish a positive work environment to foster a culture of quality and safety in nursing homes.

COVID-19 Research

In October 2020, with funding received from the Rutgers University Center for COVID-19 Response and Pandemic Preparedness, a cross-sectional survey of frontline Registered Nurse (RNs) who reported working in a New Jersey acute care hospital during the peak of the first wave of the pandemic (March 13, 2020 until June 1, 2020) was conducted. RNs were queried about their perspectives regarding staffing, personal protective equipment (PPE) adequacy, and the work environment based on their unit in which they worked. Burnout and intent to leave within the next 12 months were also examined. 3,030 RNs met the inclusion criteria and completed the survey. Major findings from this study included:

- 87.2% of the RNs reported rationing, reusing, or using their own PPE

- 80.0% of the RNs reported high physical exhaustion with a mean score of 8 out of 10 with 10 being severely physically exhausted

- 64.3% of the RNs reported burnout with over 10% of those RNs reporting the urgent need for mental health interventions

- 36.5% of the RNs reported their intent to leave the hospital within 12 months.

During the first peak, the increased staffing ratios, the lack of PPE and physical exhaustion from proning patients, donning and doffing PPE contributed to higher levels of self-reported burnout for RNs who worked in all specialties. Therefore, it is essential that evidence-based mental health interventions are developed and continued to be offered to acute care RNs to prevent the adverse effects of burnout on the RNs as well as the patients they care for.

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 2019-2020 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 Licensed Practical Nurse (LPN) education programs. The third section describes faculty employment and demographic data.

The COVID-19 Pandemic had an impact across all nursing programs (LPN, Diploma, ADN, Baccalaureate and Higher). Below is a summary of comments from these programs:

Cons

Loss of in-person learning resulted in:

- Higher costs to academic programs in supplies and technologies (PPE, screening, and virtual platforms)

- Some student struggled not being able to adapt to new learning modalities

- Fears from some faculty of delivering content online versus in-person

- Concern from faculty of pass rates of students from learning remotely

- Some students needed to take a leave due to changes to online classes and lack of access to technology

- Loss of clinical sites resulted in increased nursing lab time

Pros

- Faculty and students were resourceful in educational modalities

- Increased use of simulation, synchronous and asynchronous learning

- Increased comfort with technology for faculty and students

- Distance learning became a more accepted modality

Educational Capacity Report-RN

Overview

Figure 1.1: Pre-Licensure and Post-Licensure RN Nursing Program Types
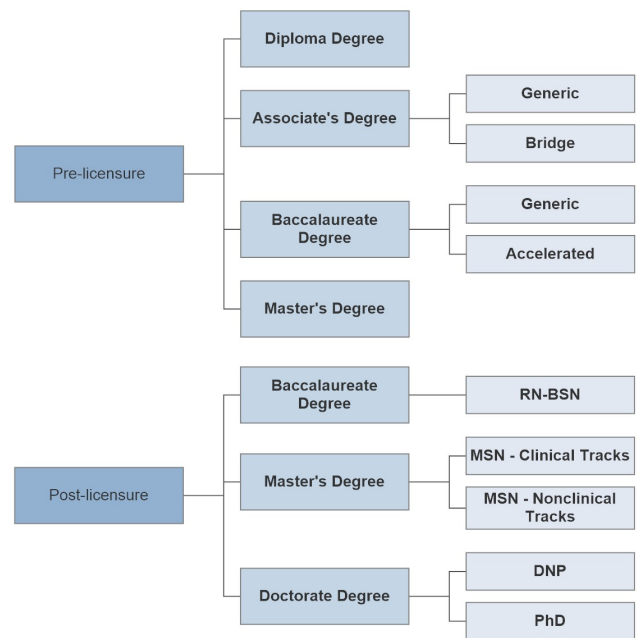
There are 48 schools in New Jersey that provide RN education (pre-licensure and post-licensure). **This year, all 48 schools provided data on their educational capacity.** Pre-licensure programs qualify graduates to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN). 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 though 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) in clinical or non-clinical tracks; 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, 13 LPN-RN programs)
20 Baccalaureate Degree Schools (17 Generic Programs, 13 Accelerated Programs)
2 Pre-licensure Masters programs
Post-licensure Nursing Programs
17 RN-BSN
11 Post-licensure Master's, Clinical Tracks
13 Post-licensure Master's, Non-Clinical Tracks
12 Doctorate of Nursing Practice
3 Doctor of Philosophy (PhD) in Nursing

Table 1.2: Federal tax classification status

	DIP	ADN	BSN and Higher Degree
	N=5	N=21	N=22
Public	1 (20%)	18 (86%)	12 (56%)
Private/Secular	0 (0%)	3 (14%)	6 (27%)
Private/Religious	4 (80%)	0 (0%)	4 (18%)

N is the number of respondent schools.

In the Educational Capacity Survey, NJCCN presented possible reasons for why respondents rejected qualified applicants. As shown in **Table 1.3**, the reasons for rejection include lack of classroom space, lack of clinical sites, and lack of qualified faculty, based on the program. 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=21	N=22
No applications rejected	2 (40%)	4 (24%)	8 (36%)
Lack of qualified faculty	0 (0%)	6 (35%)	2 (9%)
Lack of clinical space	0 (0%)	5 (29%)	3 (14%)
Limited classroom space	2 (40%)	9 (53%)	3 (14%)
Lack of clinical sites	1 (20%)	9 (53%)	3 (14%)
Other	0 (0%)	4 (24%)	3 (14%)

N is the number of respondent schools.

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 that there is a shift in the format for 2019-2020. This may be due to the pandemic, where there was less available sites. Diploma, ADN, and ADN Bridge have more hybrid formats this year.

Table 1.4: Delivery format of pre-licensure programs

	DIP	ADN Generic	ADN Bridge	BSN Generic	BSN Accel.	MSN
Face-to-Face	3	9	7	11	6	2
Hybrid	3	11	10	7	6	1

In NJCCN's Educational Capacity Survey, clinical practice time may be hands-on or set in skill lab, simulation lab, 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.

Table 1.5: Format of Clinical Practice Time (%)

	DIP N=5	ADN Generic N=17	ADN Bridge N=13	BSN Generic N=17	BSN Accel. N=13	MSN N=2
Skill Lab	14%	17%	13%	20%	13%	15%
Simulation Lab	9%	14%	11%	14%	12%	13%
Hands-On	77%	64%	71%	64%	72%	73%
Other	0%	6%	5%	1%	3%	0%

N is the number of respondent programs.

Table 1.6 shows the time elapsed between student graduation and employment as a nurse. According to **Table 1.6**, 53% of graduates from Generic BSN and 64% of Accelerated BSN programs secured their first job within 0-7 months of graduation. After 12 months, only 6% of BSN Generic and 12% of BSN Accelerated took longer to find a job. Graduates from Diploma and ADN programs took longer. The data indicate that 91% of Diploma graduates, 30% of Generic ADN graduates, and 46% of ADN Bridge graduates took 8 or more months to find employment. This is consistent with national trends. (NCSBN, 2021).

Table 1.6: Time to employment after graduation (%)

	DIP N=630	ADN Generic N=1303	ADN Bridge N=466	BSN Generic N=1,557	BSN Acc. N=530	MSN N=72
0-3 Months	0%	9%	7%	19%	25%	8%
4-7 Months	5%	25%	8%	34%	39%	38%
8-11 Months	28%	23%	25%	3%	2%	5%
12+ Months	63%	7%	21%	6%	12%	0%
Unknown/Do not Track	4%	36%	39%	38%	23%	50%

N is the number of graduates.

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 2020 academic year and four-year trended data for 2017-2020.

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.

Table 1.7: Pre-licensure student application, admission, and enrollment 2020

	DIP	ADN Generic	ADN Bridge	BSN Generic & Acc.	MSN
	N=5	N=17	N=13	N=20	N=2
Available	787	2,052	914	2,302	75
Qualified	1,129	3,345	1,672	6,905	52
Admitted	897 (79%)	1,995 (60%)	844 (50%)	5,549 (80%)	52 (100%)
Enrollees	831 (93%)	1,885 (94%)	783 (93%)	1,924 (35%)	48 (92%)

N is the number of respondent schools.

Table 1.8: Pre-licensure student application, admission, and enrollment trend 2017-2020

	2017 N=41	2018 N=42	2019 N=45	2020 N=48
Available	5,289	5,908	5,766	6,130
Qualified	9,113	11,528	12,142	13,103
Admitted	7,140	8,329	8,131	9,337
Enrollees	4,549 (64%)	4,884 (59%)	4,787 (59%)	5,471 (59%)

N is the number of respondent schools.

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.

Table 1.9: Pre-licensure total student enrollment trend 2017-2020

	2017 N=41	2018 N=42	2019 N=45	2020 N=48
DIP	3,055 (25%)	1,584 (14%)	1,449 (13%)	1,584(13%)
ADN	3,931 (32%)	4,100 (35%)	3,465 (31%)	4,478 (38%)
BSN	5,246 (43%)	5,861 (51%)	6,179 (56%)	5,646 (48%)
MSN	43 (0%)	42 (0%)	27 (0%)	47 (0%)
Total	**12,275**	**11,587**	**11,120**	**11,755**

N is the number of respondent schools.

Table 1.10: Pre-licensure student graduation trend 2017-2020

	2017 N=41	2018 N=42	2019 N=45	2020 N=48
DIP	457	384	473	630
ADN Generic	1,008	1,074	977	1,303
ADN Bridge	337	628	490	466
BSN Generic	966	975	1,426	1,495
BSN Accelerated	330	291	498	588
MSN	24	22	25	14
Total	**3,122**	**3,374**	**3,889**	**4,496**

N is the number of respondent schools.

There were a total of 4,496 graduates from pre-licensure nursing programs in 2020. This includes 630 Diploma graduates, 1,303 from generic ADN programs, 466 from ADN Bridge programs, 1,495 from generic BSN programs, 588 from Accelerated BSN programs, and 14 from the pre-licensure MSN program. The data in **Table 1.10** show a 44.5% increase in the number of pre-licensure graduates from 2017-2020. This increase is primarily from Diploma and ADN Generic programs. **This is also partially due to more schools reporting at the ADN level.**

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 2020 (NCSBN, 2021). These data represent all NJ schools. NJ was 1% higher than the U.S. in pass rates for RNs.

Table 1.11: First-Time, NJ Educated Candidates Taking the NCLEX-RN® in 2020

	Candidates	Total Passed	Pass Rate (%)
Diploma	504	445	88%
ADN	1,719	1,450	84%
BSN	1,726	1,566	91%
Total	**3,949**	**3,461**	**88%**

Table 1.12: First-Time, U.S. Educated Candidates Taking the NCLEX-RN® in 2020

	Candidates	Total Passed	Pass Rate (%)
Diploma	2,183	1,883	86%
ADN	86,508	71,642	83%
BSN	88,635	80,024	90%
Total	**177,326**	**153,549**	**87%**

Pre-Licensure Student Demographics

Table 1.13 describes pre-licensure student student demographics. This is inclusive of all students matriculating in the 2020 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".

Table 1.13: Pre-licensure student demographics

	DIP N=1,584	ADN Generic N=3,428	ADN Bridge N=1,050	BSN Generic N=5,646	BSN Accel. N=1,544	MSN N=47
Gender						
Female	1,355 (86%)	2,711 (79%)	941 (90%)	4,895 (87%)	1,297 (84%)	41 (87%)
Male	229 (14%)	649 (19%)	75 (7%)	751 (13%)	244 (16%)	6 (13%)
Transgender	0 (0%)	10 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DND	0 (0%)	58 (2%)	34 (0%)	0 (0%)	3 (1%)	0 (0%)
Race/Ethnicity						
American Indian	4 (0%)	27 (1%)	3 (0%)	6 (0%)	1 (0%)	0 (0%)
Asian	147 (9%)	331 (10%)	65 (6%)	836 (15%)	163 (11%)	1 (2%)
Black/African Am.	448 (28%)	500 (15%)	604 (58%)	689 (12%)	219 (14%)	1 (2%)
Hawaiian/Pacific Isl.	25 (2%)	11 (0%)	6 (1%)	40 (1%)	13 (1%)	0 (0%)
White/Caucasian	431 (27%)	1,662 (48%)	144 (14%)	2,620 (46%)	695 (45%)	23(49%)
Hispanic/Latino	393 (25%)	617 (18%)	128 (12%)	1,022 (18%)	274 (18%)	10 (21%)
Other	14 (1%)	26 (1%)	1 (0%)	73 (1%)	15 (1%)	2 (4%)
2+ Races	37 (2%)	59 (2%)	17 (2%)	288 (5%)	41 (3%)	4 (9%)
DND	85 (5%)	195 (6%)	82 (8%)	72 (1%)	123 (8%)	6 (13%)
Age						
17-20	34 (2%)	266 (8%)	3 (0%)	2,548 (45%)	1 (0%)	0 (0%)
21-25	463 (29%)	1,218 (36%)	93 (9%)	1,816 (32%)	305 (20%)	24 (51%)
26-30	443 (28%)	789 (23%)	225 (21%)	644 (11%)	199 (13%)	9 (19%)
31-40	452 (29%)	788 (23%)	434 (41%)	338 (6%)	140 (9%)	12 (26%)
41-50	153 (10%)	290 (8%)	211 (20%)	112 (2%)	33 (2%)	2 (4%)
51-60	39 (3%)	70 (2%)	71 (7%)	34 (1%)	19 (1%)	0 (0%)
61+	0 (0%)	5 (0%)	3 (0%)	3 (0%)	0 (0%)	0 (0%)
DND	0 (0%)	2 (0%)	10 (1%)	151 (3%)	847 (55%)	0 (0%)
Mean Age	**30.8**	**29.3**	**36.2**	**22.9**	**28.9**	**28.1**

N is the number of students.

Pre-licensure nursing students are primarily female at 85%. Male students account for 15% of the nursing workforce. Most students across all levels of pre-licensure education are White/Caucasian (42%), followed by Black/African American (19%). 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.

Table 1.14: Pre-licensure student demographic trend 2017-2020

	2017 N=41	2018 N=42	2019 N=45	2020 N=48
Gender				
Female	10,440 (85%)	9,883 (85%)	9,645 (87%)	11,240 (85%)
Male	1,748 (14%)	1,578 (14%)	1,448 (13%)	1,954 (15%)
Transgender	3 (0%)	0 (0%)	0 (0%)	10 (0%)
DND	84 (1%)	126 (1%)	28 (0%)	95 (1%)
Race/Ethnicity				
American Indian	32 (0%)	40 (0%)	29 (0%)	41 (0%)
Asian	1,305 (11%)	1,365 (12%)	1,362 (12%)	1,543 (12%)
Black/African Am.	2,574 (21%)	2,205 (19%)	2,062 (19%)	2,461 (19%)
Hawaiian/Pacific Isl.	39 (0%)	71 (1%)	60 (1%)	95 (1%)
White/Caucasian	4,870 (40%)	4,989 (43%)	4,813 (43%)	5,575 (42%)
Hispanic/Latino	2,163 (18%)	1,909 (16%)	1,904 (17%)	2,444 (18%)
Other	72 (1%)	59 (1%)	95 (1%)	131 (1%)
2+ Races	368 (3%)	385 (3%)	316 (3%)	446 (3%)
DND	815 (7%)	564 (5%)	479 (4%)	563 (4%)
Age				
17-20	2,737 (22%)	2,800 (24%)	2,810 (25%)	2,852 (21%)
21-25	3,608 (29%)	3,797 (33%)	3,570 (32%)	3,919 (29%)
26-30	2,049 (17%)	1,984 (17%)	1,841 (17%)	2,309 (17%)
31-40	1,965 (16%)	1,878 (16%)	1,782 (16%)	2,164 (16%)
41-50	848 (7%)	845 (7%)	761 (7%)	801 (6%)
51-60	178 (1%)	164 (1%)	181 (2%)	233 (2%)
61+	10 (0%)	11 (0%)	21 (0%)	11 (0%)
DND	880 (7%)	108 (1%)	154 (1%)	1,010 (8%)
Total Students	**12,275**	**11,587**	**11,120**	**13,299**

N is the number of respondent schools across all pre-licensure settings.

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.

Table 1.15: Delivery format of post-licensure programs

	RN-BSN	MSN Clinical	MSN Non-Clinical	DNP	PhD
	N=17	N=11	N=13	N=12	N=3
Exclusively Online	7	4	5	3	0
Face-to-Face	2	3	2	2	2
Hybrid	8	4	6	5	2

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 2020 academic year and four-year trended data for 2017-2020.

Table 1.16: Post-licensure student application, admission, and enrollment 2020

	RN-BSN*	MSN Clinical	MSN Non-Clinical	DNP	PhD
	N=17	N=11	N=13	N=12	N=3
Available	428	356	395	378	10
Qualified	1,169	451	392	338	11
Admitted	1,169 (100%)	451 (100%)	324 (83%)	338 (100%)	11 (100%)
Enrollees	750 (64%)	353 (78%)	219 (68%)	253 (75%)	9 (82%)

N is the number of respondent programs.

*For RN-BSN students, the number of enrollees are greater than the number of available seats. The justification for the higher number of enrollees is because 7 of the schools reported unlimited available seats. Therefore, to accurately reflect the true count, we deleted schools that responded with unlimited seats available.

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.

Table 1.17: Post-licensure student application, admission, and enrollment trend 2017-2020

	2017 N=18	2018 N=20	2019 N=21	2020 N=19
Available	4,548	6,310	7,875	1,567
Qualified	2,311	2,299	2,245	2,361
Admitted (%)	2,207 (95%)	2,211 (96%)	2,137 (95%)	2,239 (95%)
Enrollees (%)	1,398 (63%)	1,447 (65%)	1,427 (67%)	1,584 (71%)

N is the number of respondent schools.

Table 1.18: Post-licensure total student enrollment trend 2017-2020

	2017 N=18	2018 N=20	2019 N=21	2020 N=19
RN-BSN	2,140 (47%)	1,947 (49%)	1,600 (38%)	1,544 (41%)
MSN Clinical	1,185 (26%)	825 (21%)	1,135 (27%)	825 (22%)
MSN Non-Clinical	489 (11%)	410 (10%)	574 (14%)	508 (13%)
DNP	704 (15%)	738 (18%)	811 (19%)	868 (23%)
PhD	82 (2%)	85 (2%)	70 (2%)	60 (2%)
Total	**4,600**	**4,005**	**4,190**	**3,805**

N is the number of schools.

The trend in **Table 1.19** shows there is a decrease in the graduate rate for 2020 compared to prior years.

Table 1.19: Post-licensure graduation trend 2017-2020

	2017 N=18	2018 N=20	2019 N=21	2020 N=19
RN-BSN	662	745	732	518
MSN	469	377	435	416
DNP	116	137	190	155
PhD	3	10	8	4
Total	**1,250**	**1,269**	**1,365**	**1,093**

N is the number of respondent schools.

Post-Licensure Student Demographics

Table 1.20 describes post-licensure student student demographics. This is inclusive of all students matriculating in the 2020 academic year, from new enrollees to those who are about to graduate.

Table 1.20: Post-licensure student demographics

	RN-BSN N=1,544	MSN Clinical N=825	MSN Non-Clinical N=508	DNP N=868	PhD N=60
Gender					
Female	1,297 (84%)	721 (87%)	442 (87%)	741 (85%)	54 (90%)
Male	244 (16%)	103 (12%)	46 (9%)	127 (15%)	6 (10%)
Transgender	0 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)
DND	3 (0%)	0 (0%)	20 (4%)	0 (0%)	0 (0%)
Race/Ethnicity					
American Indian	1 (0%)	2 (0%)	2 (0%)	2 (0%)	0 (0%)
Asian	163 (11%)	115 (14%)	67 (13%)	126 (15%)	6 (10%)
Black/African Am.	219 (14%)	58 (7%)	65 (13%)	195 (23%)	10 (17%)
Hawaiian/Pacific Isl.	13 (1%)	5 (1%)	8 (2%)	0 (0%)	0 (0%)
White/Caucasian	695 (45%)	420 (51%)	255 (50%)	385 (44%)	30 (50%)
Hispanic/Latino	274 (18%)	93 (11%)	57 (11%)	110 (13%)	6 (10%)
Other	15 (1%)	4 (1%)	2 (0%)	2 (0%)	5 (8%)
2+ Races	41 (3%)	41 (5%)	5 (1%)	19 (2%)	2 (3%)
DND	123 (8%)	87 (11%)	47 (9%)	29 (3%)	1 (2%)
Age					
17-20	7 (1%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)
21-25	171 (11%)	151 (18%)	12 (2%)	80 (9%)	0 (0%)
26-30	260 (17%)	147 (18%)	82 (16%)	241 (28%)	3 (5%)
31-40	423 (27%)	289 (35%)	92 (18%)	273 (32%)	30 (50%)
41-50	253 (16%)	198 (24%)	116 (23%)	138 (16%)	18 (30%)
51-60	144 (9%)	28 (3%)	52 (10%)	81 (9%)	6 (10%)
61+	17 (1%)	4 (1%)	8 (2%)	12 (1%)	1 (2%)
DND	269 (17%)	8 (1%)	146 (29%)	42 (5%)	2 (3%)
Mean Age	**36.8**	**35.1**	**40.0**	**36.1**	**40.7**

N is the number of students.

Post-licensure nursing students are primarily female and White/Caucasian. The mean age of post-licensure students is 37.7. The mean age was calculated by weighting the median values of each age range. Table 1.21 shows that in 2020, 47% of post-licensure students were White/Caucasian, 14% Black/African American, 13% Asian, and 14% Hispanic/Latino.

Table 1.21: Post-licensure student demographic trend 2017-2020

	2017 N=18	2018 N=20	2019 N=21	2020 N=19
Gender				
Female	3,709 (81%)	3,434 (86%)	3,629 (87%)	3,255 (86%)
Male	482 (10%)	533 (13%)	550 (13%)	526 (14%)
Transgender	0 (0%)	1 (0%)	0 (0%)	1 (0%)
DND	409 (9%)	37 (1%)	11 (0%)	23 (1%)
Race/Ethnicity				
American Indian	4 (0%)	5 (0%)	7 (0%)	7 (0%)
Asian	500 (11%)	500 (12%)	549 (13%)	477 (13%)
Black/African Am.	600 (13%)	593 (15%)	609 (15%)	547 (14%)
Hawaiian/Pacific Isl.	55 (1%)	37 (0%)	39 (1%)	26 (1%)
White/Caucasian	1,946 (42%)	1,969 (50%)	2,012 (48%)	1,785 (47%)
Hispanic/Latino	435 (9%)	456 (11%)	514 (12%)	540 (14%)
Other	15 (0%)	24 (0%)	8 (0%)	28 (1%)
2+ Races	59 (1%)	73 (2%)	58 (1%)	108 (3%)
DND	986 (21%)	640 (9%)	394 (9%)	287 (8%)
Age				
17-20	30 (1%)	2 (0%)	3 (0%)	8 (0%)
21-25	301 (7%)	434 (11%)	303 (7%)	414 (11%)
26-30	790 (17%)	790 (20%)	714 (17%)	733 (19%)
31-40	1,177 (26%)	1,213 (30%)	1,035 (25%)	1,107 (29%)
41-50	959 (21%)	978 (24%)	804 (19%)	723 (19%)
51-60	570 (12%)	484 (12%)	439 (10%)	311 (8%)
61+	57 (1%)	61 (2%)	58 (1%)	42 (1%)
DND	716 (16%)	43 (1%)	834 (20%)	467 (12%)
Total Students	**4,600**	**4,005**	**4,190**	**3,805**

N is the number of respondent schools.

Table 1.22: New Jersey's RN Education Programs

School Name	County	Diploma	ADN Bridge	ADN Generic	BSN Generic	BSN Accel.	Pre MSN	RN-BSN	Post MSN	DNP	PhD
Atlantic Cape Community College	Atlantic		x	x							
Bergen Community College	Bergen			x							
Berkeley College	Passaic					x					
Bloomfield College	Essex				x			x	x		
Brookdale Community College	Monmouth		x	x							
Caldwell University	Essex				x	x		x	x		
Chamberlain University	Middlesex				x						
College of Saint Elizabeth	Morris				x			x	x		
County College of Morris	Morris		x	x							
Eastern International College	Essex			x							
Eastern International College	Hudson			x							
Eastwick College	Bergen		x								
Essex County College	Essex		x	x							
Fairleigh Dickinson	Bergen				x	x		x	x	x	
Felician University	Bergen				x	x		x	x	x	
Georgian Court University	Ocean				x	x					
Holy Name Medical Center	Bergen	x									
Hudson County College	Hudson			x							
Jersey College at Ewing	Mercer			x							
Jersey College at Teterboro	Bergen			x							
JFK Muhlenberg Snyder	Middlesex	x									
Kean University	Union							x	x	x	x*
Mercer County Community College	Mercer			x							
Middlesex County College	Middlesex			x							
Monmouth University	Monmouth				x			x	x	x	
Montclair State University	Essex				x		x	x	x		
New Jersey City University	Hudson					x		x	x		
Ocean County College	Ocean			x							
Our Lady Lourdes	Camden	x									
Passaic County Community College	Passaic		x	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	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, Camden	Camden				x	x		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			x	x		
Thomas Edison State University	Mercer					x		x	x	x	
Trinitas School of Nursing	Union	x									
Warren County Community College	Warren			x							
William Patterson University	Passaic				x	x		x	x	x	

*School closed PhD program in 2018.

Educational Capacity Report-LPN

Overview

This report includes data for 25 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 25 respondent schools, only 80% are currently accredited.

Table 1.23: Federal Tax Classification

	LPN N=25
Public	13 (52%)
Private/For-Profit	9 (36%)
Private/Non-Profit	2 (8%)
Other	1 (4%)

N is the number of respondent schools.

Table 1.24: Accreditation Status

	LPN N=25
Accredited	20 (80%)
Not Accredited/In Progress	5 (20%)

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

	LPN N=25
No applications rejected	16 (64%)
Lack of qualified faculty	2 (8%)
Lack of clinical space	2 (8%)
Limited classroom space	5 (20%)
Lack of clinical sites	5 (20%)
Other	1 (4%)

N is the number of respondent schools.

Program Characteristics

This section presents information about the format and content of New Jersey's LPN education programs. Data in **Table 1.26** indicate that programs are primarily face-to-face. Fifty-two percent of schools offer hybrid programs.

Table 1.26: Delivery format of LPN programs

	LPN N=25
Face-to-Face	15 (60%)
Hybrid	13 (52%)
Online	1 (4%)

N is the number of respondent schools.

In NJCCN's Educational Capacity Survey, clinical practice time may be hands-on or conducted in skill lab, simulation lab, or other settings. As shown in **Table 1.27**, 53% of clinical practice time is hands-on, which is 5% less than previous years.

Table 1.27: Format of clinical practice time (%)

	LPN N=25
Skill Lab	24%
Simulation Lab	20%
Hands-on	53%
Other	3%

N is the number of respondent schools.

As shown in **Table 1.28**, graduates (52%) secured their first job within 0-7 months of graduation.

Table 1.28: Time to employment after graduation (%)

	LPN N=25
0-3 Months Post Graduation	32%
4-7 Months Post Graduation	20%
8-11 Months Post Graduation	7%
12+ Months Post Graduation	12%
Unknown/ Do not Track	30%

N is the number of respondent schools.

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. Number of graduates from 2017-2020 have increased 16% despite the number of respondent schools decreasing from 31 in 2017 to 25 in 2020.

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.

Table 1.29: LPN student application, admission, and enrollment 2020

	2017 N=31	2018 N=31	2019 N=25	2020 N=25
Available	3,007	2,612	2,629	2,877
Qualified	3,116	3,170	3,017	3,459
Admitted	2,232 (72%)	2,352 (74%)	2,219 (74%)	2,436 (70%)
Enrollees	1,982 (89%)	1,897 (81%)	1,996 (90%)	2,188 (90%)
Graduates	1,220	1,323	1,340	1,412

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 2020 (NCSBN, 2021). 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 2020

Candidates	Total Passed	Pass Rate (%)
1,399	1,094	78%

Table 1.31: First-Time, U.S. Educated Candidates Taking the NCLEX-PN in 2020

Candidates	Total Passed	Pass Rate (%)
45,661	37,944	83%

LPN Student Demographics

Table 1.32 shows four years of LPN student demographic data from 2017-2020. This is inclusive of all students matriculating in the 2020 academic year, from new enrollees to those who are about to graduate. Students are primarily female and Black/African American. The mean age for LPN students in 2020 was 31.8. The mean age was calculated by weighting the median values of each age range.

Table 1.32: LPN student demographics trend 2017-2020

	2017 N=2,363	2018 N=2,438	2019 N=2,672	2020 N=2,681
Gender				
Female	2,081 (88%)	2,178 (89%)	2,371 (89%)	2,351 (88%)
Male	281 (12%)	257 (11%)	300 (11%)	330 (12%)
Transgender	1 (0%)	0 (0%)	0 (0%)	0 (0%)
DND	0 (0%)	3 (0%)	1 (0%)	0 (0%)
Race/Ethnicity				
American Indian	7 (0%)	14 (1%)	6 (0%)	1 (0%)
Asian	119 (5%)	123 (5%)	130 (5%)	142 (5%)
Black/African American	1,199 (51%)	1,214 (50%)	1,322 (49%)	1,293 (48%)
Hawaiian/Pacific Islander	15 (1%)	6 (0%)	4 (0%)	65 (2%)
White/Caucasian	420 (18%)	427 (18%)	404 (15%)	371 (14%)
Hispanic/Latino	396 (17%)	449 (18%)	530 (20%)	530 (20%)
Other	19 (1%)	15 (1%)	28 (1%)	15 (1%)
2+ Races	21 (1%)	41 (2%)	43 (2%)	54 (2%)
DND	167 (7%)	149 (6%)	205 (8%)	210 (8%)
Age				
17-20	127 (1%)	142 (6%)	105 (4%)	108 (4%)
21-25	562 (24%)	536 (22%)	554 (21%)	574 (21%)
26-30	608 (26%)	620 (25%)	635 (24%)	787 (29%)
31-40	641 (27%)	729 (30%)	831 (31%)	790 (29%)
41-50	314 (13%)	316 (13%)	305 (11%)	291 (11%)
51-60	93 (4%)	85 (4%)	151 (6%)	101 (4%)
61+	4 (0%)	2 (0%)	16 (1%)	9 (0%)
DND	14 (1%)	8 (0%)	75 (3%)	21 (1%)

N is the number of students.

Table 1.33: New Jersey's LPN Education Programs

School Name	County
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

*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.

Table 1.34: RN Faculty Positions and Vacancies

	DIP	ADN	BSN & Higher	Total
Full-time positions available	74	190	377	641
Full-time faculty employed	72	172	348	592
Full-time position vacancies	2 (3%)	18 (9%)	29 (8%)	49 (8%)

Table 1.35: RN Program Faculty Vacancy Trend 2017-2020

	2017 N=43	2018 N=45	2019 N=45	2020 N=48
DIP	5	3	1	2
ADN	10	8	15	18
BSN & Higher	36	46	54	29
Total	**51**	**57**	**70**	**49**

N is the number of respondent schools.

Table 1.36: RN Program Faculty Employment Trend 2017-2020

	2017 N=43	2018 N=45	2019 N=45	2020 N=48
DIP	69	71	73	72
ADN	155	159	140	172
BSN & Higher	354	349	380	348
Total	**578**	**579**	**593**	**592**

N is the number of respondent schools.

Table 1.36 shows the trend of full-time faculty employed since 2017. **Figure 1.2** shows the percentage of RN classes taught by adjuncts by program level. In 2020, the percentage of classes taught by adjuncts were 21.7% for RN to BSN, 17.9% for ADN Generic and 14.8% 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 2020

RN-BSN	21.7%
ADN Generic	17.9%
BSN Generic	14.8%
MSN Non-Clinical	14.0%
MSN Clinical	13.2%
DNP	12.8%
BSN Accel.	10.7%
ADN Accel.	9.1%
Diploma	4.0%
Pre-Licensure MSN	2.3%
LPN-BSN	0.0%
PHD	0.0%
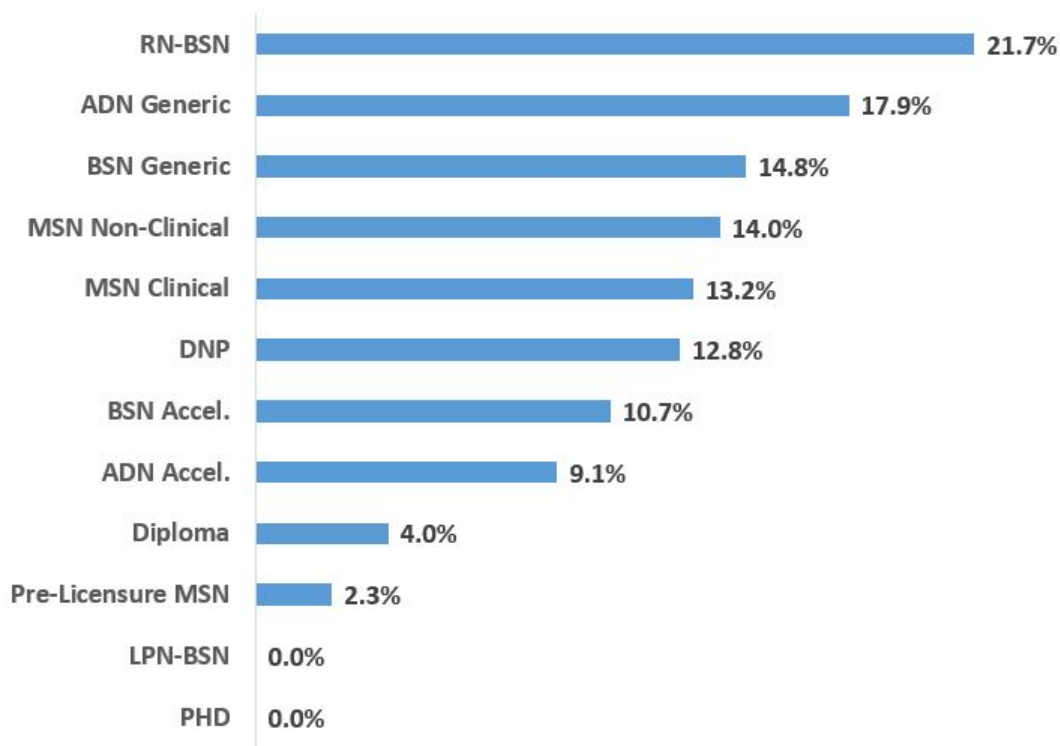
Demographics

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=172	BSN & Higher N=348
BSN	0 (0%)	0 (0%)	0 (0%)
MSN	51 (71%)	137 (80%)	88 (25%)
Non-Nursing Masters	0 (0%)	5 (3%)	0 (0%)
DNP	14 (19%)	24 (14%)	96 (28%)
PhD in Nursing	5 (7%)	4 (2%)	120 (34%)
Non-Nursing Doctorate	2 (3%)	2 (1%)	44 (13%)
Missing/Unknown	0 (0%)	0 (0%)	0 (0%)

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/Caucasian, female, and in the higher age brackets.

Table 1.38: RN program faculty demographics

	DIP N=72	ADN N=172	BSN & Higher N=348
Gender			
Female	71 (97%)	160 (93%)	250 (72%)
Male	1 (3%)	7 (4%)	23 (7%)
Transgender	0 (0%)	0 (0%)	0 (0%)
DND	0 (0%)	5 (3%)	75 (22%)
Race/Ethnicity			
American Indian	0 (0%)	0 (0%)	0 (0%)
Asian	4 (6%)	12 (7%)	44 (13%)
Black/African Am.	14 (19%)	24 (14%)	38 (11%)
Hawaiian/Pacific Isl.	0 (0%)	2 (1%)	1 (0%)
White/Caucasian	50 (69%)	125 (73%)	152 (44%)
Hispanic/Latino	3 (4%)	8 (5%)	40 (11%)
Other	1 (1%)	0 (0%)	2 (0%)
2+ Races	0 (0%)	1 (0%)	24 (7%)
DND	0 (0%)	0 (1%)	47 (14%)
Age			
30 or younger	1 (1%)	0 (0%)	0 (0%)
31-40	7 (10%)	18 (10%)	19 (5%)
41-50	13 (18%)	38 (22%)	69 (20%)
51-55	17 (24%)	32 (19%)	51 (15%)
56-60	17 (24%)	33 (19%)	59 (17%)
61-65	12 (17%)	36 (21%)	63 (18%)
66-70	4 (5%)	9 (5%)	42 (12%)
71+	1 (1%)	3 (2%)	25 (7%)
DND	0 (0%)	3 (2%)	20 (6%)
Mean Age	**53**	**54**	**48**

N is the number of faculty.

Table 1.39: RN program faculty demographics trend 2017-2020

	2017	2018	2019	2020
	N (%)	N (%)	N (%)	N (%)
Gender				
Female	547 (94)	548 (95)	560 (94)	481 (81)
Male	31 (5)	31 (5)	30 (5)	31 (5)
Transgender	0 (0)	0 (0)	0 (0)	0 (0)
DND	7 (1)	0 (0)	3 (1)	80 (14)
Race/ Ethnicity				
American Indian	0 (0)	0 (0)	0 (0)	0 (0)
Asian	33 (6)	37 (6)	39 (7)	60 (10)
Black/African Am.	57 (10)	61 (1)	67 (11)	76 (13)
Hawaiian/Pacific Isl.	2 (0)	3 (1)	6 (1)	3 (1)
White/Caucasian	443 (76)	432 (75)	432 (73)	327 (55)
Hispanic/Latino	27 (5)	19 (3)	21 (4)	51 (9)
Other	4 (1)	2 (0)	1 (0)	3 (1)
2+ Races	1 (0)	4 (1)	9 (2)	25 (4)
DND	18 (3)	21 (4)	18 (3)	47 (8)
Age				
30 or younger	1 (0)	3 (1)	1 (0)	1 (0)
31-40	42 (7)	35 (6)	57 (10)	44 (7)
41-50	92 (16)	117 (20)	120 (20)	120 (20)
51-55	105 (18)	96 (17)	103 (17)	100 (18)
56-60	123 (21)	114 (20)	101 (17)	109 (18)
61-65	110 (19)	115 (20)	129 (22)	111 (19)
66-70	62 (11)	61 (11)	62 (10)	55 (9)
71+	23 (4)	22 (4)	20 (3)	29 (5)
DND	27 (5)	16 (3)	0 (0)	23 (4)
Total Faculty	**585**	**579**	**593**	**592**

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

	LPN	(%)
Full-time positions available	103	
Full-time faculty employed	90	
Full-time position vacancies	13	(13)

Table 1.41: Vacancy Trend for Faculty in LPN schools 2017-2020

2017 N=31	2018 N=27	2019 N=25	2020 N=25
15	11	12	13

N is the number of respondent schools.

Table 1.42: LPN Program Faculty Employment Trend 2017-2020

2017 N=31	2018 N=27	2019 N=25	2020 N=25
135	86	95	90

N is the number of respondent schools.

Table 1.42 shows the number of full-time faculty employed. The vacancy rate in **Table 1.41** has not changed and is relatively flat.

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.

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

	N=115
ADN	0 (0%)
BSN	49 (43%)
Non-Nursing Baccalaureate	2 (2%)
MSN	58 (50%)
Non-Nursing Masters	2 (2%)
DNP	4 (3%)
PhD	0 (0%)
Other Doctorate in Nursing	0 (0%)
Non-Nursing Doctorate	0 (0%)
Missing/Unknown	0 (0%)

N is the total number of faculty.

Table 1.44 shows four years of demographic data for faculty teaching in LPN programs. Data for 2020 shows that faculty are primarily female and White/Caucasian. The mean age for full-time faculty is 53.

Table 1.44: LPN Faculty Demographic Trend 2017-2020

	2017 N (%)	2018 N (%)	2019 N (%)	2020 N (%)
Gender				
Female	103 (86)	86 (89)	89 (91)	78 (87)
Male	17 (14)	11 (11)	9 (9)	11 (12)
Transgender	0 (0)	0 (0)	0 (0)	0 (0)
DND	0 (0)	0 (0)	0 (0)	1 (1)
Race/ Ethnicity				
American Indian	0 (0)	0 (0)	0 (0)	0 (0)
Asian	8 (7)	9 (9)	9 (9)	6 (7)
Black/African Am.	34 (28)	23 (24)	30 (31)	25 (28)
Hawaiian/Pacific Isl.	3 (3)	3 (3)	3 (3)	1 (1)
White/Caucasian	70 (58)	55 (57)	49 (50)	53 (59)
Hispanic/Latino	4 (3)	7 (7)	7 (7)	4 (4)
Other	0 (0)	0 (0)	0 (0)	0 (0)
2+ Races	0 (1)	0 (0)	0 (0)	1 (1)
Missing/Unknown	1 (0)	0 (0)	0 (0)	0 (0)
Age				
30 or younger	1 (1)	3 (3)	0 (0)	3 (3)
31-40	13 (11)	9 (9)	12 (9)	9 (10)
41-50	23 (19)	23 (24)	26 (24)	17 (19)
51-55	26 (22)	22 (23)	18 (23)	17 (19)
56-60	20 (17)	9 (9)	15 (9)	16 (18)
61-65	25 (21)	21 (22)	20 (22)	22 (24)
66-70	8 (7)	7 (7)	5 (7)	2 (2)
71+	4 (3)	3 (3)	2 (3)	2 (2)
DND	0 (0)	0 (0)	0 (0)	2 (2)
Total Faculty	**150**	**135**	**98**	**90**

Chapter 2

Workforce Supply Data

The data for this chapter were acquired from the 2020 and 2021 New Jersey Board of Nursing (NJBON) Nursys® 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, not the total number of RNs 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 2020-2021 survey period, 113,464 licensed RNs responded out of New Jersey's 165,944 licensed RNs. Of those, 137,838 were active while 28,106 were inactive. RN respondents account for 68.4% of the RN workforce. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 113,464.

License Status

According to **Table 2.1**, 96% of respondents have an active RN license, which renders them eligible to practice as an RN in New Jersey.

Table 2.1: RN License Status

	N=113,464	**%**
Active	108,888	96
Inactive	4,576	4

Table 2.2 describes the method by which RNs attained their licensure. Those who attained their licensure via exam have graduated from an approved school of nursing and taken the NCLEX-RN examination in New Jersey. Those who attained their license via endorsement have first been licensed in another state.

Table 2.2: Basis for RN Licensure

	N=113,464	**(%)**
Exam	75,571	67
Endorsement	37,892	33

Demographics

Table 2.3 shows the demographic characteristics of RN respondents. New Jersey's RNs are primarily White/Caucasian (58%), female (91%), and between 46-65 years of age (48%). The mean age of RNs in New Jersey is 50.

Table 2.3: RN Demographic Characteristics

Gender		**N=113,464**	**%**
	Female	103,211	91
	Male	10,253	9
	Missing/No Data	0	0
Race/Ethnicity			
	Asian	15,041	13
	Black/African American	9,849	9
	White/Caucasian	65,657	58
	Hispanic/Latino	5,779	5
	American Indian	111	0
	Pacific Islander	758	1
	Other	3,014	3
	Missing/No Data	13,255	12
Age			
	19-25	2,407	2
	26-35	21,404	19
	36-45	20,241	18
	46-55	24,426	22
	56-65	29,062	26
	66-75	13,707	12
	76-85	2,088	2
	86+	127	0
	Missing/No Data	1	0

Education

Table 2.4 describes the highest degree of nursing education currently held by respondents who were renewing their RN license. 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 97,376 respondents, excluding those who did not provide data (Missing/invalid), 68% have a Baccalaureate or higher degree in nursing, and 32% have an Associate's Degree or Diploma in nursing.

Table 2.4: RN Highest Level of Education*

	N=97,376	%
Diploma in Nursing	4,921	5
Associate's Degree in Nursing	25,892	27
Baccalaureate Degree in Nursing	56,471	58
Master's Degree in Nursing	9,101	9
DNP, PhD, or Other Doctoral Degree in Nursing	991	1

*The 16,088 missing/invalid data are excluded.

Figure 2.1 describes the 97,651 respondents who provided data on the country in which they received their entry-level nursing education. Of the total respondents, 86,761 were from the United States. Of the remaining 10,854 RNs, the Philippines were the most common source of entry-level nursing education outside of the United States.

Figure 2.1: Country of RN Entry-level Education **Outside of the United States**
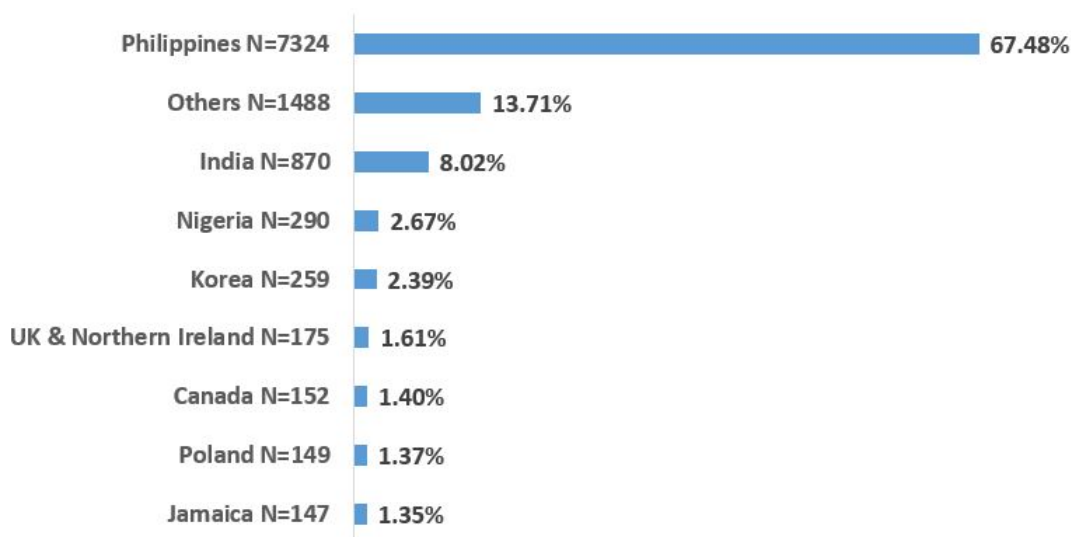
*The 15,849 missing data are excluded.

Employment Characteristics

Table 2.5 describes the employment status of the 98,084 RNs who reported their employment status. "Employed in nursing" is defined as being employed in a position that requires an RN license.

Table 2.5: RN Employment Status*

	N=98,084	%
Employed in nursing full-time	72,479	74
Employed in nursing part-time	9,045	9
Employed in nursing per diem	5,331	5
Volunteering (only) in nursing	653	1
Retired	5,206	5
Unemployed, seeking work in nursing	2,928	3
Employed in a field other than nursing	2,442	2

*The 15,380 missing data are excluded.

Respondents were asked to report the number of positions that they are currently holding as a nurse. The following table shows that 83% of the RN workforce hold one position.

Table 2.6: Number of RN Positions*

	N=89,066	%
1 position	74,088	83
2 positions	13,525	15
3 positions	1,451	2
4 positions	2	0

*The 24,397 missing data are excluded.

According to **Figure 2.2**, more than 54% of 93,424 respondents reported that the hospital was their primary employment setting.

Figure 2.2: RN Primary Employment Setting*
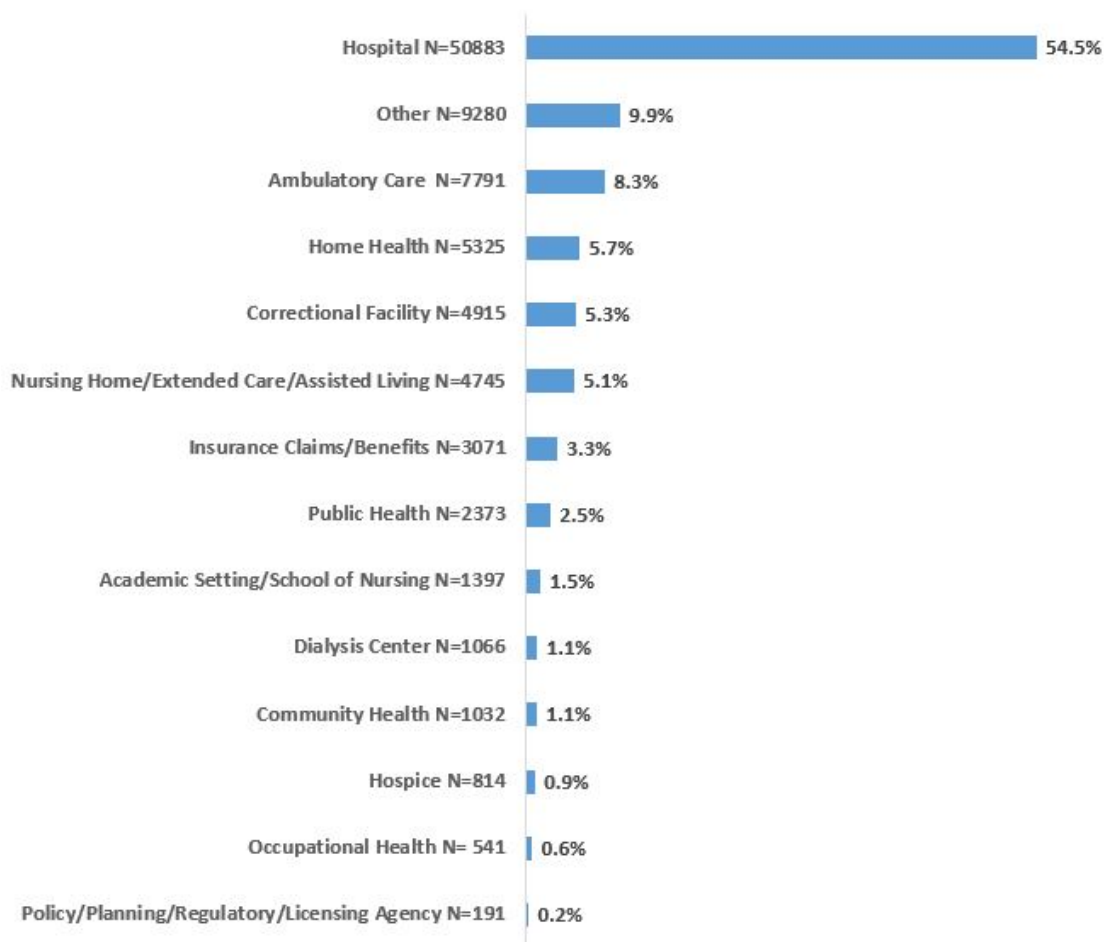
*The 20,040 missing data are excluded.

Figure 2.3 shows that 69% of 94,701 respondents reported that their primary employment position was as a staff nurse. The combined data indicate that the majority of RNs are staff nurses.

Figure 2.3: RN Primary Employment Position Description*
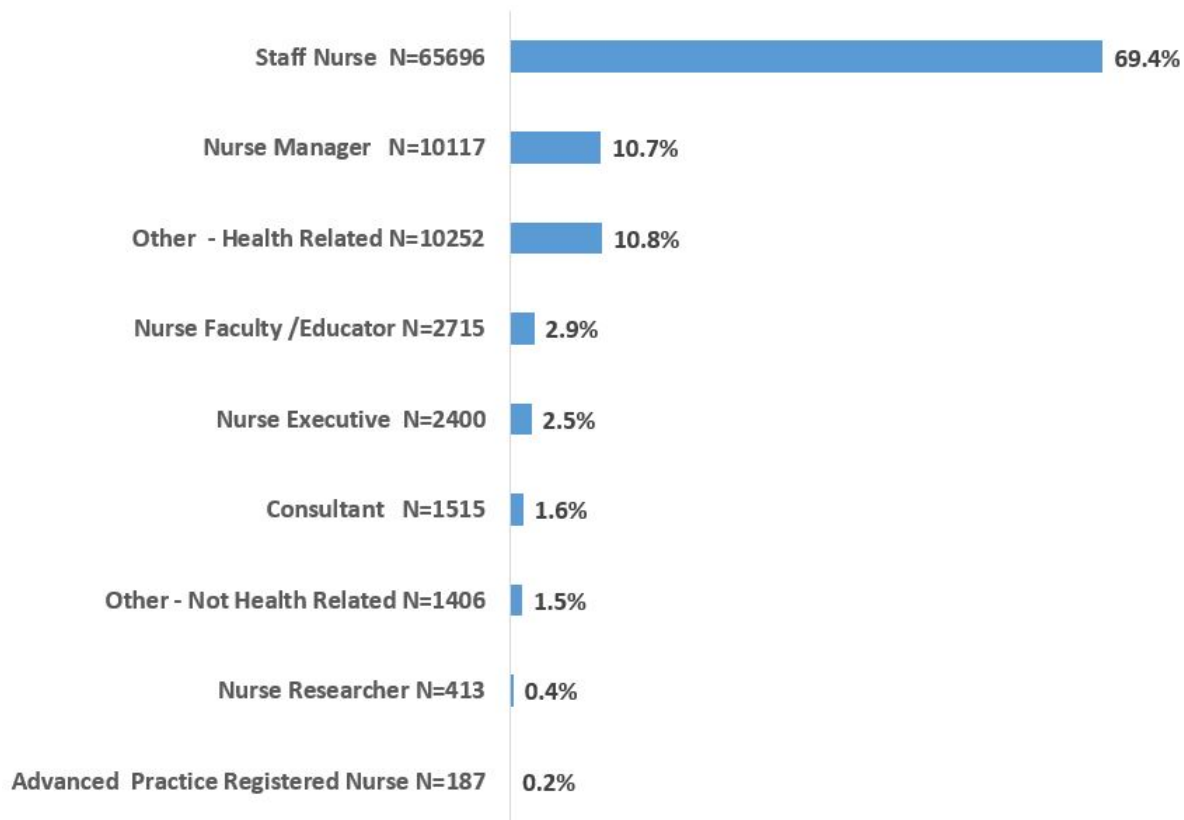
*The 18,763 missing data are excluded.

Nurses classified their employment specialties as outlined in **Figure 2.4**.

Figure 2.4: RN Primary Employment Position Specialty*
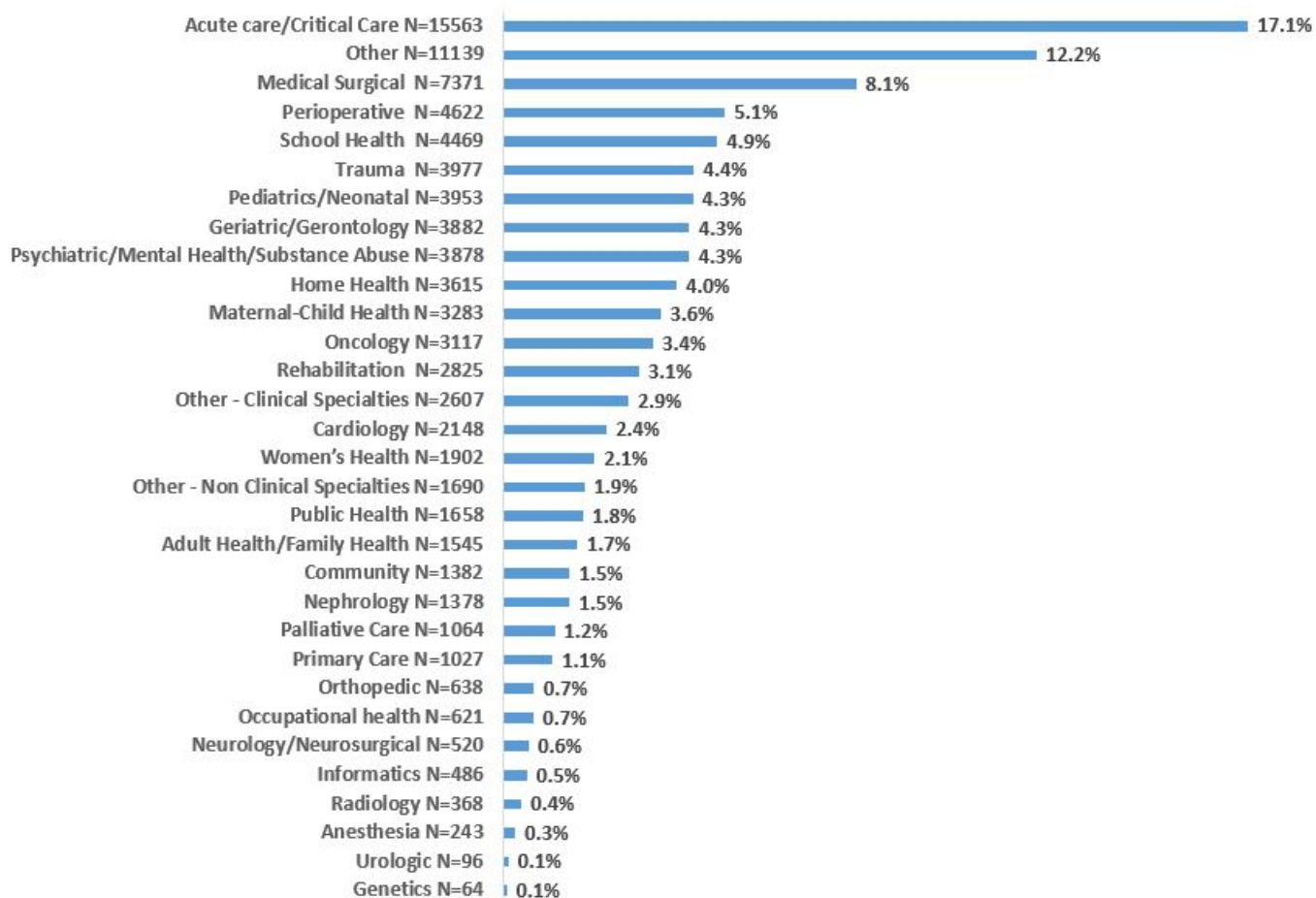
*The 22,333 missing data are excluded.

Unemployment

Figure 2.5 shows that there were 11,427 RNs who reported a reason for not being employed as a nurse. Of those, 28% cited "taking care of home and family" as their primary reason.

Figure 2.5: RN Reason for Not Being Employed
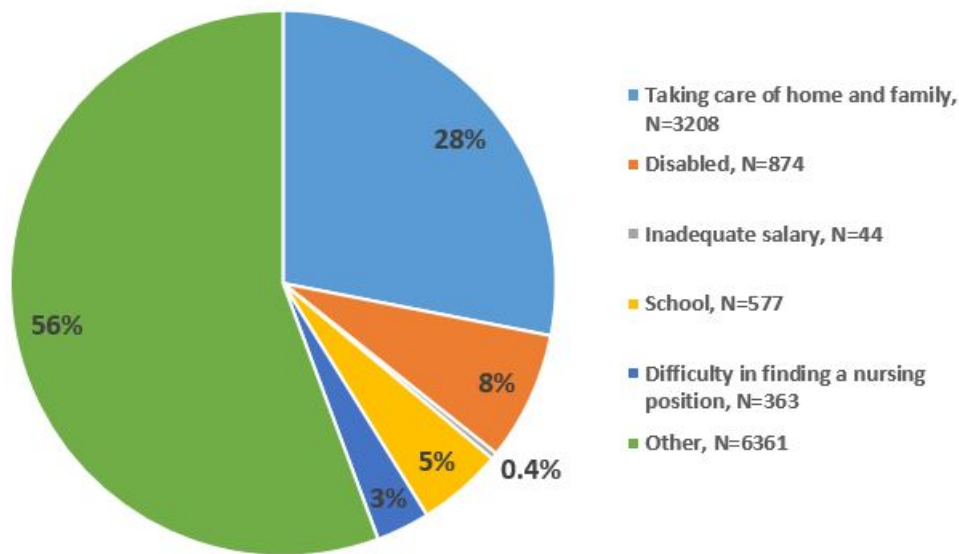
*Missing 102,037 data are excluded.

Retirement

NJCCN asked participants of their intention to retire within two years, prior to the next license renewal. In response, 5% of RNs indicated a plan to retire within this timeframe (not inclusive of missing data).

Table 2.7 identifies RNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 26% intend to retire; of nurses who are 76-85 year old, 32% intend to retire. The number of RN respondents in each age category is different from the numbers reported in **Table 2.3** because **Table 2.7** only includes RNs who reported their age (18 or greater) **and** their intent to retire.

Table 2.7: RN Intent to Retire according to Age

Age	RN Respondents N=87,633	Intent to Retire N=4,328	%
18-25	1,071	8	1
26-35	15,705	55	0
36-45	15,881	51	0
46-55	19,988	93	0
56-65	23,949	1,177	5
66-75	9,797	2,544	26
76-85	1,194	380	32
86-95	48	20	42

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. Nursys® does not currently include any direct questions for APNs. However, NJCCN added a question to the survey that inquired about respondent specialities (CRNA/ CNS/ CNM/ NP). RNs who indicated one of these specialities were identified as APNs. In the 2020-2021 survey period, 12,039 APNs responded out of New Jersey's 14,860 licensed APNs. Of those, 12,107 were active while 2,753 were inactive. APNs respondents accounted for for 81% of the APN workforce. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 12,039.

License Status

According to **Table 2.8**, 98% of respondents are active APNs.

Table 2.8: APN Credential Status

	N=12,039	%
Active	11,779	98
Not Active	260	2

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 that most APNs (78%) are Nurse Practitioners.

Table 2.9: APN Category

	N=12,039	%
Nurse Practitioner (NP)	9,365	78
Clinical Nurse Specialist (CNS)	620	5
Certified Nurse Midwife (CNM)	306	3
Certified Nurse Anesthetist (CRNA)	1,287	11

Demographics

Table 2.10 shows that New Jersey's APN's are primarily White/Caucasian (60%), female (90%), and between 36-55 years of age (50%). The mean age of APNs are 49.

Table 2.10: APN Demographic Characteristics

Gender		**N=12,039**	**%**
	Female	10,813	90
	Male	1,225	10
	Missing/No Data	1	0
Race/Ethnicity			
	Asian	1,395	12
	Black/African American	1,271	11
	White/Caucasian	7,219	60
	Hispanic/Latino	544	5
	American Indian	16	0
	Pacific Islander	69	1
	Other	375	3
	Missing/No Data	1,150	10
Age			
	19-25	6	0
	26-35	2,239	19
	36-45	3,133	26
	46-55	2,861	24
	56-65	2,552	21
	66-75	1,107	9
	76-85	136	1
	86+	5	0
	Missing/No Data	0	0

Education

Table 2.11 describes the highest degree of nursing education currently held by APN respondents. Of the 11,073 respondents, 86% have a Master's Degree and 11% have a DNP.

Table 2.11: APN Highest Level of Nursing Education*

	N=11,073	**%**
MSN	9,572	86
DNP	1,255	11
PhD	157	1
Other Doctoral Degree in Nursing	89	1

*The 966 missing/invalid data are excluded.

Employment Characteristics

Table 2.12 describes the employment status of the 10,923 APNs who reported their employment status. "Employed in nursing" is defined as being employed as a nurse and in a position that requires an APN credential.

Table 2.12: APN Employment Status*

	N=10,923	%
Employed in nursing full-time	8,935	82
Employed in nursing part-time	1,021	9
Employed in nursing per diem	395	4
Volunteering (only) in nursing	44	0
Retired	205	2
Unemployed, seeking work in nursing	201	2
Employed in a field other than Nursing	122	1

*The 1,116 missing data are excluded.

Respondents were asked to report the number of positions that they are currently holding as a nurse. **Table 2.13** indicates that 26% of New Jersey's APN workforce are holding multiple APN positions.

Table 2.13: Number of APN Positions*

	N=10,300	%
1 position	7,672	74
2 positions	2,192	21
3 positions	436	4

*The 1,739 missing data are excluded.

The figures on the following pages describe the setting and position description of respondents' primary employment. According to **Figure 2.6**, 45% of the 10,906 respondents reported their primary employment setting was in a hospital. **Figure 2.7** shows that 78% of the 11,019 respondents reported their primary employment position was as an Advanced Practice Nurse.

Figure 2.6: APN Primary Employment Setting*
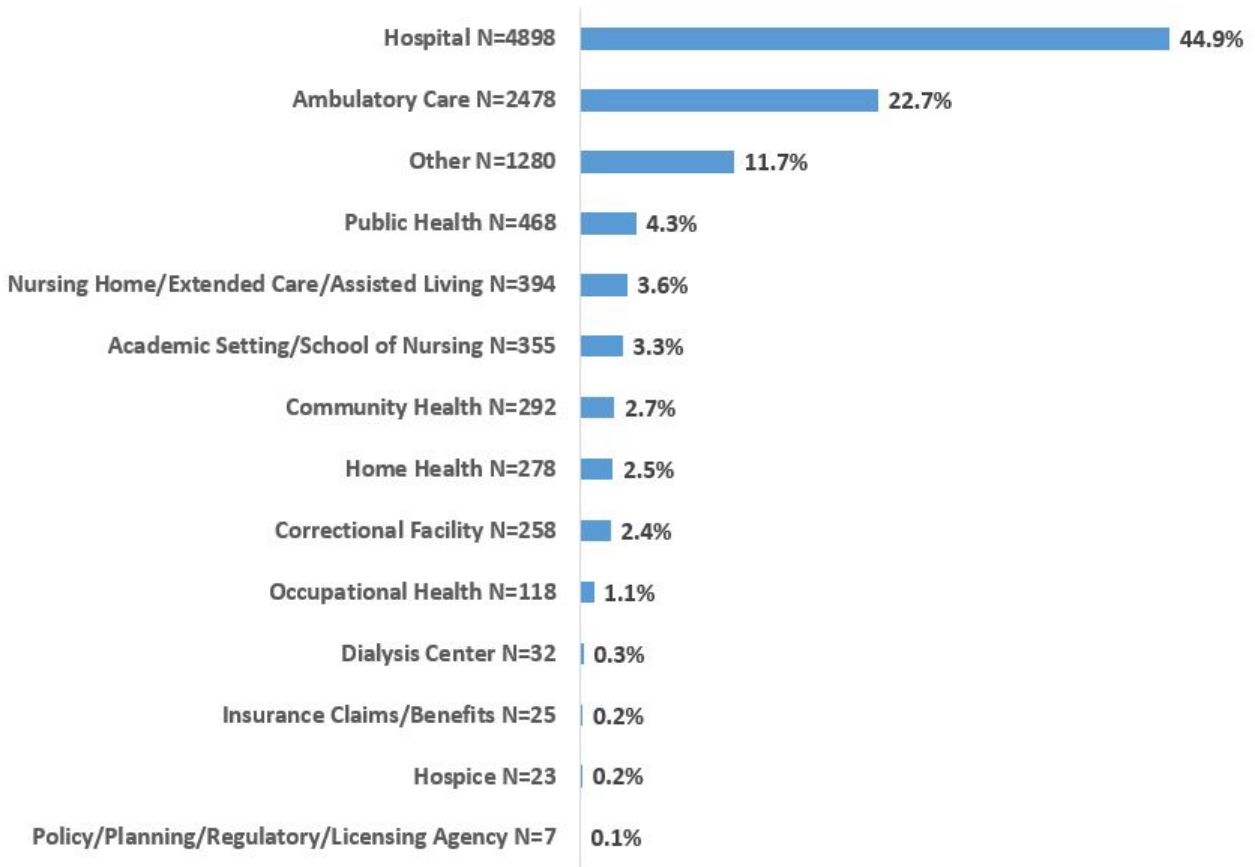
*The 1,133 missing data are excluded.

Figure 2.7: APN Primary Employment Position Description*

Position	Percentage
Advanced Practice Registered Nurse N=8651	78.5%
Staff Nurse N=1209	11.0%
Nurse Faculty /Educator N=399	3.6%
Other - Health Related N=261	2.4%
Nurse Manager N=226	2.1%
Nurse Executive N=151	1.4%
Consultant N=57	0.5%
Other - Not Health Related N=33	0.3%
Nurse Researcher N=32	0.3%
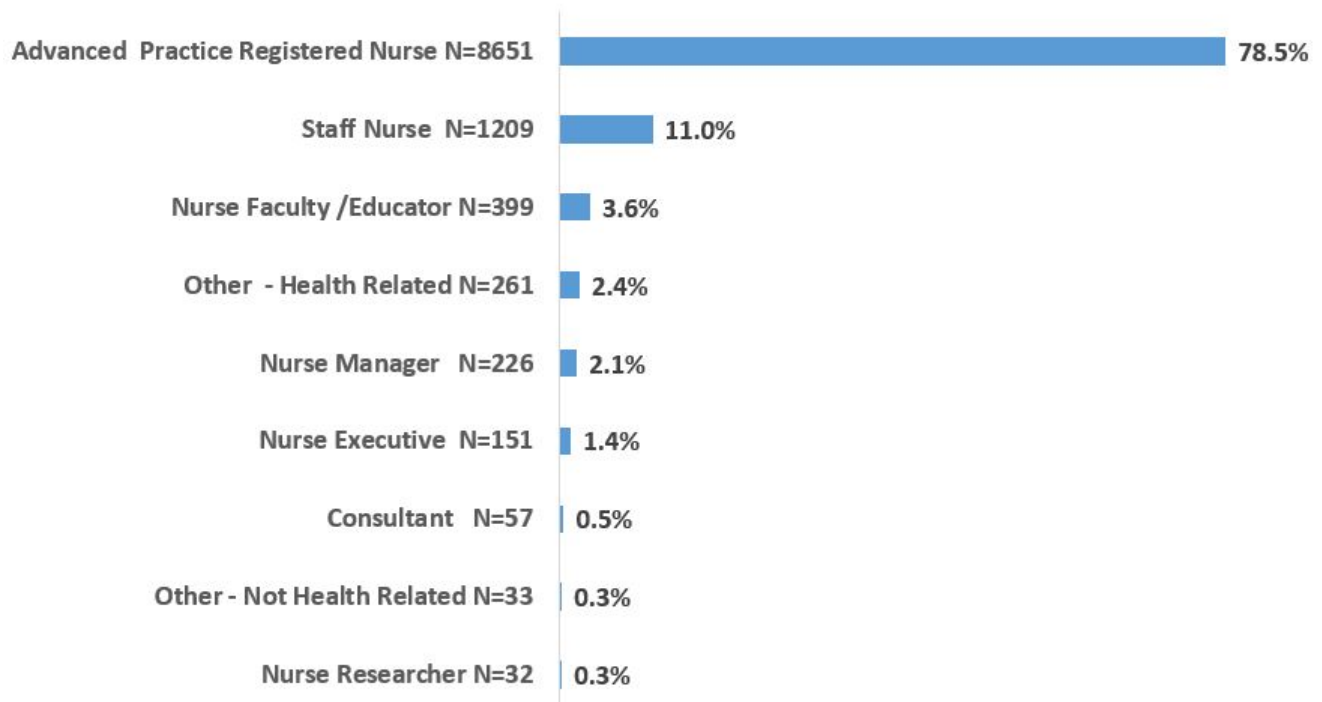
*The 1,020 missing data are excluded.

Figure 2.8 shows that 8,881 Advanced Practice Nurses classified their employment specialties as outlined below.

Figure 2.8: APN Primary Employment Position Specialty*
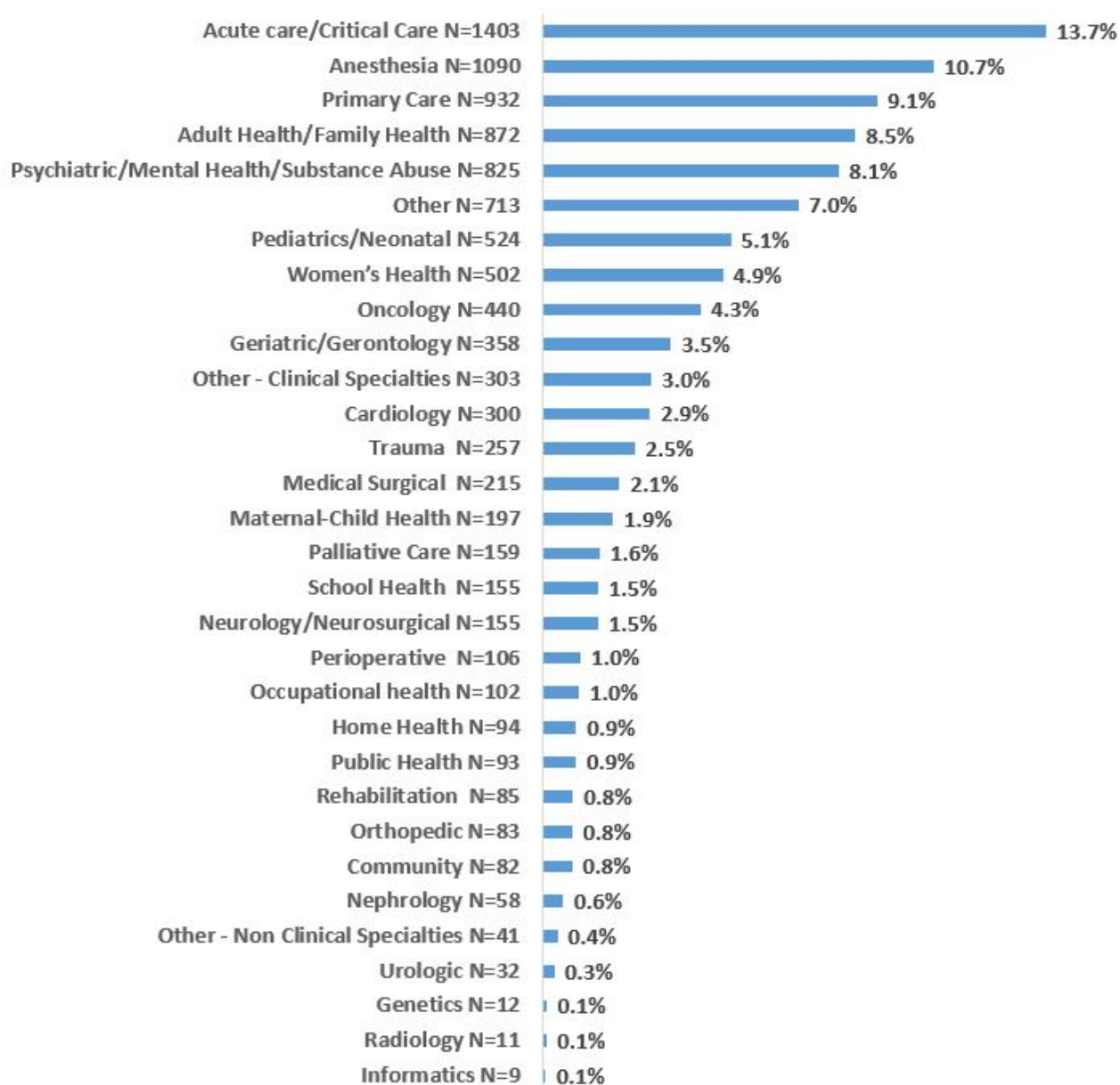
*The 1,831 missing data are excluded.

Nurse Practitioners

The majority of APNs identify as NPs. Table 2.14 shows their specialties.

Table 2.14: Nurse Practitioner specialty*

	N=8,493	%
Adult/Gero Primary	2,217	26
Adult/Gero Acute	1,097	13
Family	2,541	30
Pediatrics	721	8
Women's Health	500	6
Psych	659	8
Other	758	9

*The 3,546 missing data are excluded.

A total of 2,118 (18%) of the 12,039 NP respondents, indicated that they are active in states other than New Jersey.

Table 2.15: NPs active in other states

	N=2,154	%
New York	864	40
Pennsylvania	867	40
Connecticut	11	1
Delaware	59	3
Other	317	15
No Data	36	2

Unemployment

Figure 2.9 shows that there were 714 APNs who reported a reason for not being employed as an APN. Of those, 23% cited "taking care of home and family" as their primary reason.

Figure 2.9: APN Reason for Not Being Employed
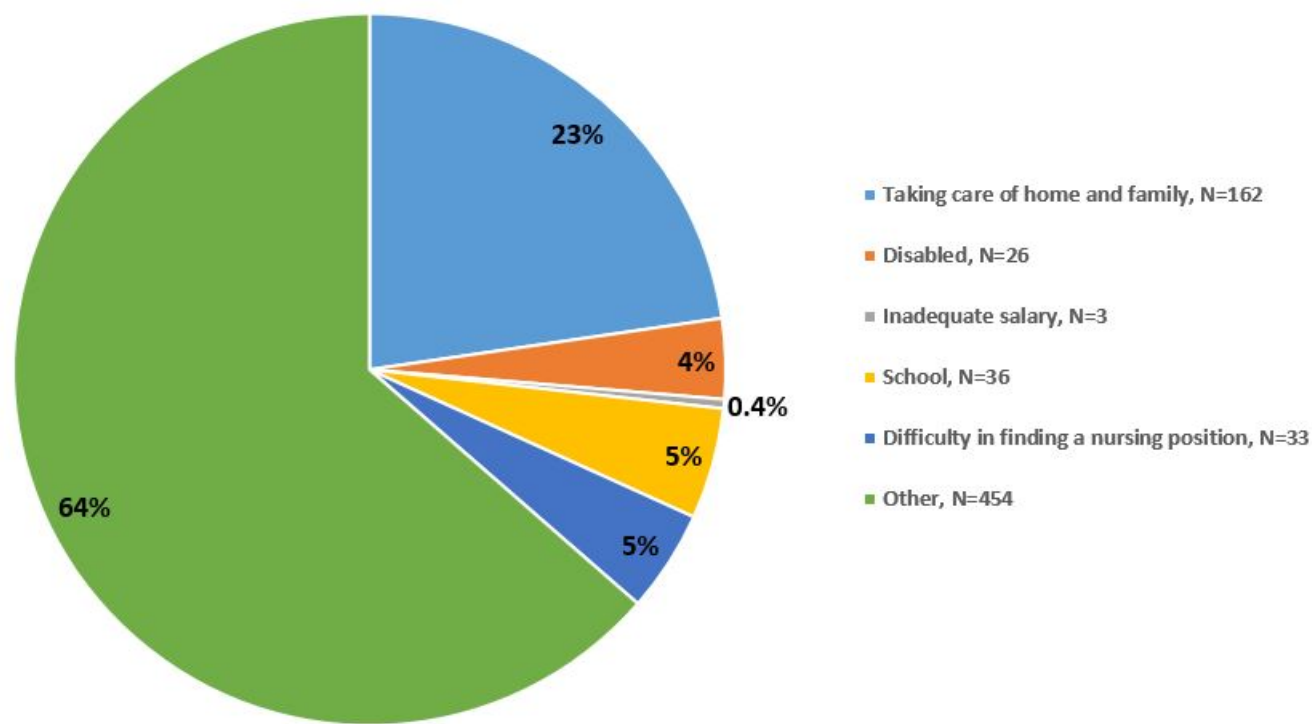
*Missing 5,872 data are excluded.

Retirement

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

Table 2.16 identifies APNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 18% intend to retire; of nurses who are 76-85 year old, 25% intend to retire. The number of APN respondents in each age category is different from the numbers reported in **Table 2.10** because **Table 2.16** only includes APNs who reported their age **and** their intent to retire.

Table 2.16: APN Intent to Retire according to Age

Age	APN Respondents N=10,549	Intent to Retire N=296	%
18-25	3	0	0
26-35	1,898	5	0
36-45	2,695	7	0
46-55	2,556	6	0
56-65	2,313	72	3
66-75	976	179	18
76-85	104	26	25
86-95	4	1	25

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

Licensed Practical Nurse (LPN) Profile

In the 2019-2020 survey period, 21,583 LPNs responded out of New Jersey's 28,803 total LPNs. Of those, 23,503 were active while 5,300 were inactive. LPN respondents accounted for 74.9% of the LPN workforce. Respondents may have skipped questions, causing data in some tables and figures to add up to less than 21,532.

License Status

According to **Table 2.17**, 97% of respondents have an active LPN license, which renders them eligible to practice as a LPN in New Jersey.

Table 2.17: LPN License Status

	N=21,583	%
Active	20,875	97
Inactive	708	3

Table 2.18 decribes the method by which LPNs attained their licensure. Those who attained their licensure via exam 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 have first been licensed in another state.

Table 2.18: Basis for LPN Licensure

	N=21,582	%
Exam	18,996	88
Endorsement	2,586	12

*There is one invalid response, which was not included.

Demographics

Table 2.19 shows the demographic characteristics of LPN respondents. New Jersey's LPNs are primarily female (90%), diverse in race/ethnicity, and between 46-65 year of age (47%). The mean age of LPNs is 49.

Table 2.19: LPN Demographic Characteristics

Gender		N=21,583	%
	Female	19,370	90
	Male	2,212	10
	Missing/No Data	1	0
Race/Ethnicity			
	Asian	1,335	6
	Black/African American	6,259	29
	White/Caucasian	8,211	38
	Hispanic/Latino	1,739	8
	American Indian	43	0
	Pacific Islander	107	0
	Other	1,078	5
	Missing/No Data	2,811	13
Age			
	0-18	0	0
	19-25	318	1
	26-35	3,639	17
	36-45	4,916	23
	46-55	5,099	24
	56-65	5,041	23
	66-75	2,305	11
	76-85	252	1
	86+	13	0

Employment Status

Table 2.20 describes the employment status of the 17,180 LPNs who reported their employment status. "Employed in nursing" is defined as being employed as a nurse or in a position that requires an LPN license.

Table 2.20: LPN Employment Status*

	N=17,180	%
Employed in nursing full-time	12,491	73
Employed in nursing part-time	1,555	9
Employed in nursing per diem	890	5
Volunteering (only) in nursing	101	1
Retired	558	3
Unemployed, seeking work in nursing	927	5
Employed in a field other than Nursing	658	4

*The 4,403 missing data are excluded.

Respondents were asked to report the number of positions that they are currently holding as a nurse. **Table 2.21** indicates that 17% of New Jersey's LPN workforce are holding multiple LPN positions.

Table 2.21: Number of LPN Positions*

	N=15,261	%
1 position	12,600	83
2 positions	2,443	16
3 positions	218	1

*The 6,322 missing data are excluded.

The figures on the following pages describe the setting and position description of respondents' primary employment. According to **Figure 2.10**, more than 40% (N=6,190) of 15,311 respondents reported that the nursing home/assisted living facility was their primary employment setting. **Figure 2.11** shows that 79.5% of LPNs identify as Staff Nurses.

Figure 2.10: LPN Primary Employment Setting*
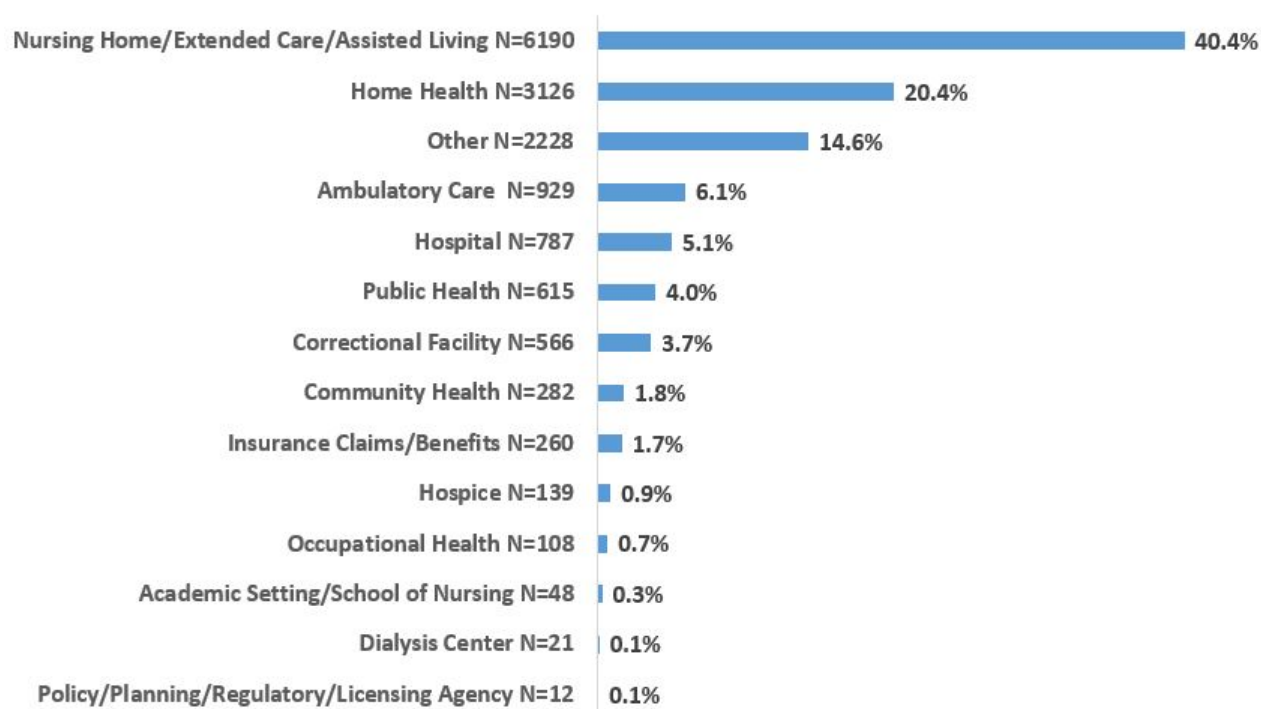
*The 6,272 missing data are excluded.

Figure 2.11: LPN Primary Employment Position Description*
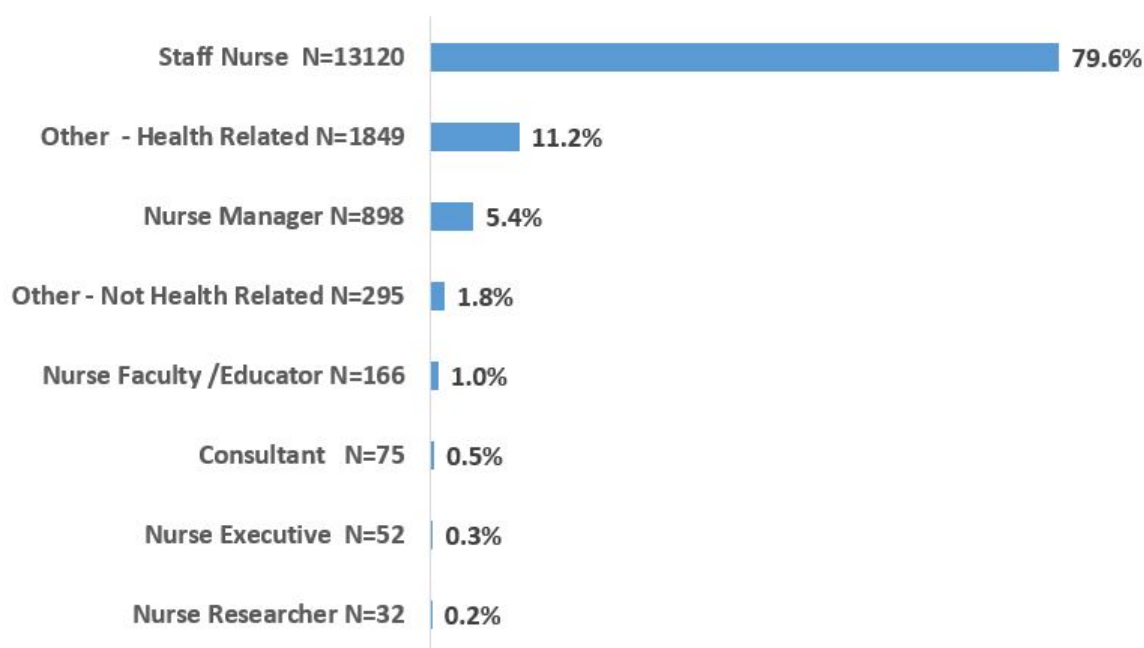
*The 5,096 missing data are excluded.

Figure 2.12 shows how LPNs classified their employment specialties.

Figure 2.12: LPN Primary Employment Position Specialty*
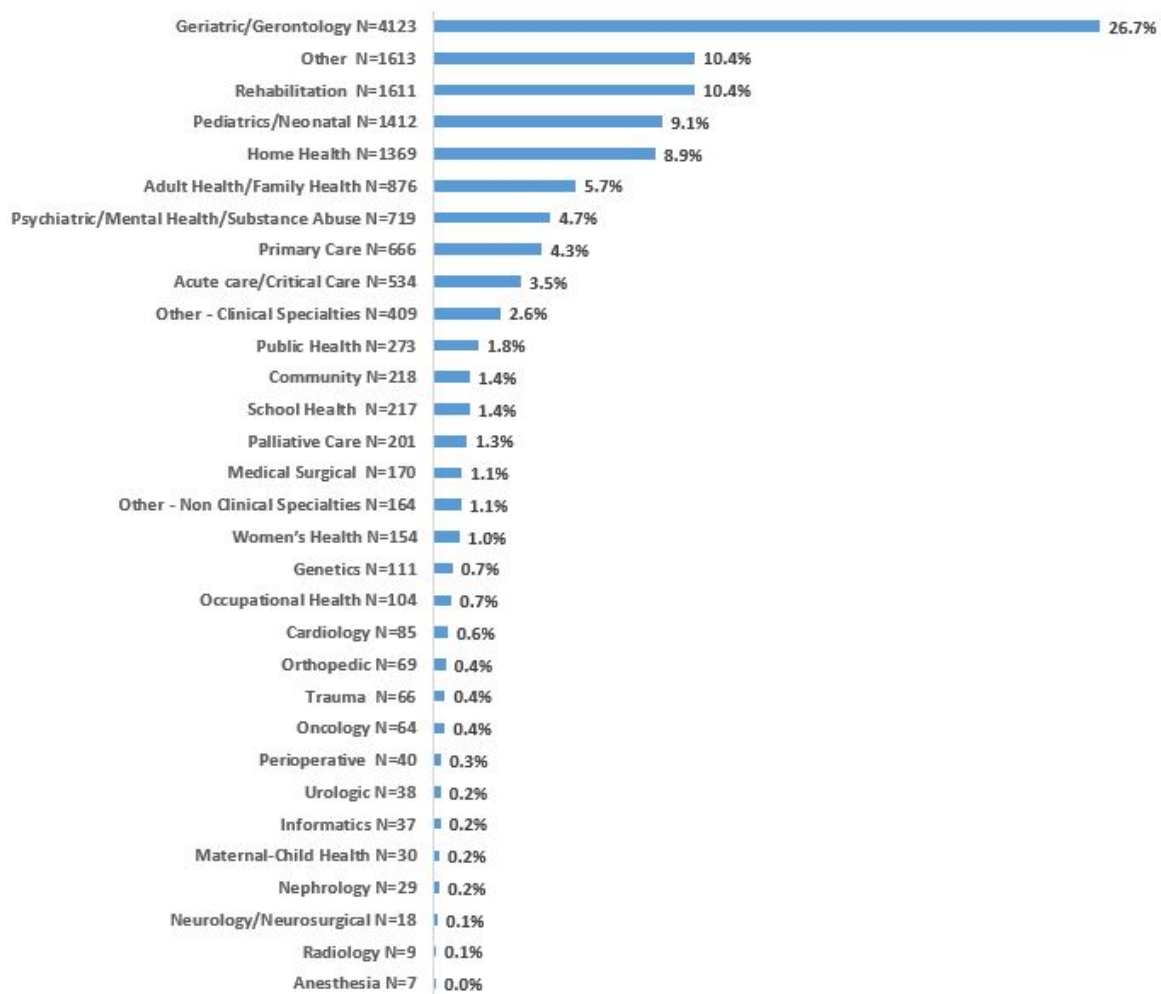
*The 6,147 missing data are excluded.

Unemployment

Figure 2.13 shows that there were 3,039 LPNs who reported a reason for not being employed as a nurse. Of those, 26% cited "taking care of home and family" as their primary reason.

Figure 2.13: LPN Reason for Not Being Employed
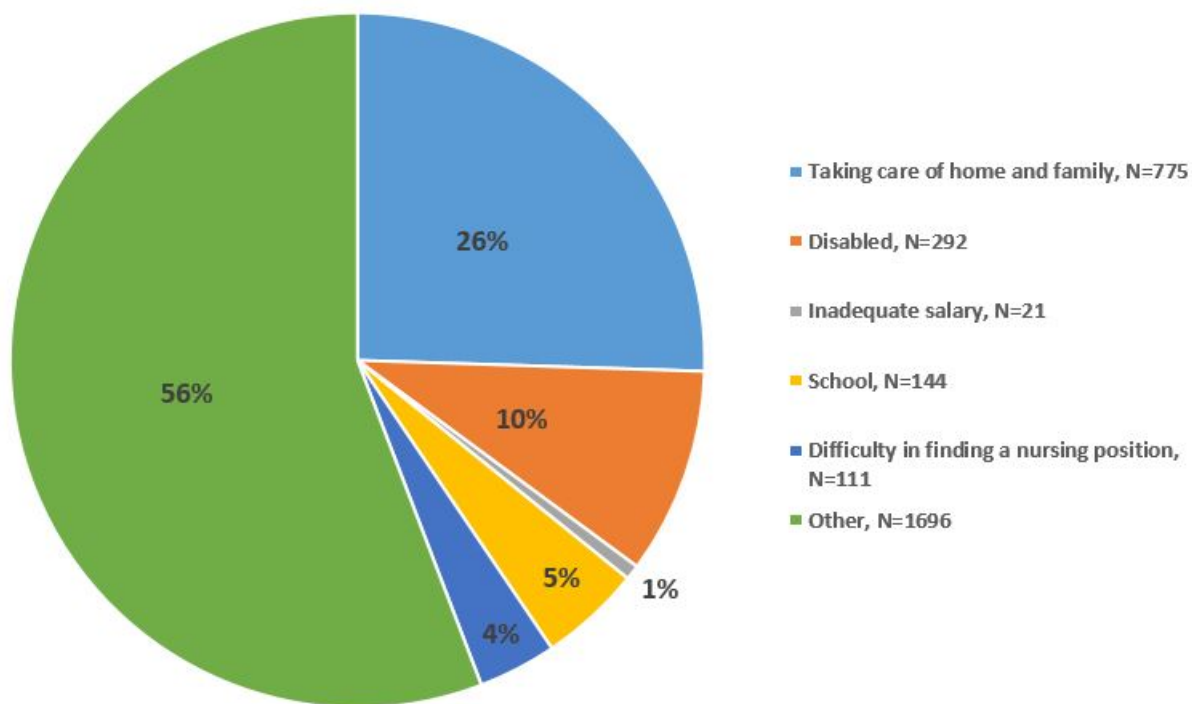
*Missing 18,544 data are excluded.

Retirement

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

Table 2.22 identifies LPNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 18% intend to retire; of nurses who are 76-85 year old, 21% intend to retire. The number of LPN respondents in each age category is different from the numbers reported in **Table 2.19** because **Table 2.22** only includes LPNs who reported their age **and** their intent to retire.

Table 2.22: LPN Intent to Retire according to Age

Age	LPN Respondents N=15,230	Intent to Retire N=488	%
18-25	145	1	1
26-35	2,444	12	0
36-45	3,522	19	1
46-55	3,764	25	1
56-65	3,700	125	3
66-75	1,504	274	18
76-85	143	30	21
86-95	8	2	25

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

Update to Nurse Retirement Projections

In our previous report titled *New Jersey Annual Nursing Data report 2017*, we published an added section titled *Chapter 4: Projection of Nurse Retirement.* (NJCCN, 2017). This section projected the expected retirement amongst LPNs, RNs and APNs. Analysis included historical retirement rates across age categories and employment settings. In addition, the projection of future workforce levels along with confidence intervals were established from average historical retirement rates for 2020 and 2025 across LPNs, RNs and APNs.

In this report, we are verifying the extent to which the projections align with actual numbers from our most recent data this year. This will not include re-estimating the historical retirement rates or altering our expectations of the future demand for 2025.

Nurse Retirement Projections for 2020 and 2025: A Review

Table 78 Projected Trend of the Active NJ Nursing Workforce Through 2025 is summarized here for reference. The table reflects a total of 826 LPN retirements, 7,169 RN retirements, and 179 APN retirements expected in the workforce by 2020.

Table 2.23: Projected Trend of the Active NJ Nursing Workforce Through 2025 (Table 78 from previous report)

	LPN		RN		APN	
	2020	2025	2020	2025	2020	2025
Expected # of retirements	826	3,161	7,169	23,831	179	786
Active workforce after retirements (projected)	20,004	17,670	98,855	82,193	7,201	6,594
% reduction in the workforce from 2018	4	15	7	22	2	11

(Source: NJCCN Educational Survey 2017, BON Survey 2018)

Based on our survey this year, we can compare the total number of nurses who reported 'retired' for their employment status to a pro-rated number of expected to be retired by 2021 from our estimates for 2020 & 2025. This allows us to understand if our projections were correct or over/under estimated.

Retirements in the Workforce (2019-2021)

A total of 774 LPNs, 7,797 RNs, and 289 APNs have been reported retired in 2019-2021 based on BON survey 2019-2021 as shown in the table below.

Table 2.24: Actual Number of Retirements in the Workforce

	2019	**2020**	**2021**	**Total**
LPN	216	305	253	774
RN	2,591	2,208	2,998	7,797
APN	84	88	117	289

(Source: BON Survey 2019-2021)

Comparing the actual retirement to the expected retirement projections, LPNs have 40% less retirements than expected, while RNs have 26% less retirements than expected. APNs are closest in projections with only 4% difference between the numbers.

Note: The projections are a somewhat overly conservative estimate but we justify our need to do so across the sections herein due to missing data and non-linearity of retirements.

Table 2.25: Comparison of actual retirements in 2019-2021 with projected retirements by 2025

| | LPN | | RN | | APN | |
	2019-2021 Actual	2019-2021 Expected*	2019-2021 Actual	2019-2021 Expected*	2019-2021 Actual	2019-2021 Expected*
Number of retirements	774	1,293	7,797	10,501	289	300
Difference (%) (Actual/Expected -1)		-40%		-26%		-4%

Further, 24% of LPNs, 17% of RNs, and 11% of APNs did not respond to the survey question *"What is your employment status?"* in 2019-2021. Thus, the number of actual retirements is likely to be higher than reported. For example, 7,797 RNs have reported being retired. We expect some of the RNs did not respond to the retirement question, therefore, more may have retired. Essentially, the gap between the expected and actual numbers in Table 2.25 will be smaller, confirming the need for a slightly more conservative estimate.

The bars in Figure 2.14 represent the actual retirement broken out by each year. The line projects the expected number of retirements for 2019-2025 projected in 2018 report. The exact numbers for 2020 2025 are from the projection in 2018 report (see Table 78 above) while the intermediate years are obtained by a simple interpolation formula for a linear model. Table 2.25 reports the difference between the actual number of retirements (stacked bars) and the projected retirements (line) which is 26% for the RNs in this graph.

Figure 2.14: Retirements for RN (Actual vs Expected)
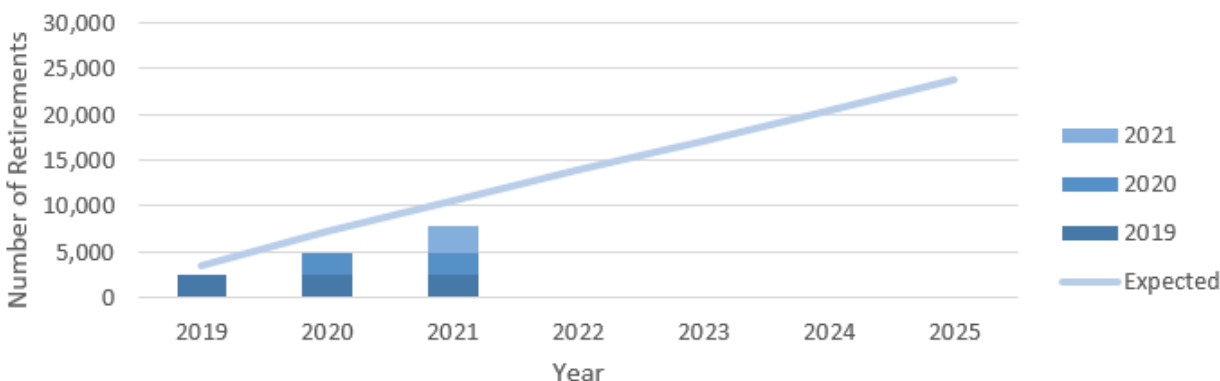
Table 2.26: Rate of Retirement of Nurses by Age Bracket

	LPN				RN				APN			
	2018 (%)	2019 (%)	2020 (%)	2021 (%)	2018 (%)	2019 (%)	2020 (%)	2021 (%)	2018 (%)	2019 (%)	2020 (%)	2021 (%)
N	183	216	305	253	1,613	2,591	2,208	2,998	60	84	88	117
46-50	0.1	0.1	1	-	0.02	0.1	0.4	0.2	-	-	-	-
51-55	0.4	0.3	3	3	0.1	0.3	1	0	0.2	-	-	-
56-60	1	1.1	4	4	0.2	2	4	3	1	1	2	1
61-65	4	5	15	17	1	8	22	13	2	2	27	9
66-70	9	17	41	47	5	24	38	38	11	13	34	39
71-75	10	17	26	20	18	27	23	30	17	20	26	34
76-80	13	17	7	8	24	27	9	11	19	32	8	15
81-85	5	13	3	2	22	33	3	3	-	-	-	2
86+	38	-	1	0.4	23	38	1	1	50	-	2	-

Assessment of Nurse Retirement 2018-2021

Table 2.26 corresponds all those that answered 'Retired' to the survey question *"What is your employment status?"* in BON survey 2018-2021. *(This table is similar to Table 75 in our NJCCN 2017 report).* 2018 is the baseline year.

Breaking down retirement rates by age group, **retirements have increased across all 3 categories for ages 61-75 years from baseline (2018).** The majority of retirements in 2020-21 have come from nurses in 61-75 age group. This is much higher than historically seen in the 61-75 age groups and is an indication that retirements have started happening more actively in this age sector.

This demonstrates a shift in the profile of the nurses who are retiring from the workforce. Nurses historically retired much later in age. Such a profile shift is indicative of the national projection of baby boomer retirements accelerating as Generation Z and millennials increase in the workforce.

Distribution of Nurses in NJ Across Various Age Cohorts

Table 2.27 compares the age distribution of LPNs, RNs, and APNs in the workforce between 2019-2020 and 2020-2021.

Table 2.27: Age Distribution LPNs, RNs, and APNs in the Workforce

Age (years)	LPN		RN		APN	
	2019-2020 N=21,523 (%)	2020-2021 N=21,583 (%)	2019-2020 N=112,245 (%)	2020-2021 N=113,464 (%)	2019-2020 N=10,718 (%)	2020-2021 N=12,039 (%)
18-30	8	7	10	11	5	4
31-40	22	22	19	19	28	28
41-50	23	23	20	19	24	25
51-65	36	35	38	37	34	32
66+	11	12	14	14	10	10

(Source: BON Survey 2019-2021)

Retirement Intentions (Self-Reported)

Table 2.28 shows the number of self-reported retirements before next renewal is marginally lower than reported last year across all LPNs, RNs, and APNs.

Table 2.28: Self-reported Retirement Plan in the Next 2 Years

	N	2022-23	% of current workforce
LPN	15,230	488	3.2
RN	87,633	4,328	4.9
APN	10,549	296	2.8

(Source: BON Survey 2020-2021)

This table corresponds all those that answered 'Yes' to the survey question *"Do you plan retirement prior to next renewal?"* in BON survey 2020-2021.

Graduation Trend Rates

An obvious way to diffuse this risk of retirement is to infuse the workforce with higher numbers of new graduates to replace future retirements. Lower retirement levels across the categories help us bridge the gap from otherwise higher levels of expected retirements.

Table 2.29: Nurse Graduation Data 2015-2020*

	2015	2016	2017	2018	2019	2020
LPN	1,543	1,247	1,220	1,323	1,340	1,412
RN	3,161	3,007	3,122	3,374	3,889	4,496

(Source: NJCCN Educational Survey 2015-2020)

Based on our yearly graduation rates, there is a consistent supply of new graduates into the workforce (in line with our assumptions used in the projections for 2020 & 2025). A slightly higher rate of graduation for RNs and APNs might ensure greater availability while current or lower levels of LPN graduation will be sufficient.

Conclusion

Data suggests that while our estimates are slightly conservative, they are warranted considering the missing data and non-responses of this self-reported survey data. Therefore, we move forward with the existing projections from our previous report for the number of retirements of nurses in LPN, RN, and APN categories. It remains unclear what the impact of the COVID-19 pandemic will have on the workforce.

Chapter 3

Workforce Demand Data

NJCCN used data mined from Burning Glass Technologies™ to determine demand for nurses in the State of New Jersey. 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.

Table 3.1: Summary Demand and Requirements Table by Occupation - 2020

Category		Demand and Employment				Salary
	Source	Burning Glass	BLS*/ OES2020	BGT** Projections		
SOC Code (ONET-6)	Occupation Title	Number of job Postings	Number Employed 2020	% Change in Employment 2019-2020	Projected Statewide Change in Employment 2018-2028	Mean Salary
29-1141	Registered Nurses	12,856	78,590	-2%	11.3%	85,720
29-2061	Licensed Practical & Licensed Vocational Nurses	3,149	15,590	-12%	7.3%	57,590
29-1171	Nurse Practitioners	2,253	5,800	-10%	28.2%	130,890

*BLS/OES2020 is Bureau of Labor Statistics Occupational Employment Statistics 2020
**BGT is Burning Glass Technologies™

Registered Nurse (RN) Demand Profile

Figure 3.1 shows the 20 employers who produced the greatest number of online job postings for RNs in 2020. 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 8,546 (80.5%) of the 10,620 qualified total postings.

Figure 3.1: Top 20 Employers of RNs
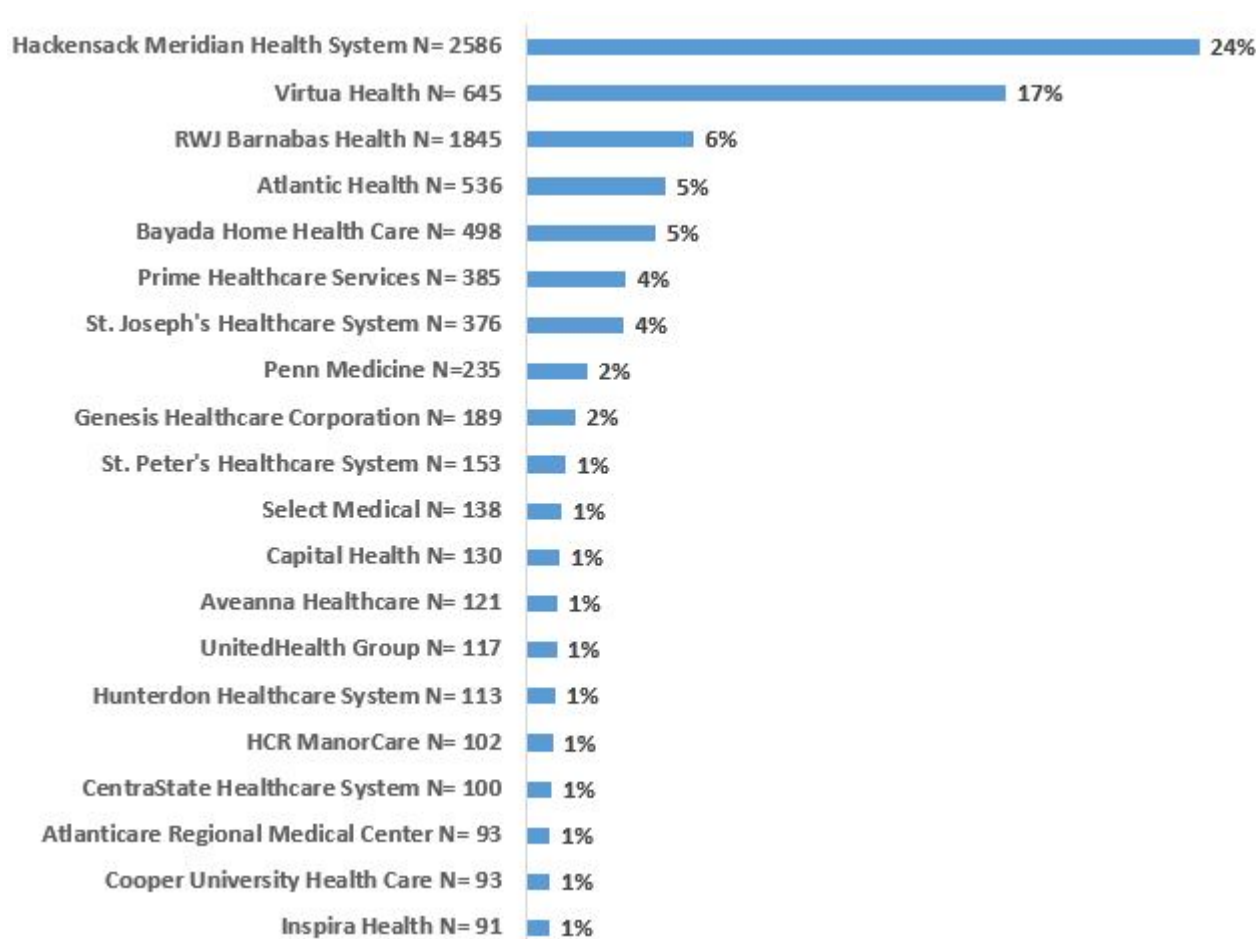
(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

According to **Figure 3.2**, postings increased by 14.82% to 12,856 in the period of 2019-2020.

Figure 3.2: RN Time Series Analysis 2010-2020
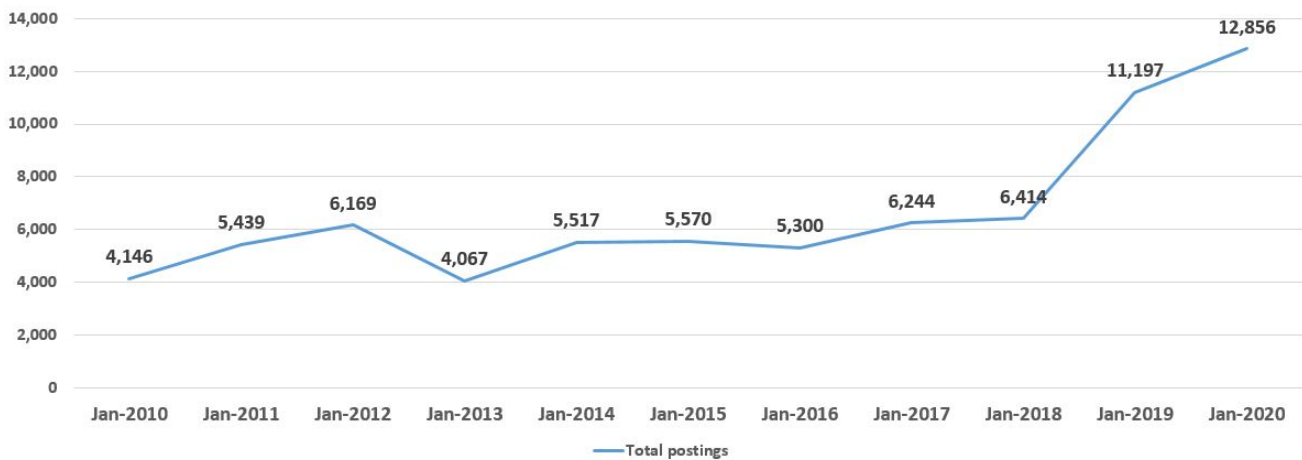
Figure 3.3, on the following page, lists the top RN positions in most demand. Compared to last year's report, there is greater demand for med-surg and emergency room nurses. In 2020, the top 20 RN positions accounted for 5,012 (87.7%) of the 5,716 total qualified postings. In 2019, top 20 RN positions accounted for 3,671 (81%) of the 4,529 total qualified postings. The med-surg position increased from 408 postings in 2019 to 2,122 postings in 2020. This accounted for 37% of the top 20 postings in 2020, compared to 9% in 2019.

Figure 3.3: Top 20 RN Positions

2019

Position	Percentage
Intensive Care Unit (ICU) Registered Nurse N=590	13%
Med/Surg Registered Nurse N=408	9%
Operating Room Nurse N=308	7%
Registered Nurse Supervisor N=298	7%
Nurse Manager N=258	6%
Emergency Room Registered Nurse N=246	5%
Home Care Registered Nurse N=236	5%
Nurse Case Manager N=168	4%
Telemetry Registered Nurse N=151	3%
Labor and Delivery Registered Nurse N=137	3%
Oncology Registered Nurse N=134	3%
Neonatal Intensive Care Registered Nurse N=111	2%
Post-Anesthesia Care Unit (PACU) Registered Nurse N=107	2%
Behavioral Health Registered Nurse N=93	2%
Radiology Registered Nurse N=84	2%
Dialysis Registered Nurse N=79	2%
Endoscopy Registered Nurse N=73	2%
Oncology Nurse/Navigator N=59	1%
School Nurse N=52	1%
Nurse Clinician N=49	1%

2020

Position	Percentage
Med/Surg N= 2122	37%
Emergency Room N= 336	6%
Intensive Care Unit N= 300	5%
Nurse Supervisor N= 288	5%
Operating Room N= 262	5%
Nurse Manager N= 262	5%
Pediatrics N= 192	3%
Home Care and Hospice N= 173	3%
Telemetry N=149	3%
Post Anesthesia Care Unit N= 148	3%
Case Manager N= 141	2%
Float Pool N= 99	2%
Labor and Delivery N= 99	2%
Endoscopy N= 83	1%
Assistant Nurse Manager N= 81	1%
Oncology N= 81	1%
Same Day Surgery N= 54	1%
Wellness Nurse N= 52	1%
Dialysis N= 49	1%
Neonatal Intensive Care Unit N= 41	1%

(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

National Demand Comparison

Figure 3.4 shows the level of demand for RNs across the United States from October 1, 2020 through September 30, 2021. Local area demand is relative to national demand.

Figure 3.4: National Demand for RNs
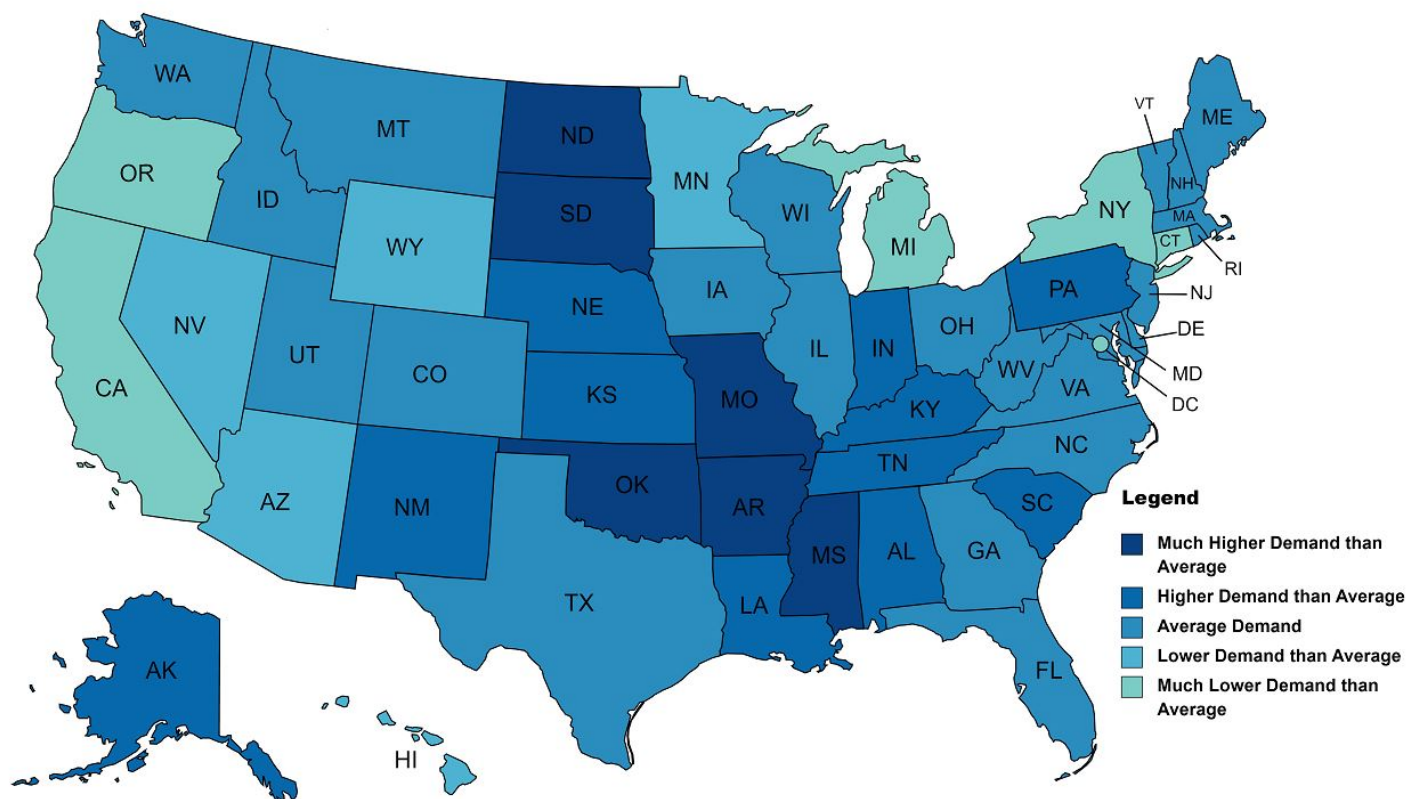
The average rate of demand for RNs nationally is job postings per employed persons. When compared to this rate, **New Jersey has an average rate of demand for RN positions (1.1 LQ).** The states with much higher demand than average are Oklahoma (2.1 LQ), Missouri (1.7 LQ), Arkansas (1.7 LQ), Mississippi (1.7 LQ), and South Dakota (1.7 LQ). The states with much lower demand that average are Michigan (.1 LQ), Connecticut (.2 LQ), California (.2 LQ), New York (.4 LQ), and District of Columbia (.6 LQ).

Job Postings by County

January 1, 2020 - December 31, 2020

There were 12,791 qualified postings available with the current filters applied.

Table 3.2: Demand for RNs by NJ County

County	Job Postings	Location Quotient	Concentration
Atlantic	219	1.5	High
Bergen	1,069	0.8*	Low
Burlington	777	1.2	Average
Camden	1,183	1.8	Very High
Cape May	38	1.1	Average
Cumberland	148	1.4	High
Essex	1,302	1.3	High
Gloucester	304	0.9	Average
Hudson	576	0.6	Very Low
Hunterdon	118	1.1	Average
Mercer	540	0.7*	Low
Middlesex	1,591	1.2	Average
Monmouth	1,435	2.2	Very High
Morris	775	0.8*	Low
Ocean	915	3.3	Very High
Passaic	746	1.6	Very High
Salem	62	1.1	Average
Somerset	315	0.5	Very Low
Sussex	64	1.0	Average
Union	515	0.8*	Low
Warren	99	1.5	High

*Values should be used with caution due to small sample size.
(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

Table 3.2 shows county-level data for the raw number of job postings, the percent of NJ job postings located in each county, and the county Location Quotient (LQ). LQ is a per capita measure that aims to show the concentration of a job in a given area compared to concentration of the same job nationwide.

- A LQ that is equal to the national average would be 1.0.

- A LQ greater than 1.0 would indicate that demand is greater than the national average. For example, 1.2 would indicate that demand is 20% higher than the national average.

- A LQ less than 1.0 would indicate that demand is lower than the national average. For example, 0.8 would indicate that demand is 20% lower than the national average.

The counties with the highest LQ, which indicate demand is greater than the national average, include Ocean (3.3), Monmouth (2.2), and Camden (1.8). The counties with the lowest LQ, which

indication demand is lower than the national average, include Somerset (0.5), Hudson (0.6), and Mercer (0.7*).

The counties with the most job postings include Middlesex (1,591), Monmouth (1,435), and Essex (1,302).

Nurse Practitioner (NP) Demand Profile

Figure 3.5 shows the top 20 employers with the greatest number of online job postings for Nurse Practitioners (NP) in 2020. 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 815 (73.8%) of the 1,104 total qualified postings.

Figure 3.5: Top 20 Employers of NPs
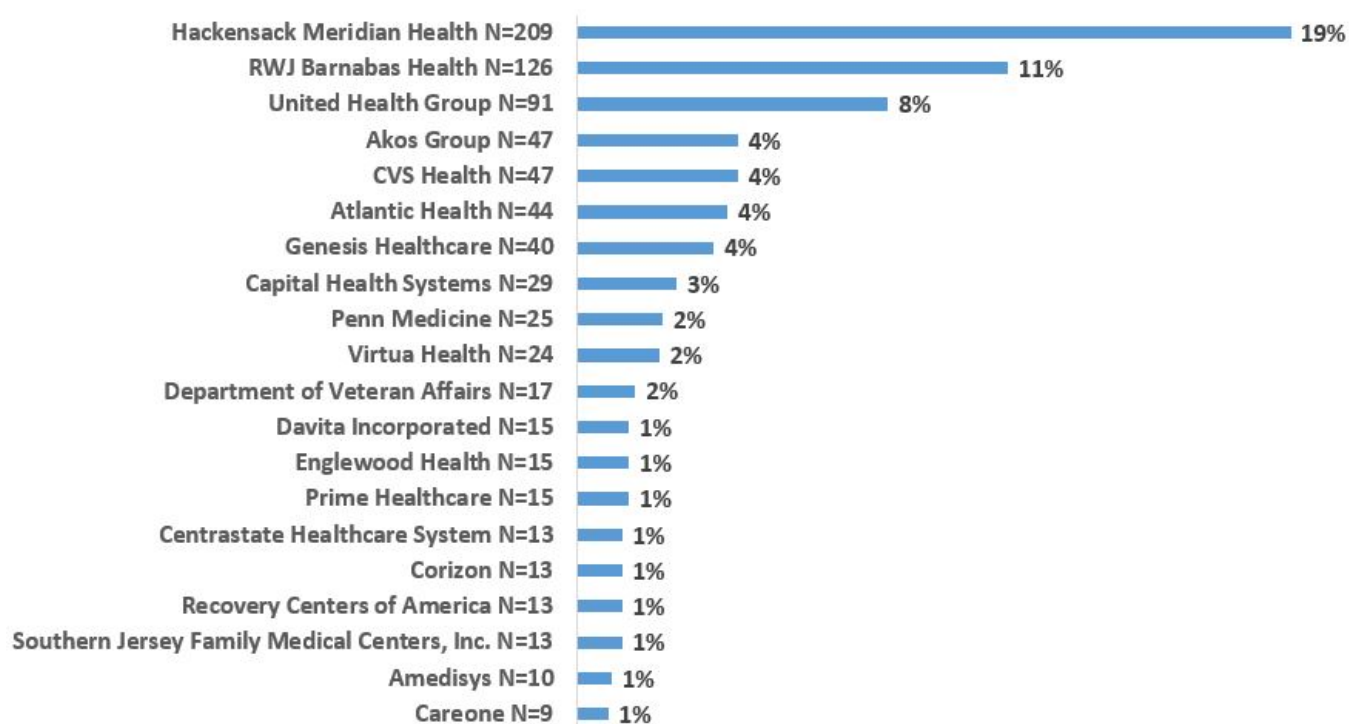
According to **Figure 3.6**, postings decreased by 22.92% to 2,250 in the period of 2019-2020.

Figure 3.6: NP Time Series Analysis 2010-2020
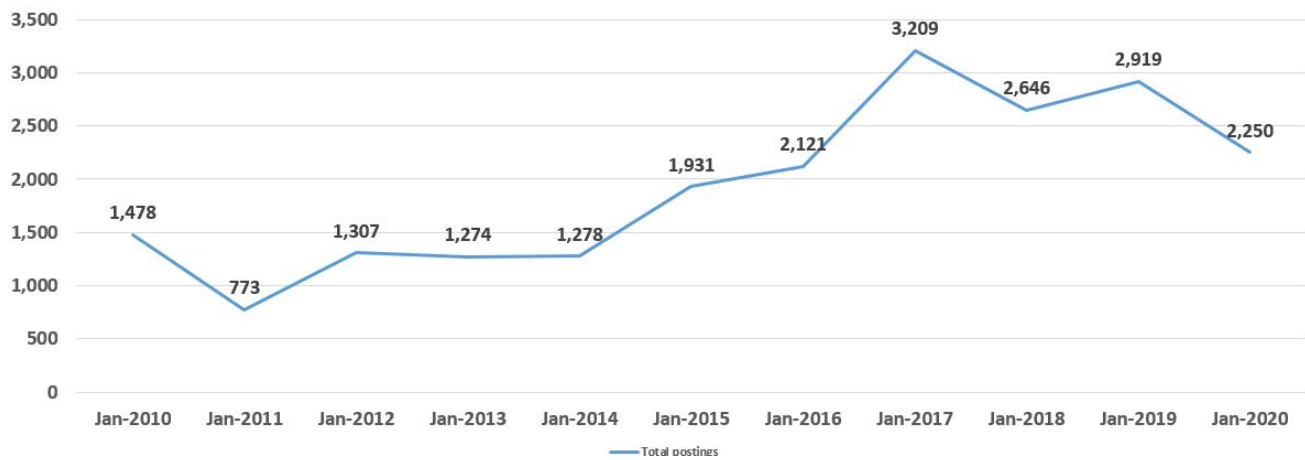
(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

National Demand Comparison

Figure 3.7 shows the level of demand for NPs across the United States from October 1, 2020 through September 30, 2021. Local area demand is calculated relative to national demand.

Figure 3.7: National Demand for NPs

(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

The average rate of demand for NPs nationally is job postings per employed persons. When compared to this rate, **New Jersey has an average rate of demand for NP positions, at 0.9 LQ**. States with much higher demand than average are Maine (2.1 LQ), Alaska (2.0 LQ), Connecticut (1.7 LQ). The three states with much lower demand than average are Utah (0.4 LQ), Wyoming (0.6 LQ), and Kansas (0.6 LQ).

Job Postings by County

January 1, 2020 - December 31, 2020

There were 2,441 qualified postings available with the current filters applied.

Table 3.3: Demand for NPs by NJ County

County	Job Postings	Location Quotient	Concentration
Atlantic	256	1.8	Very High
Bergen	212	0.8*	Low
Burlington	101	0.7*	Low
Camden	167	1.2	Average
Cape May	17	2.2	Very High
Cumberland	49	2.2	Very High
Essex	288	1.3	High
Gloucester	51	0.7*	Low
Hudson	195	0.9	Average
Hunterdon	12	0.5	Very Low
Mercer	133	0.8*	Low
Middlesex	206	0.7*	Low
Monmouth	242	1.8	Very High
Morris	102	0.5	Very Low
Ocean	122	2.1	Very High
Passaic	77	0.8*	Low
Salem	10	0.8*	Low
Somerset	41	0.3	Very Low
Sussex	27	2.1	Very High
Union	122	0.8*	Low
Warren	11	0.8	Low

*Values should be used with caution due to small sample size.
(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

Table 3.3 shows county-level data for the raw number of job postings, the percent of NJ job postings located in each county, and the county Location Quotient (LQ). The LQ is a per capita measure that aims to show the concentration of a job in a given area compared to concentration of the same job nationwide.

- A LQ that is equal to the national average would be 1.0.

- A LQ greater than 1.0 would indicate that demand is greater than the national average. For example, 1.2 would indicate that demand is 20% higher than the national average.

- A LQ less than 1.0 would indicate that demand is lower than the national average. For example, 0.8 would indicate that demand is 20% lower than the national average.

The counties with the highest LQ, which indicate demand is greater than the national average, include Cape May (2.2), Cumberland (2.2), Sussex (2.1), and Ocean (2.1). The counties with the

lowest LQ, which indication demand is lower than the national average, include Somerset (0.3), and Hunterdon (0.5), and Morris (0.5).

The counties with the most job postings include Essex (288), Atlantic (256), and Monmouth (242).

Licensed Practical Nurse (LPN) Demand Profile

Figure 3.8 shows the top employers with the greatest number of online job postings for LPNs in 2020. 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 1,805 (73.6%) of the 2,453 total qualified postings. Top employers included nursing homes, home health care providers, and hospital systems.

Figure 3.8: Top 20 Employers of LPNs
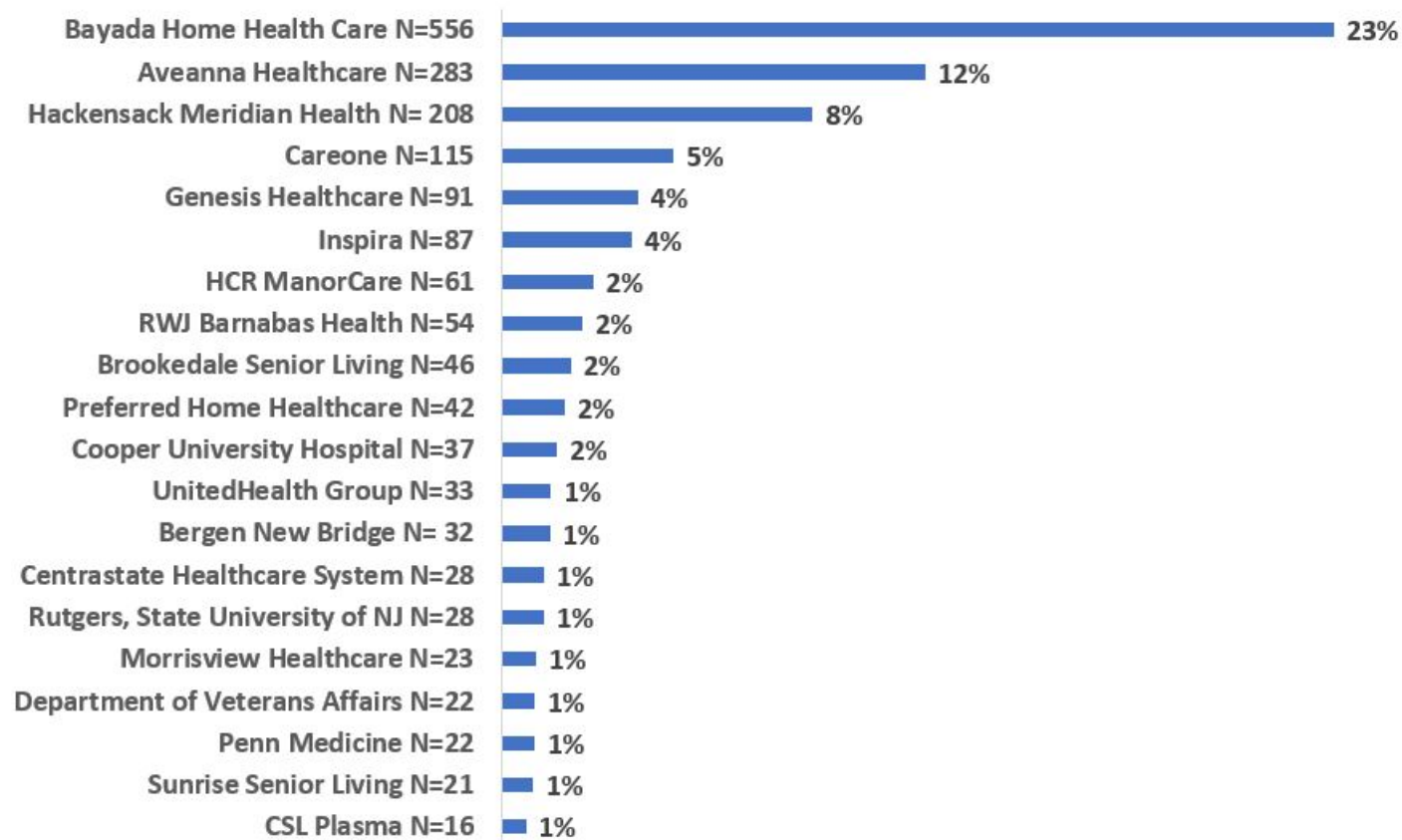
According to **Figure 3.9**, postings increase by 23.73% to 3,149 in the period of 2019-2020.

Figure 3.9: LPN Time Series Analysis 2010-2020
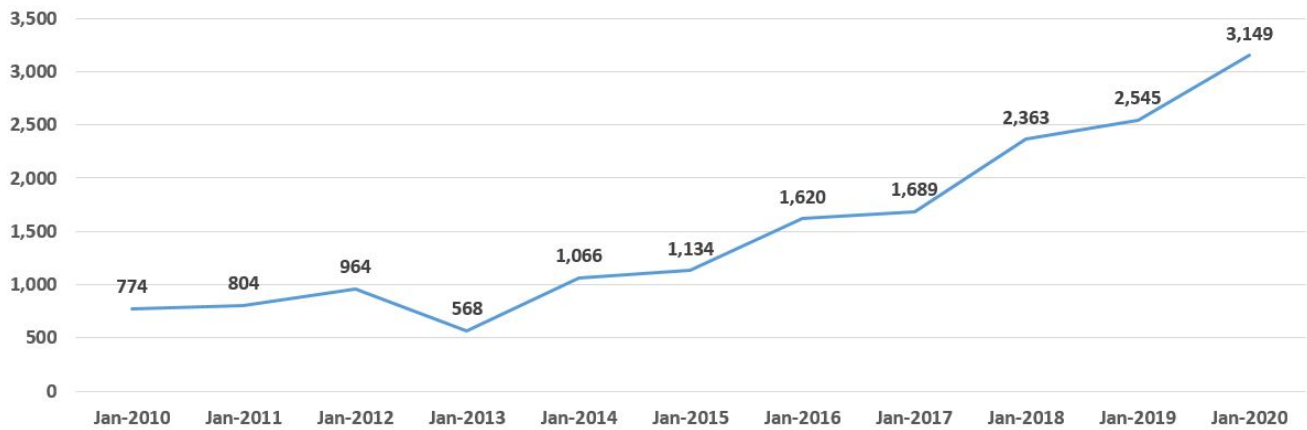
National Demand Comparison

Figure 3.10 shows the level of demand for LPNs across the United States from October 1, 2020 through September 30, 2021. The demand for LPNs is identified here as the ratio of LPN job postings per employed persons.

Figure 3.10: National Demand for LPNs
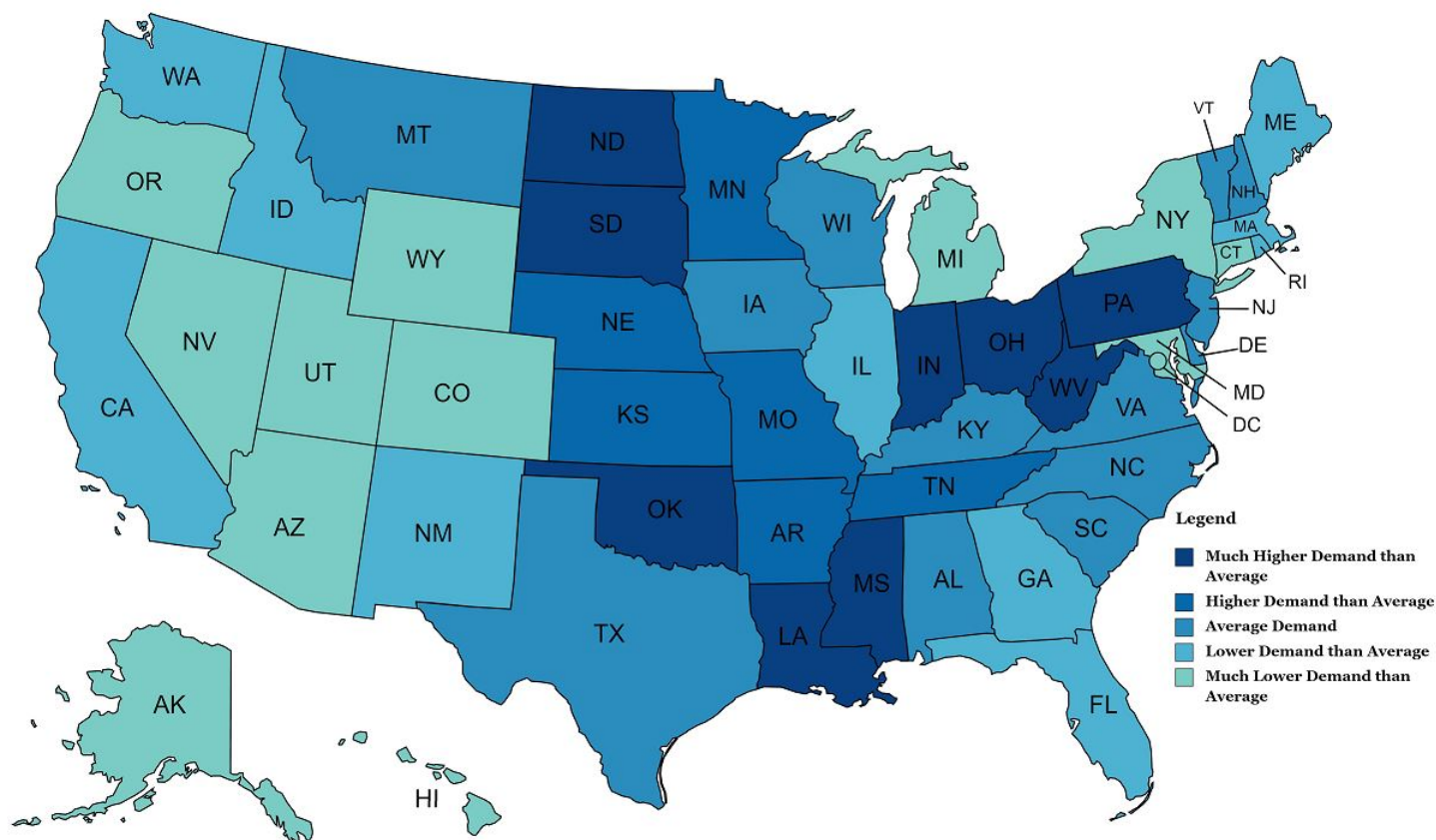
The average rate of demand for LPNs nationally is job postings per employed persons. When compared to this rate, **New Jersey has an average rate of demand for LPN positions, with a rate of postings per employed persons.** The states with much higher demand than average are South Dakota (2.6 LQ), Oklahoma (2.0 LQ), Louisiana (2.0 LQ), and Mississippi (2.0 LQ). The states with much lower demand than average are District of Columbia (0.1 LQ), Connecticut (0.2 LQ), and Michigan (0.2 LQ).

Job Postings by County

January 1, 2020 - December 31, 2020

There were 2,745 qualified postings available with the current filters applied.

Table 3.4: Demand for LPNs by NJ County

County	Job Postings	Location Quotient	Concentration
Atlantic	86	1.9*	Very High
Bergen	268	0.7	Low
Burlington	262	1.4	High
Camden	460	2.3	Very High
Cape May	31	2.9*	Very High
Cumberland	88	2.7*	Very High
Essex	178	0.6	Very Low
Gloucester	223	2.1	Very High
Hudson	73	0.2*	Very Low
Hunterdon	48	1.5*	High
Mercer	167	0.7	Low
Middlesex	266	0.7	Low
Monmouth	294	1.5	High
Morris	116	0.4	Very Low
Ocean	166	2.0	Very High
Passaic	118	0.8	Low
Salem	44	2.5*	Very High
Somerset	86	0.4*	Very Low
Sussex	25	1.3*	High
Union	113	0.6	Very Low
Warren	33	1.7*	Very High

*Values should be used with caution due to small sample size.
(Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2021)

Table 3.4 shows county-level data for the raw number of job postings, the percent of NJ job postings located in each county, and the county Location Quotient (LQ). The LQ is a per capita measure that aims to show the concentration of a job in a given area compared to concentration of the same job nationwide.

- A LQ that is equal to the national average would be 1.0.

- A LQ greater than 1.0 would indicate that demand is greater than the national average. For example, 1.2 would indicate that demand is 20% higher than the national average.

- A LQ less than 1.0 would indicate that demand is lower than the national average. For example, 0.8 would indicate that demand is 20% lower than the national average.

The counties with the highest LQ, which indicate demand is greater than the national average, include Cape May (2.9*), Cumberland (2.7*), and Salem (2.5*). The counties with the lowest LQ,

which indication demand is lower than the national average, include Hudson (0.2*), Morris (0.4), and Somerset (0.4*).

The counties with the most job postings include Camden (460), Monmouth (294), and Bergen (268).

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 full-time 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 evidence-based, 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 BON licensure data. 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 a third-party vendor and used by the BON prior to being sent to the Center for analysis. Because it is self-reported, these data can have errors. In 2018, the BON changes its survey questions to the Nursys® Licensure and Workforce tool. Data for 2018-2019 were collected using the Nursys® tool.

Demand

Demand data that determines workforce trends in real-time is important for predicting the job market. As such, the Center is using Labor Insight™ designed by Burning Glass Technologies (BGT). Labor Insight™ 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. Labor Insight™ obtains data on online job postings from up to 40,000 sources, 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 NJCCN used data mined from BGT to determine the demand for nurses in the state of New Jersey. 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.

There are several limitations of BGT data. A major limitation is that online job advertisements are only partially representative of the labor market and the demand for labor. Current approaches to advertising also include newspapers, career fairs, and social networking (American Psychological Association APA, 2015). 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 BGT uses an algorithm to remove duplications in each 60-day timeframe. If a job is not filled and is reposted within this 60-day timeframe, it will be a duplicate that cannot be screened out. 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. Lastly, because new web sources of online job ads are continuously added by BGT, samples of job advertisements from different time periods are incomparable (APA, 2015). Thus, BGT data cannot be used to study longitudinal changes in the online labor market (APA, 2015).

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 2019-20 data.

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