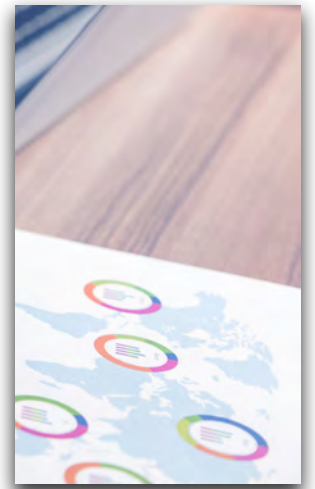
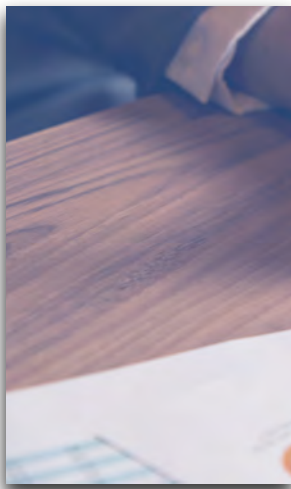




New Jersey Licensed Practical Nurse Supply and Demand



August 2018

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Introduction

The New Jersey Collaborating Center for Nursing (NJCCN) is the primary source for New Jersey data on Nursing Workforce. To that end, the Center conducts annual surveys of all nursing schools to monitor trends in enrollment and graduation. Working collaboratively with the New Jersey Board of Nursing, the Center also analyzes workforce data at the time of licensure. Both of these reports provide the supply data. Both of these surveys are self-reported and therefore can have errors based on the individual's attention to detail.

Demand data is extracted by Labor Insight™ designed by Burning Glass Technologies™. Labor Insight™ draws on a comprehensive database of real-time demand data on a national and regional level. This database can track and analyze employer hiring activities by industry, occupations, education, and skills.

O* Net is the nation's primary source of occupational information and is developed under the sponsorship of the US Department of Labor employment. Limitations are that there can be duplicates which are missed through a de-duplication algorithm used by Burning Glass for each 60-day timeframe. If the job is not filled in 60 days and is reposted, it will be a duplicate that cannot be screened out.

This report is specifically targeted for LPN data to determine current supply and demand needs.

I. Licensed Practical Nurse Supply

A. Educational Capacity Data

The table below describes self-reported data on application, enrollment, and graduation rates for new Jersey's LPN programs from 2014 - 2017.

Table 1. Practical Nursing Admission, Enrollment, and Graduation Trends				
	2014	2015	2016	2017
Available Seats	3569	3515	2862	3007
Qualified Applicants	3406	3286	2882	3116
Admitted Applicants	2617	2530	2265	2232
Enrollees	2368	2117	1882	1982
Enrolled (%)	90%	84%	83%	89%
Graduates	1575	1543	1247	1220

The number of **Available Seats** is the maximum number of LPN students that could be accommodated across all programs. **Qualified Applicants** are those who met the criteria to be admitted into a program. **Admitted Applicants** are those who were offered a position in a program. A student may have applied to and been offered admission to multiple programs. **New Enrollees** are those who accepted admission and began matriculating in an LPN program. **Graduates** are those who completed the program and are qualified to sit for the NCLEX-PN.



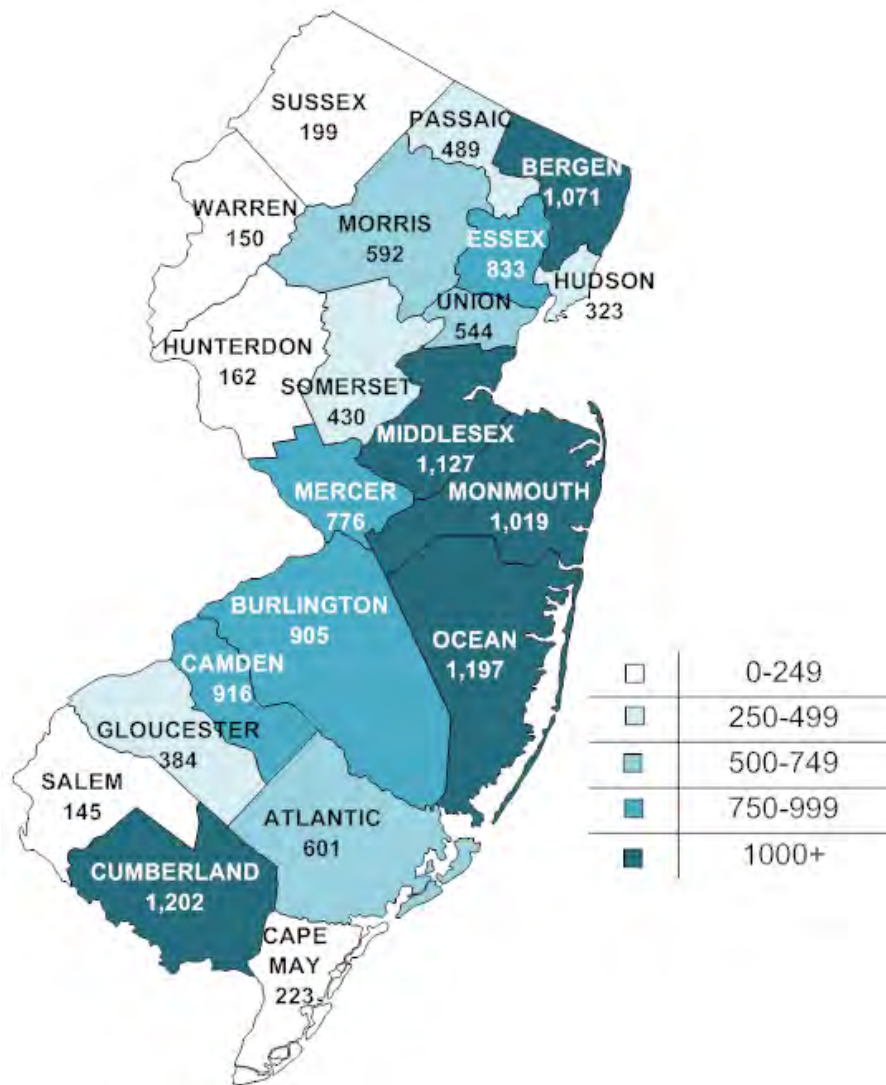
There is a 23.5% decline in graduates since 2014. The data also shows that there are more than adequate seats available to accommodate the applicant pool.

B. Supply Data

The following figure shows the distribution of LPNs by County. This data is drawn from the 2016-2017 LPN License Renewal Survey.

Figure 2 describes the employment of LPNs geographically by sorting LPNs according to the zip code of their primary employer. Of the 16,831 survey respondents, 4,282 did not report their employer’s zip code, so they are not included on this map.

Figure 2. Distribution of LPNs by County



As reported by the LPNs in their licensure renewal for 2016-2017, the majority of LPNs work in Nursing Homes, Home Health Agencies, and Rehabilitation Facilities. This data will be further evidenced in the demand data for New Jersey.

Figure 3. LPN Primary Employment Setting

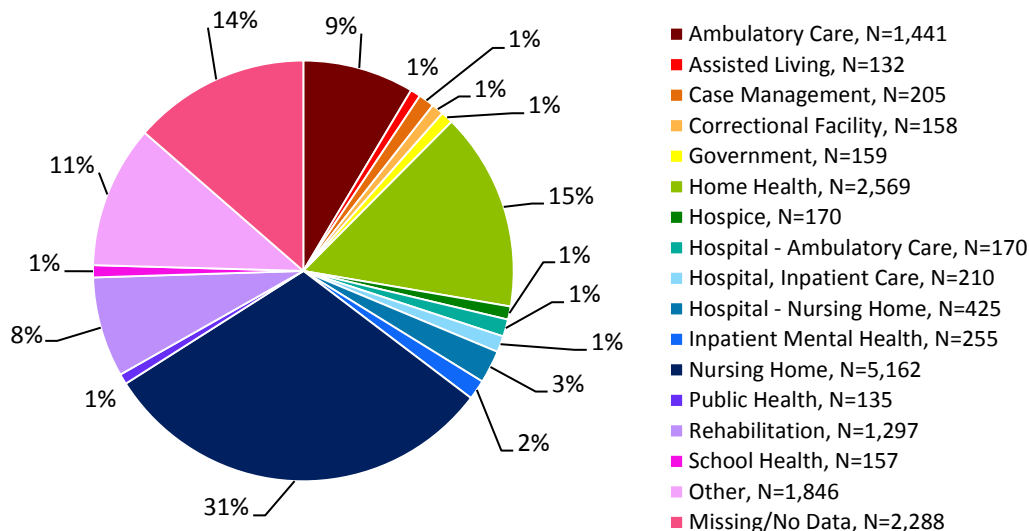
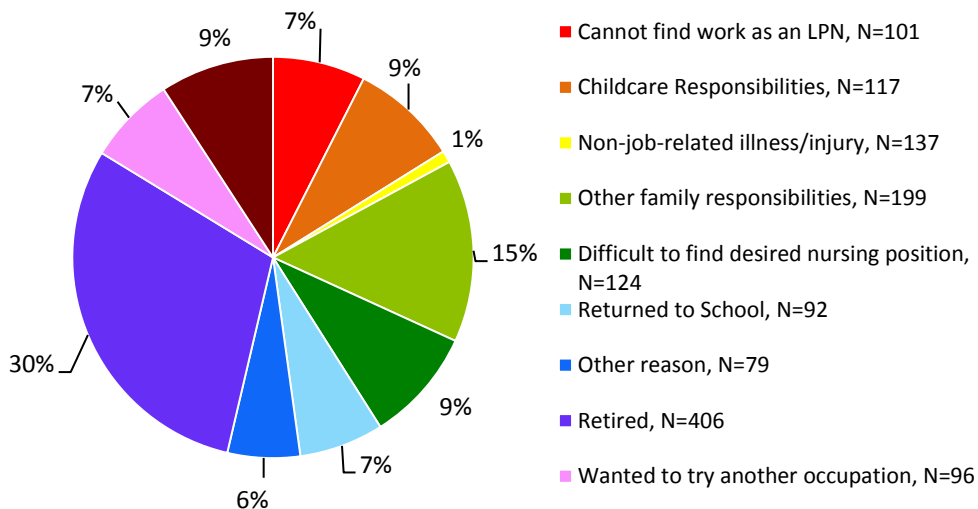


Figure 4 below describes the reasons for unemployment as reported by the 1,475 LPNs who self-reported themselves as unemployed during the 2016-2017 license renewal period. There was an 8.76% unemployment rate according to the total LPN workforce report. Retired LPNs account for 30% (n = 406) of unemployed LPNs.

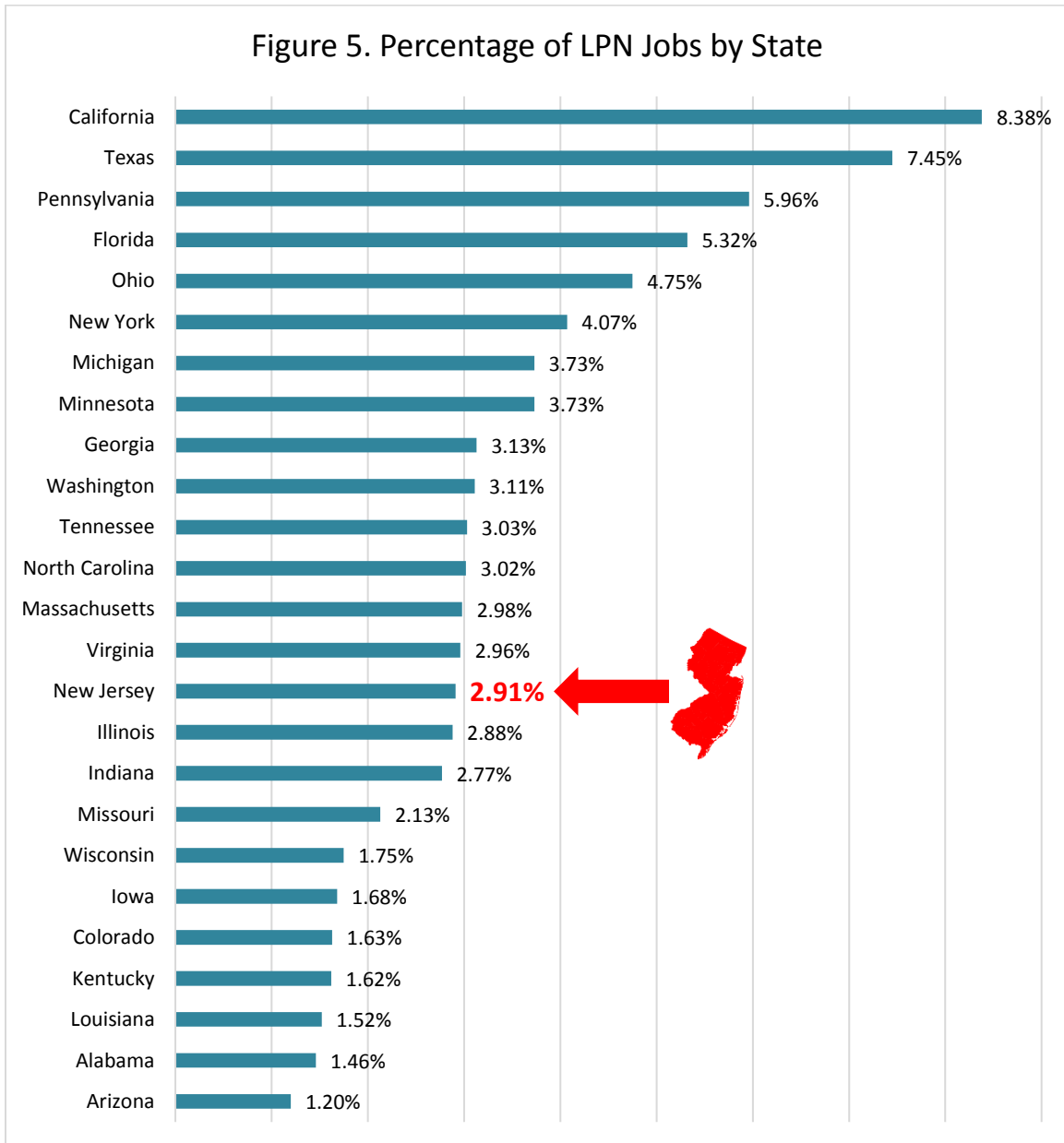
Figure 4. Reason Given for LPN Unemployment



II. New Jersey Demand Data for LPNs

A. LPN Jobs by State

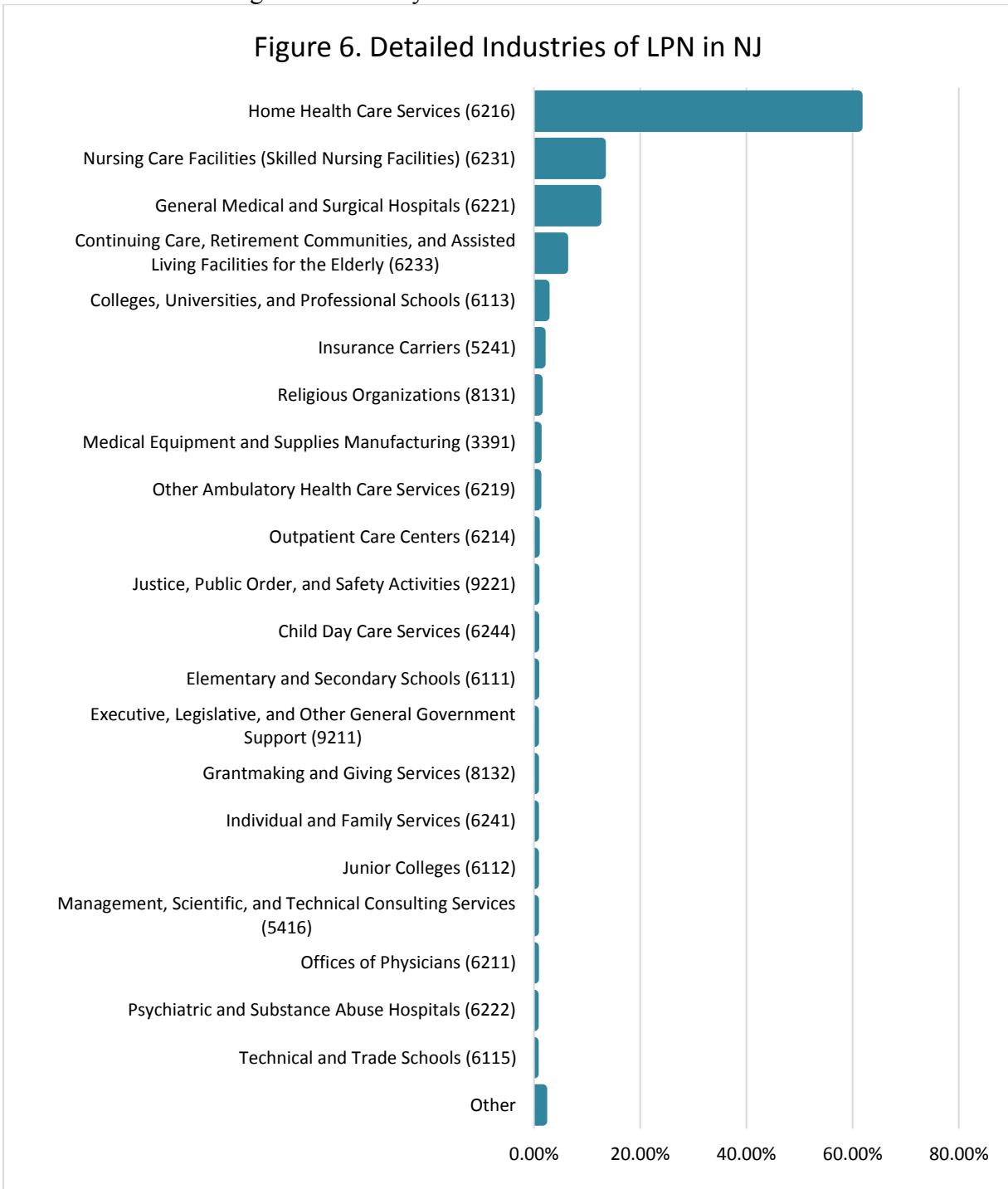
We also looked at how New Jersey compares to other states in terms of demand. A search by location of job opportunities for 2017 shows that there were 173,218 LPN job postings nationally. Those postings were distributed across the US. As indicated below in Figure 5, New Jersey accounts for only 2.9% of the jobs available for the year.



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2018)

B. Industry Utilization in New Jersey

For 2017, there were 2089 postings for LPNs in New Jersey. Of these postings, the majority were in post-acute settings. They include Home Care Services (61.07%), Skilled Nursing Care (12.69%) and Continuing Care/Retirement/Assisted Living Facilities (5.63%) Figure 6 below provides a detailed listing of the industry sectors.

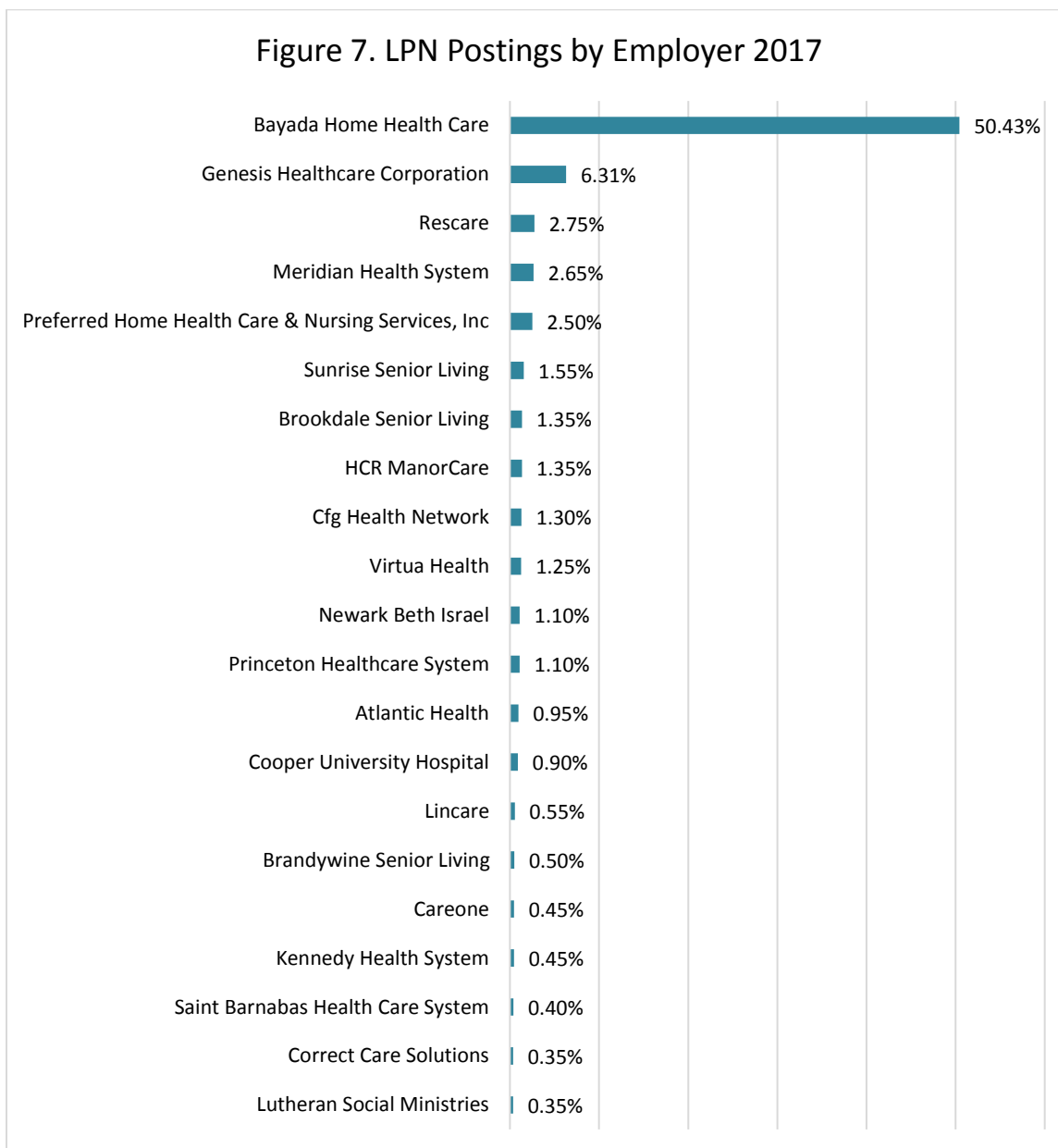


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2018)



C. Employer Postings

Most of the postings in New Jersey came from one employer: Bayada, in the field of Home Health Care. The greater numbers of postings may reflect a high rate of turnover, frequent repeated postings, or a high demand from employers.



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2018)

D. Demand by MSA

Demand by Metropolitan Statistical Areas (MSA) for New Jersey are provided in the following chart. MSAs serve a group of counties and cities in a specific geographic area for the purposes of population census and the compilation of related data. As seen below, MSAs also cross state lines.

MSA	Job Postings	Location Quotient	Concentration
New York-Newark-Jersey City, NY-NJ-PA	2,096	0.5	Very Low
Philadelphia-Camden-Wilmington, PA-NJ-DE	1,422	1.1	Average
Allentown-Bethlehem-Easton PA-NJ-DE	256	1.6	Very High
Trenton, NJ	133	1.2	Average
Atlantic City-Hammonton, NJ	103	1.7	Very High
Vineland-Bridgeton, NJ	55	2	Very High
Ocean City, NJ	40	2	Very High

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2018)

* Grayed-out values should be used with caution due to low posting totals.

E. Demand within Each NJ County

Location Quotients (LQ) show how concentrated demand is within a geographical area. US-wide average demand equals 1.0. An LQ of 1.2 indicates 20% higher demand than the US average. New Jersey's LQ overall for LPNs is 1.1, which demonstrates an average demand as compared to the US as a whole. For New Jersey, the counties with the highest concentration of demand as defined by the LQ are Burlington, Passaic, Ocean, Atlantic, and Camden (See Table 9 below).

County	Job Postings	Location Quotient
Burlington, NJ	195	2.1
Bergen, NJ	192	0.9
Passaic, NJ	184	2.4
Camden, NJ	161	1.7
Monmouth, NJ	153	1.3
Ocean, NJ	137	1.8
Mercer, NJ	133	1.2
Middlesex, NJ	126	0.7
Essex, NJ	118	0.7
Atlantic, NJ	103	1.7

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2018)

* Additional counties are not shown due to low posting totals.

Burning Glass Technologies calculates statewide projections for LPN demand. Their most recent projection, which covers the period from 2016 to 2026, shows a 14.6% increase in demand. This is equivalent to a 1.46% increase per year, which can be accommodated by available seats in current LPN programs.

III. National Demand Data for New Jersey

The Health Resources and Services Administration's (HRSA) Health Workforce Simulation model estimates current and future supply and demand for health workers. It assumes that demand equals supply in the base year. It also assumes that the state will provide the same level of nursing care consistent with 2014. According to the HRSA report projection for New Jersey, there will be an 11.3% adequacy/surplus of LPNs for New Jersey, as shown in Table 10.

Table 10. New Jersey Demand for LPNs 2014-2030				
2014	2030	2030		
Supply/Demand	Supply	Demand	Difference	Adequacy
19,400	30,500	27,400	3,100	11.3%

Using a similar assumption that during the first year the supply and demand are equal for the Long-Term Services and Supports (LTSS) segment of the workforce (institutional, home, and community settings), the data shows that the northeast has the slowest growth rate anticipated from 2015 to 2030 for LPNs as compared to other regions. New Jersey's LTSS demand data is shown in Table 11.

Table 11. New Jersey LTSS Demand for LPNs 2015-2030				
2015	2020	2025	2030	% change*
10,770	12,130	13,510	15,510	44%

*This change equates to a 2.9% change each year.

It is recognized however that changes in delivery systems, economic volatility, and insurance coverage can impact these models either in a positive or negative manner.



IV. Findings

- Based on the trended educational capacity data, there appears to be adequate number of seats available in the current programs to meet the needs of the applicant pool.
- Using 2014 as a base year, there has been a 23.5% decline in the number of graduates through 2017.
- Workforce data shows that 8.76% of the respondents in the survey identified they were unemployed, which is important to note in terms of projecting demand.
- The majority of the LPN workforce work in nursing home, home health, and rehab facilities.
- National and NJ data shows an adequate supply of LPNs for the state.
- The data shows that NJ has an overall average demand for LPNs.
- Analysis of the distribution of job postings shows greater concentration of demand in the southern counties and Passaic County.

Work in Progress: Exploration of Licensed Practical Nursing in NJ

The New Jersey Collaborating Center for Nursing (NJCCN) is conducting a research study to examine the current Licensed Practical Nurse (LPN) role in New Jersey (NJ) from the employee and employer perspective. The aims of this mixed method study are:

Aim 1: To explore and describe key stakeholders understanding of the supply, demand and use of LPNs in New Jersey.

Aim 2: To compare the actual practice of LPNs, as reported by key stakeholders, and determine if LPNs are working to the full extent of their licensure

Aim 3: To describe the relationship between LPN's job satisfaction and their job activities, work setting and demographics.

Through focus groups and interviews, the perspective of LPNs and LPN employers will be explored regarding the current and future role of LPNs in varied settings. After analysis of the qualitative data, a survey will be sent to LPNs and LPN employers to examine the relationship between LPNs' job activities and their job satisfaction, work setting and demographics.

The results of this study will be shared regarding the LPN workforce in NJ and whether LPNs are working to the full extent of their licensure.



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- US Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. (2017). National and Regional Supply and demand Projections of the Nursing Workforce: 2014-2030. Rockville, Maryland.
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