Florida's Licensed Practical Nurse Supply: 2014-2015 Workforce Characteristics and Trends

May 2016

Addressing Nurse Workforce Issues for the Health of Florida
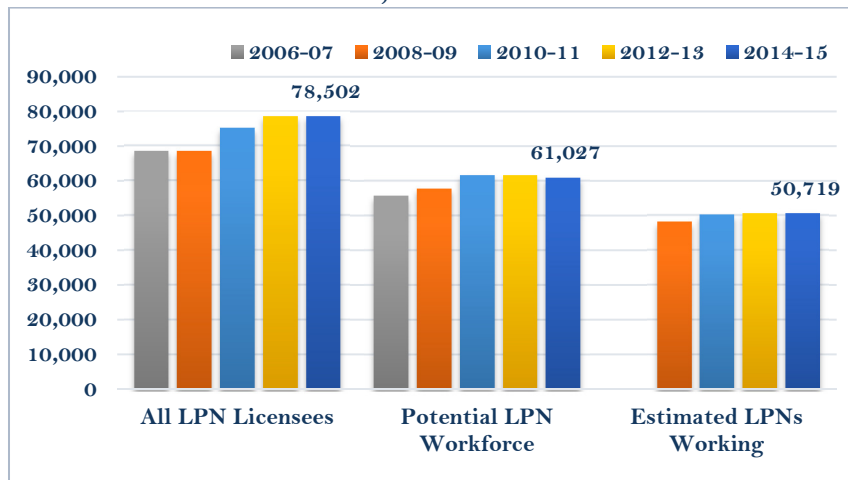
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Florida
Center for Nursing

The information below represents the **key findings** on Licensed Practical Nurse (LPN) supply and workforce in Florida. Trend analysis is provided for 2007 through 2015 when available.

Trends in LPN Workforce, 2008-09 to 2014-15

LPN Workforce Gains and Losses, 2008-09 to 2014-15
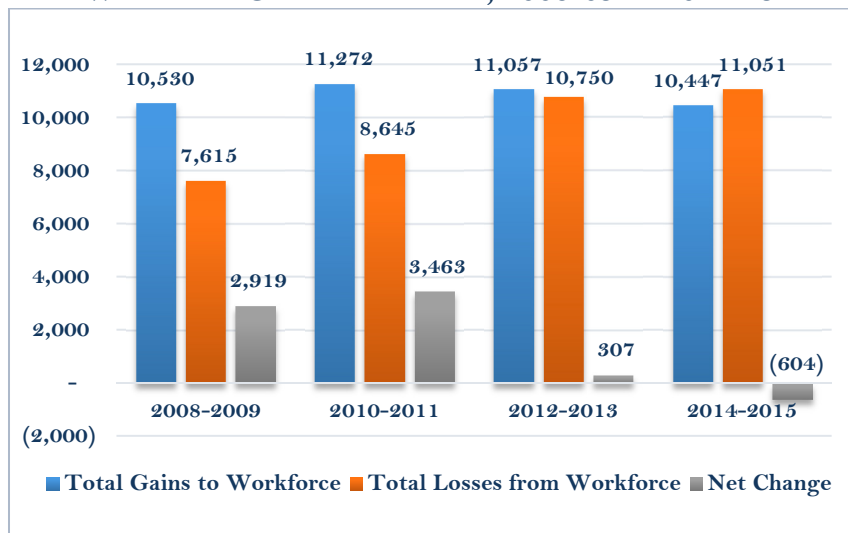
- Florida's potential LPN workforce has remained **stable** since 2012-13.
- 83% of the potential workforce is estimated to be **working**.
- While the workforce gained nearly 10,500 LPNs, over **11,000 were lost** from 2012-13 to 2014-15.
- The primary reason for losses was a **failure to renew**.
- The **top four** employment settings for LPNs long-term care (39%), home health (15%), health provider offices (11%), and hospitals (8%).
- 30% of LPNs work in **geriatrics** for their clinical practice, 12% in home health, and 10% in adult/family health.
- The average **age** of LPNs is 45.9 and about 38% are over the age of 50 years.
- Florida has an estimated **256 LPNs employed in nursing per 100,000** population, down from 264 in 2012-13.

Recommendations

1. Encourage academic and industry collaboration to assure appropriate curriculum content in preparation for industry needs.
2. Monitor the increasing trend of losses from the LPN workforce. Information is needed about the reasons LPNs are leaving the profession, in order to improve retention and help strategically plan and recruit LPNs for the future workforce.
3. Support the Center's research efforts and analysis of workforce

INTRODUCTION

The Florida Center for Nursing (Center), in partnership with the Florida Board of Nursing and Florida Department of Health, Division of Medical Quality Assurance, has collected nurse workforce data since January 2008 via a voluntary Workforce Survey. The survey is integrated into the online license renewal process for all nurse licensees. This report provides information on Florida's licensed practical nurse (LPN) population using data collected during the license renewal cycle of January 2014 – December 2015. Characteristics of Florida's LPN workforce, such as size, demographics, and employment information are described herein. Current information is also compared to data from previous license renewal cycles and trends of the changing LPN workforce are discussed as possible. Data on the state's supply of nurses provides valuable information to nurse employers, nursing schools, nurse faculty, workforce planners, and policy makers.

FLORIDA'S LPN SUPPLY AS OF DECEMBER, 2015

LPNs renew their licenses in odd years, with the last LPN renewal in 2015. The Center used a data extract from late December 2015 to represent the current population of licensees. With online license renewal, nurses have the option to participate in the Center's Workforce Survey. The Workforce Survey response rate among all LPNs was 69.8% (n=54,760) during the 2014-2015 renewal cycle, 89% of those renewing and 56% of the new licensees took the survey. LPNs newly licensed in Florida during the same period have the option to participate in the survey, but to do so requires extra effort as it is not incorporated in the application process.

The Center uses responses to the workforce survey to estimate the number of nurses working in Florida. Because response rates were lower than 100%, this estimate was calculated by extrapolating survey results for certain questions to nurses who did not respond to the Workforce Survey. More information about the data processes can be found in the Center's technical report.[1]

There were 78,502 LPN licenses in the nurse licensure database as of December 2015; however, far fewer are actually in Florida's LPN workforce (Figure 1). About 61,000 (78%) met the criteria for being counted as part of the *potential* nurse workforce: an active license, Florida address, and no disciplinary restrictions. This group of nurses is capable of providing nursing labor in Florida; however, some are working in other fields or not working at all. We estimate that about 83% of the potential LPN workforce, or 51,000, are *actually* working as LPNs in Florida. Finally, since some nurses work part-time, Florida's number of full-time equivalent (FTE) LPNs is lower still at an estimated 43,225. The total number of LPN licenses in the state's database, the potential LPN workforce, the estimated number of LPNs working, and estimated FTEs have remained about the same for the past two renewal cycles.
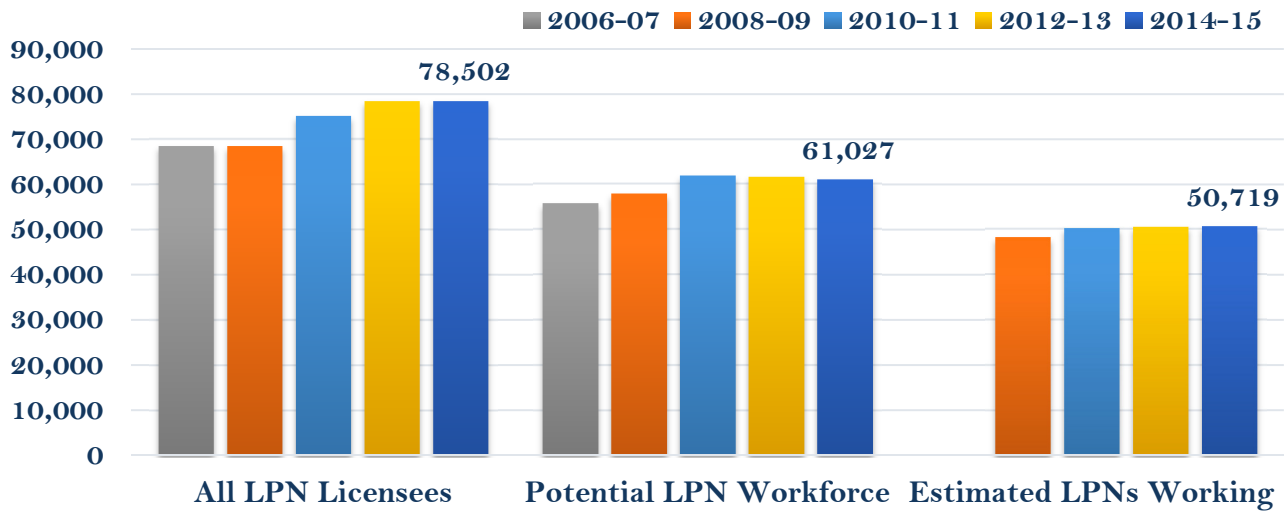
Figure 1. Florida's LPN Supply Trend, 2006-07 to 2014-15
Note: Estimated number of working LPNs was not available for 2006-2007 data.

LPN WORKFORCE GAINS AND LOSSES

Florida's potential LPN workforce lost 604 nurses between December 2013 and December 2015 (see Figure 2). To investigate this net change, the Center tracked individual licensees into and out of the workforce over the two-year period. We found that the potential LPN workforce actually gained nearly 10,500 LPNs but during the same time over 11,000 were lost from the potential LPN workforce. Compared to previous licensure cycles, workforce gains decreased while the reverse was true for losses.

Figure 2. Florida's LPN Workforce Gains and Losses, 2008-09 to 2014-15

Table 1 shows the causes of gains in the potential LPN workforce during 2014-15. Licensure by examination was the most common reason a nurse joined the workforce. As in previous years, the second most common reason for gaining new LPNs was endorsement into Florida

with a nursing license from another state. Nearly 300 LPNs moved into Florida with an existing Florida nursing license, and about 1,500 made a license status change rendering them eligible to practice nursing in the state.

Table 1. New Additions to the Potential LPN Workforce, 2014-15

	n
New Licensee by Endorsement	2,531
New Licensee by Exam	6,110
Unknown New Licensee	9
New Florida Address	277
Changed to eligible status	1,494
Changed to active status	26
Total	**10,447**

The most common cause for attrition from the potential LPN workforce was failure to renew a nursing license as scheduled in 2015, which was an increase of about 700 more people than in 2013 (see Table 2). Unfortunately, when nurses do not renew their nursing license, we do not learn whether they did so because they no longer practice in Florida, work outside the field of nursing, retire, or for another reason. It is also possible that LPNs did not renew their license because they upgraded to RN, but this information could not be tracked in the database. Over 800 LPNs changed their address to outside of Florida, but still maintain their license in the state.

Table 2. Losses from the Potential LPN Workforce, 2014-15

	n
Failed to Renew	9,454
No longer living and/or working in FL	824
License Went Null and Void	433
Changed to Inactive Status	77
Changed to Retired Status	202
Disciplinary Action	21
Obligations/Probation	40
Total Attrition	**11,051**

EMPLOYMENT CHARACTERISTICS

About 84% of the LPNs responding to the survey indicated that they are working as LPNs in Florida (see Figure 3). In addition, 5.2% are seeking nursing employment, about 1% less than 2012-13. Only 5.4% are not seeking work, and 2.4% are retired but still have an active license. The "Not applicable" is an artifact of the questionnaire and may indicate that someone is employed outside of nursing. Overall, LPNs are working in the field at a slightly lower rate as are Florida's RNs (86%). The workforce participation rate for LPNs has remained steady over the past renewal cycles.
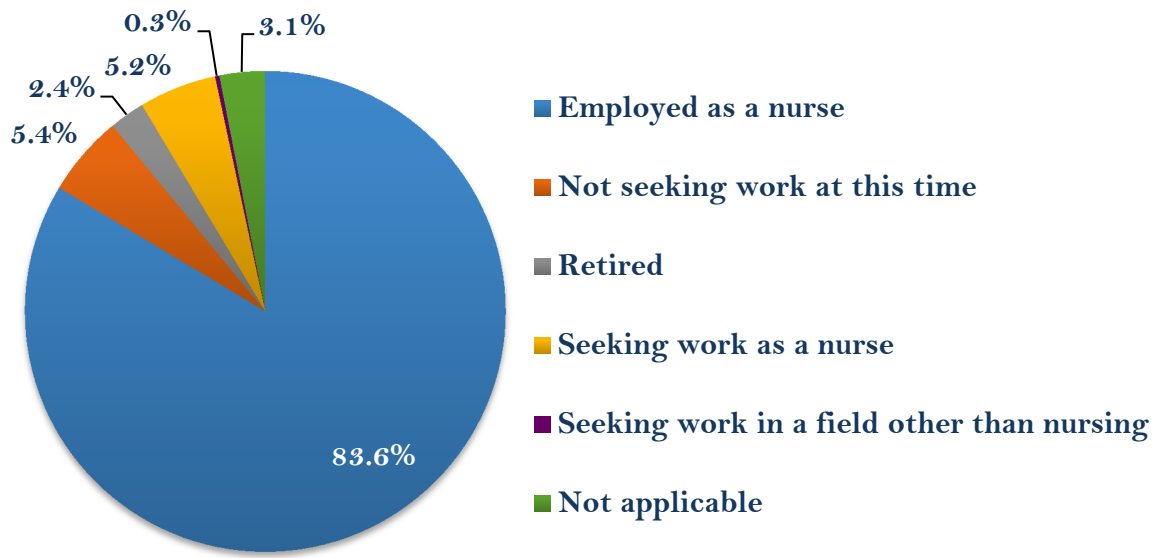
Figure 3. **Work Status of LPNs in 2014-2015**

The survey also asked unemployed nurses the reasons why they are not working. Among unemployed LPNs (i.e. those not seeking work at this time, seeking work as a nurse, or seeking work in a field other than nursing), the primary reason for not working was *taking care of home and* family at 31%(see Figure 4). The second reason was *school responsibilities* at 13%, down five percentage points since the last survey.
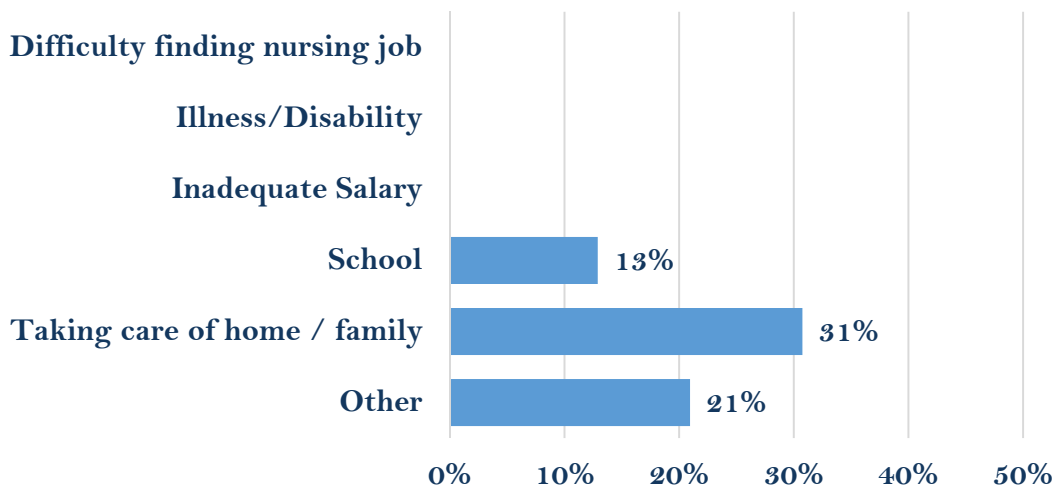

Figure 4. **Reasons LPNs are not working**

The distribution of LPNs employed in various industries is shown in Table 3. The largest employment setting for LPNs is long-term care, where 38.8% of LPNs are employed. LPNs are also commonly employed in home health care (15.4%), physician or health provider offices (10.6%), and hospitals (7.8%). Employment distribution by setting has remained relatively stable with the notable exception of decreasing LPN employment in hospitals (from 10.1% in the last survey to 7.8% in this survey). LPNs are more likely to work in long-term care or home health care, compared with RNs, who are more likely to work in hospitals.

Table 3. LPN Employed by Setting, 2008-09 to 2014-15

	2008-09		2010-11		2012-13		2014-15	
	n	%	n	%	n	%	n	%
Academic Setting	92	0.2	146	0.3	142	0.3	132	0.3
Ambulatory Care	1,282	2.7	1,029	2.1	1,128	2.2	1,187	2.3
Corrections Facility	2,120	4.4	2,194	4.4	2,241	4.4	2,039	4.0
Healthcare Consulting / Product Sales	111	0.2	141	0.3	142	0.3	152	0.3
Home Health Care	7,281	15.1	8,043	16.0	8,614	17.0	7,801	15.4
*Hospice	-		-		-		2,871	5.7
Hospital	7,127	14.8	6,231	12.4	5,088	10.1	3,946	7.8
Insurance Company	602	1.3	547	1.1	652	1.3	918	1.8
Long-Term Care	17,607	36.5	20,480	40.8	20,541	40.6	19,684	38.8
Occupational Health	173	0.4	141	0.3	111	0.2	101	0.2
Physician or other Health Provider Office	4,765	9.9	4,981	9.9	5,220	10.3	5,391	10.6
*Policy / Planning / Regulatory / Licensing Agency	-		-		-		41	0.1
Public/Community Health	1,200	2.5	1,165	2.3	1,214	2.4	1,136	2.2
School Health	901	1.9	1,069	2.1	1,148	2.3	1,227	2.4
Temporary Agency	631	1.3	462	0.9	420	0.8	309	0.6
*Urgent Care/Walk-in Clinic	-		-		-		446	0.9
Other	4,293	8.9	3,560	7.1	3,920	7.8	3,327	6.6

*Data unavailable for 2008-2013 renewal cycles.

The Workforce Survey also included questions about nurses' position titles and clinical specialty area of practice. Nearly 75% of LPNs have the title of staff nurse and 5.2% had the title of nurse manager (see Figure 5). The most common clinical practice area for LPNs is geriatrics (29.7%) followed by home health (12%), adult/family health (9.8%) and rehabilitation (6.3%); (see Figure 6).
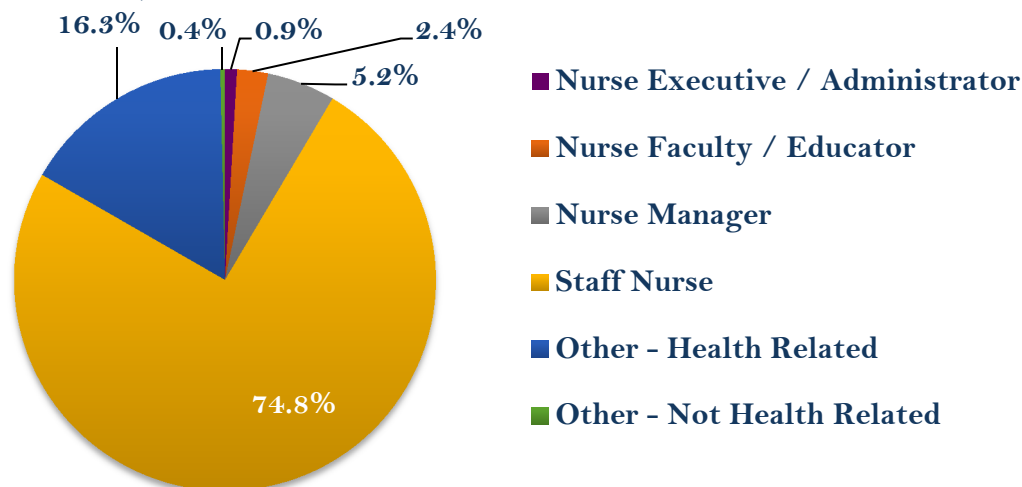
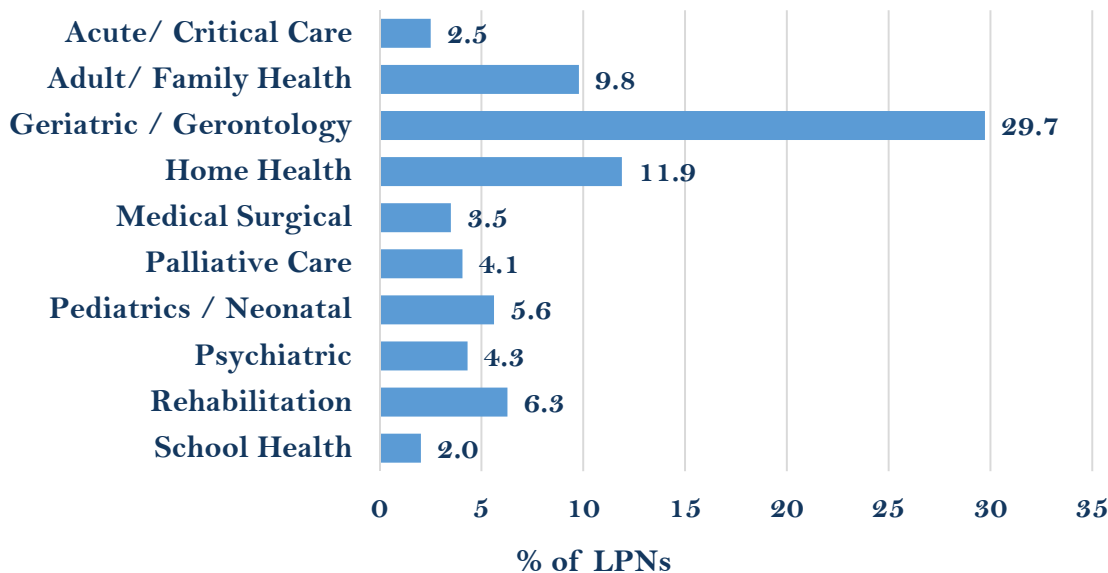

Figure 5. LPN Occupational Titles

Figure 6. LPN Clinical Practice Areas

The majority of LPNs are working full-time (79.4%), which is 1.3% higher than the previous survey (see Table 4). About 9% of LPNs reported working for a temp agency or in a per diem position and 11.2% worked part-time. LPNs in Florida are working a large number of hours: 18.1% are working more than 40 hours per week while the percentage of LPNs working 35 or fewer hours per week is shifting lower. The average FTE has remained the same at 0.85.

Table 4. Employment Detail for LPNs Working in Nursing

	2008–09	2010–11	2012–13	2014–15
Employment Status (%)				
FT	79.7	79.6	78.1	79.4
PT	10.1	11.1	11.8	11.2
Per Diem/Agency	10.2	9.3	10.1	9.4
Multiple Jobs? (%)				
Yes	21.1	13.0	12.9	13.5
No	78.9	87.0	87.1	86.5
Hours Per Week (%)				
20 or fewer	5.8	8.0	8.7	8.2
21–30	6.9	8.0	8.3	8.0
31–35	7.7	8.6	8.7	8.2
36–40	46.0	58.0	57.7	56.8
41–50	28.3	12.8	12.4	13.8
51 or more	5.4	4.6	4.3	4.3
Average FTE*	0.89	0.88	0.85	0.85

*FTE = Full-time Equivalent

DEMOGRAPHICS

Demographic characteristics of working LPNs are shown in Table 5. The percentage of employed LPNs in the youngest age group has remained the same at about 13% since the last survey. The percentage of LPNs age 61 and older in the workforce increased from 12.2% in 2013 to 13.4% in 2015; indicating that older LPNs may not be retiring their licenses and leaving the workforce. This increase is also evident in the average age of working LPNs, which has gone from 45.6 years in the 2012-13 cycle to 45.9. Employed LPNs are more commonly white, female, and more heavily represented in the 41-50 age group. The LPN profession is also more racially and ethnically diverse when compared with RNs. About 51% are white and 32% black, in contrast about 65% of RNs are white and 14% are black.

Table 5. Demographic Characteristics of LPNs Working in Nursing

Race/Ethnicity	%	Age	%
White	51.3%	18–30	13.2%
Black	32.4%	31–40	22.4%
Hispanic	10.9%	41–50	26.3%
Asian	2.4%	51–60	24.7%
Native American	0.3%	61 or older	13.4%
Other	2.8%	**Average Age**	**45.9**
Gender	**%**		
Female	89.9%		
Male	10.1%		

Figure 7 displays trends in the age distribution of employed LPNs. About 38% of working LPNs are age 51 or older and this group can be expected to retire within the next 15 years. The exodus of older, experienced nurses will reduce the size of the workforce and result in a loss of highly skilled mentors with years of organizational and experiential knowledge.
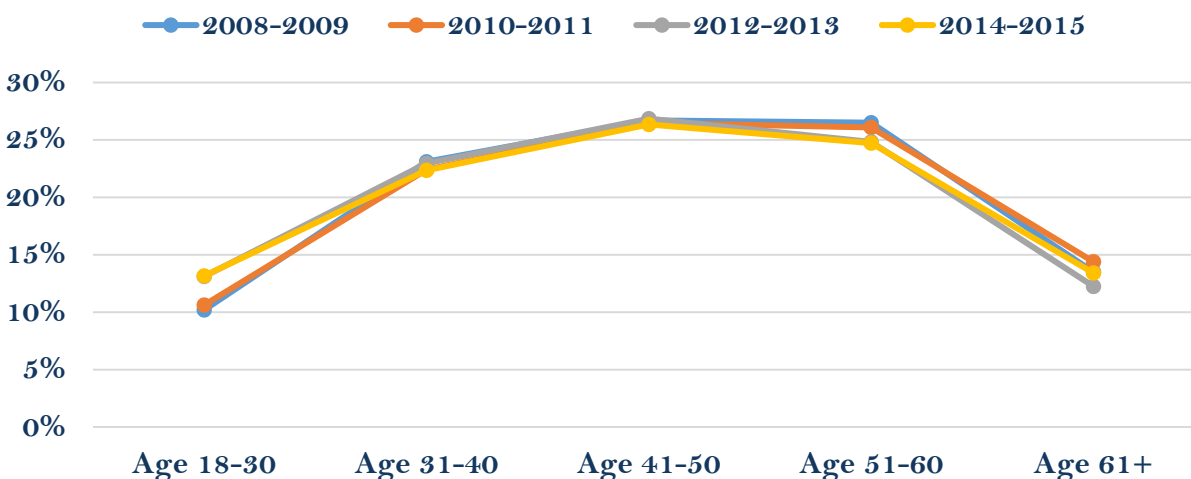

Figure 7. Age Distribution Trends of Working LPNs

ACADEMIC ACHIEVEMENT

The educational preparation of LPNs employed in nursing is shown in Figure 8. As expected, the vast majority of LPNs hold the LPN Certificate as their highest degree. About 12% had a diploma in nursing, 6% had an Associate's in Nursing, 0.8% had a Bachelor's in Nursing and 0.1 percent had a Master's or Doctorate in Nursing. There may be some errors in the data reporting as it is unclear why these nurses would be working as an LPN but also have a higher nursing degree. Since a number of LPNs upgrade their licenses to RN each year, it is likely that some LPNs were in the process of (but had not yet completed) upgrading their licenses during the 2015 LPN renewal cycle when survey data were provided. Or perhaps these LPNs have not successfully passed the RN licensure exam.
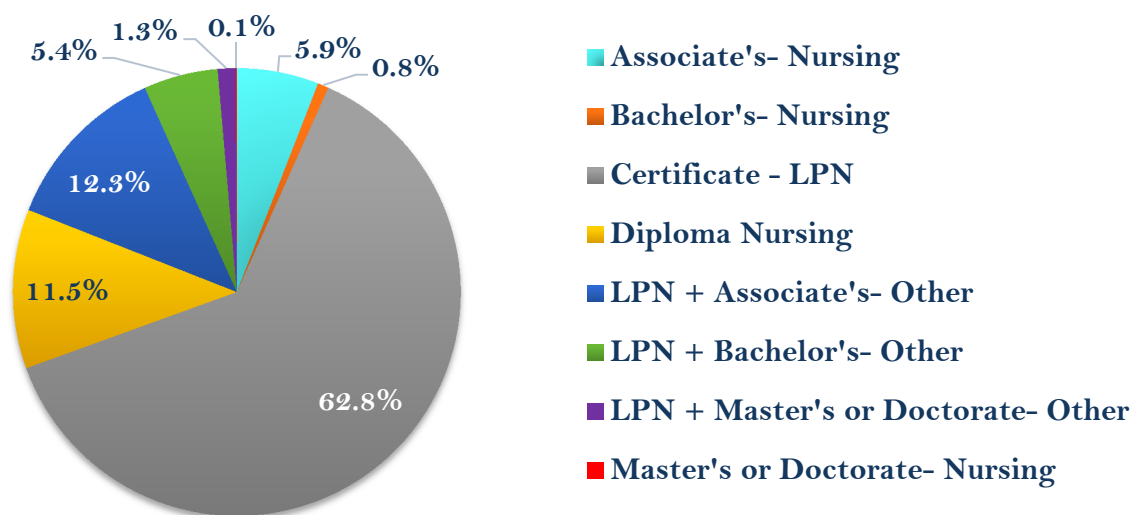

Figure 8. **Highest Educational Degree of LPNs Working in Nursing**

FTES BY AGE AND EMPLOYMENT SETTING

A full-time equivalent (FTE) indicates the workload of an employee and refers to the ratio of hours worked by an employee in a given time period by the number of hours considered full-time for that same given time period. Among all working nurses, the average proportion of a full-time equivalent (FTE) position was 0.85 for LPNs. Average FTE varies substantially by age, as shown in Figure 9. The average FTE worked increases in every age group and peaks at 0.90 from ages 46 to 55 years. LPNs age 61-65 are still working at an average 0.85 FTE. After age 65, the average FTE declines significantly as nurses retire and stop working full-time. The LPN workforce by age group presents an interesting picture. The 5,875 LPNs age 61 and older will most likely retire and leave the workforce over the next 5 years. Over the next decade, the 10,826 LPNs currently age 51-60 will begin to retire, with the likely result of reduced working hours and reduced workforce participation for this large cohort. Fortunately the age 41-50 cohort has about 700 more nurses than the age 51-60 cohort. The small size of the age 18-30 LPN cohort should be watched closely over the next license renewal cycle. It is possible that the smaller size is in response to a decreasing demand for LPNs as seen in the Center's research indicating weak estimated LPN growth in all industries except home health care and possibly long-term care.[5]
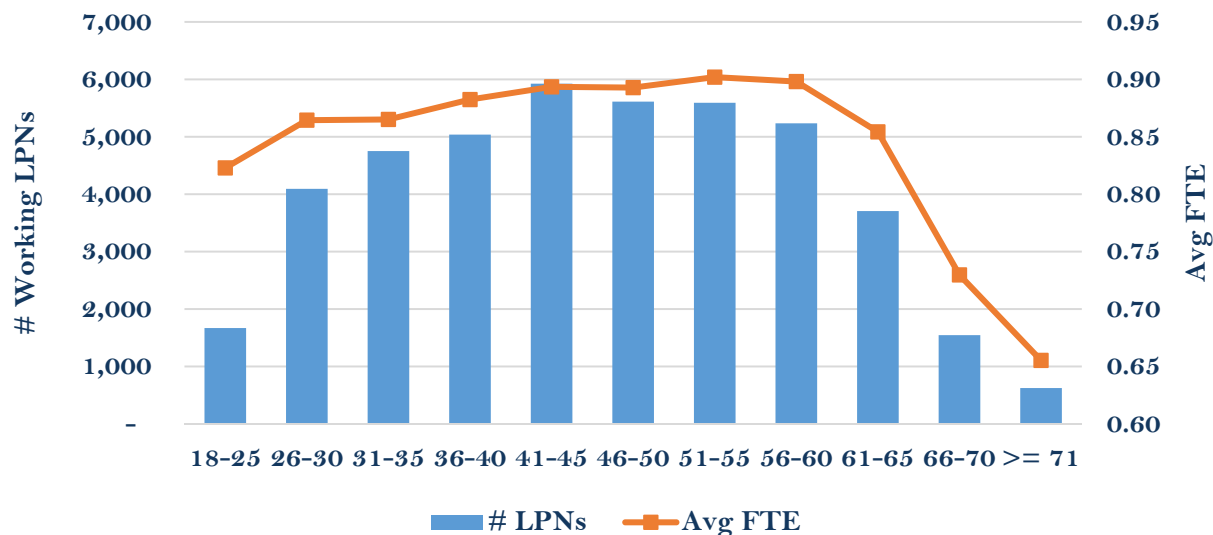
Figure 9. Number of LPNs Working and Average FTE by Age Category

Table 6 shows the estimated number of FTEs as well as the average proportion of an FTE worked by LPNs in each healthcare setting. The largest number of LPN FTEs can be found in long-term care (an estimated 16,900 FTEs), followed by home health, physicians' offices, hospitals, and hospice. LPNs working for insurance companies worked the most hours per week as evidenced by their larger average FTE (.96). LPNs working for temporary agencies (.61), worked the fewest hours per week. Strong LPN employment in the home health and long-term care industries should continue as the older Florida population grows in size.

Table 6. Estimated and Average FTEs by Setting

Setting	Estimated Number of FTEs	Average FTE
Academic Setting	97	0.75
Ambulatory Care Setting	1,055	0.91
Assisted Living Facility	2,922	0.85
Community Health	710	0.91
Correctional Facility	1,819	0.91
Healthcare Consulting/Product Sales	128	0.86
Home Health	6,075	0.80
Hospice	2,429	0.86
Hospital	3,536	0.91
Insurance Claims/Benefits	860	0.96
Nursing Home/Extended Care	13,978	0.88
Occupational Health	87	0.89
Other	2,828	0.87
Physician's Office	4,853	0.92
Policy/Planning/Regulatory/Licensing Agency	34	0.89
Public Health	314	0.92
School Health Service	921	0.76
Temporary / Staffing Agency	187	0.61
Urgent Care/Walk-in Clinic	390	0.89

Note: A full-time position is 1.0 FTE. Higher average FTEs indicate more full-time positions and lower average FTEs indicate more part-time positions.

NURSE WORKFORCE BY STATE POPULATION

Growth in the number of nurses does not take into account the changing patient population driving the demand for healthcare. To better understand the nurse supply in relation to the population, we compared the number of working nurses to the size of the general population[6] and the number of skilled nursing facility beds[7] statewide. There are an estimated 256 LPNs employed in nursing for every 100,000 members of the general population as of December 2015, which is slightly lower than the last report of 264. Since 2013, the number of employed LPNs per 100 skilled nursing facility beds remained stable at 60.8.

CONCLUSION

The supply of LPNs in Florida has essentially remained stagnant from 2013 to 2015. A gain of 10,500 LPNs was observed in the potential workforce; however, 11,000 were lost from the workforce creating a negative loss. Failure to renew was the primary reason for attrition and may explain this difference. LPNs who failed to renew may have moved out of state or retired, but further information on why LPNs leave the workforce is not available. Florida's LPNs have a workforce participation rate of 84%, about the same as in 2013, and 5% of LPNs reported trying to find a nursing job. About 79% of LPNs reported working full-time in 2015, and 13.5% reported working more than one job.

The percentage of LPNs employed within each industry remained about the same since 2013, although the number of LPNs employed at hospitals decreased by over 1,100 and by 800 in home health. The Center's Workforce Demand Report[5] indicates home health care and long-term care are the two industries that will have strong growth for LPNs. With 30% of the LPN workforce specializing in geriatrics, a growing elderly population in Florida and reduced length of stay in acute care settings, long-term care and home health employment settings appear to be able to sustain long-term growth.

The slow growth rate of LPNs during the last renewal cycle and the small proportion of the youngest age group in the LPN workforce indicates need for caution and research into the future LPN supply. Although the youngest age group of LPNs is of adequate replacement size for the oldest age group, the influx of younger LPNs will not be able to replace the LPNs age 51 and older who are potentially leaving the workforce in the next 5-15 years. The Center's 2015 demand report found an increased number of vacancies in home health and estimated that 4,655 new LPN positions would be created in Florida's home health industry in 2016.[5] It is anticipated that demand for LPNs will also remain strong in the long-term care industry. Furthermore, the Center's baseline (2010) forecasts indicate that Florida will face a shortage of 12,548 LPN FTEs by 2025.[8] The LPN workforce supply, potential for workforce growth through education, and projected future LPN demand by employers should be monitored to ensure that supply and demand are in alignment.

RECOMMENDATIONS

Recommendation 1: Encourage academic and industry collaboration to assure appropriate curriculum content in preparation to meet industry needs, specifically in the geriatric/gerontological area of practice and home health.

Recommendation 2: Monitor the increasing trend of losses from the LPN workforce. Information is needed about the reasons LPNs are leaving the profession, which can be used to improve retention and help strategically plan and recruit LPNs for the future workforce.

Recommendation 3: Support the Center's research efforts and analysis of workforce trends to assure the Center attains the best data on the supply of all types of nurses, and to maximize the use of limited resources.

ACKNOWLEDGEMENTS

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