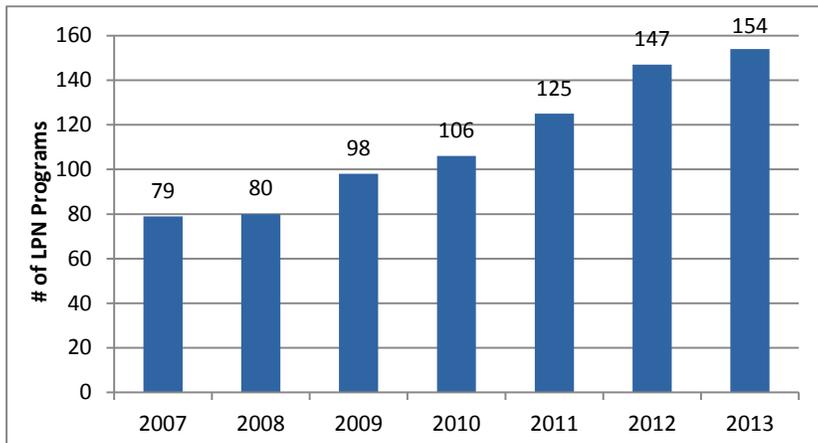


This report presents the **key findings** regarding the Licensed Practice Nursing education system in Florida. This report details information on student education capacity, discusses implications, and proposes research and policy recommendations.

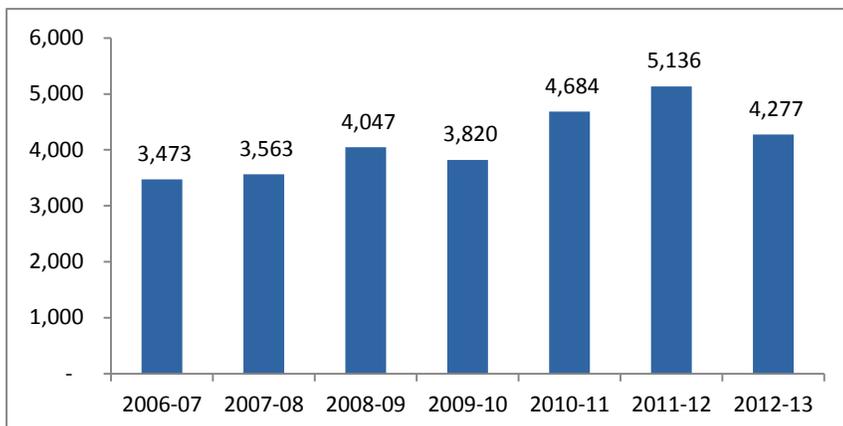
### LPN Program Growth, 2007-2013



### Program Capacity for Pre-licensure LPN Programs, AY 2012-2013

	Generic LPN Curriculum	Bridge LPN Curriculum
# of QUALIFIED applications	6,288	102
# of student SEATS	5,099	107
# of students ADMITTED	4,470	80
% declined applications	29%	22%
# of NEW enrollees	4,071	77
# Seats Left Vacant	1,028	30

### Trend in Number of New LPN Graduates, 2007-2013



- The **number of LPN nursing programs continues to increase** from 79 in 2007 to 154 in 2013.
- Survey **response rates for LPN programs are 57%**, resulting in an incomplete picture of education but allowing for some trend identification.
- **The number of new graduate LPN nurses has decreased by almost 1,000 graduates from last year.** Over 1,000 seats were left vacant in education programs.
- **Barriers to maximizing program capacity remain:**
  - Limited clinical sites and lack of qualified student applicants.
  - Within non-profit LPN programs, 73% report limited clinical sites and 54% reported lack of campus resources.
- The Center's employer surveys consistently indicate **the greatest future growth will be in home health services and the long term care industry**, both of which employ high numbers of LPNs.

### Recommendations

1. A critical assessment of new and existing programs is needed to determine their quality and impact on the students and the nurse workforce.
2. Create incentives for LPNs to seek advanced education, from LPN to RN, and engage in lifelong learning.
3. A consistent, long-term data collection, analysis, and reporting system must be maintained and adequately funded.

## Florida Licensed Practical Nurse Education: Academic Year 2012-2013

### Background

The number of nurse education programs in Florida has grown considerably since 2007, when the Florida Center for Nursing (Center) first initiated the annual nursing education program survey. Program growth has been in response to demand from potential nursing students, demand from employers, and future anticipated demand within the healthcare industry due to a projected nursing shortage as older nurses leave the workforce, the population ages, and access to healthcare increases. The goals of the Center’s nurse education survey are to characterize trends in the education of nurses and the faculty workforce. The Center’s data collection, analysis, and subsequent reports have multiple benefits to stakeholders: schools can use the data for academic decision making, to strengthen grant applications, to plan for faculty demand and student expansion; policy makers can use the data to guide funding decisions and to plan strategic use of resources. This report describes information from the Center’s survey of licensed practical nurse (LPN) programs for Academic Year (AY) 2012-2013, and highlights trends in results since the Center began data collection and analysis. The implications are discussed and research and policy recommendations are offered.

### Data Source

Data for this report are from the 2013 Florida Center for Nursing Survey of Nursing Education Programs. In October 2013, a survey link was emailed to the Dean or Program Director of each nursing education program in the state of Florida. Responding Deans and Directors provided data on the faculty and student populations as of September 30<sup>th</sup>, 2013 and on program capacity for AY 2012-2013.

Nursing education programs are identified from the Board of Nursing website, which maintains an updated database of Licensed Practical Nurse (LPN), Associate Degree in Nursing (ADN) and pre-licensure Bachelor’s in Nursing (BSN) programs. The list of all nursing programs in Florida was downloaded from the Board of Nursing in August 2013. A total of 154 LPN programs were asked to complete the survey, an addition of 7 new LPN programs since last year.

A total of 88 LPN programs responded to the survey, yielding a response rate of 57 percent (Table 1). The response rate was higher for state schools (70%) than private schools (52%).

**Table 1. Response Rates for Florida’s LPN Nursing Schools, AY 2012-2013**

Type of Program	Total # of Schools	Responding Programs	Overall Response Rate	State Schools Response %	Private Schools Response %
LPN	154	88	57%	70%	52%

Except when indicated, data in this report are from the responding schools. Given that this is the Center’s seventh annual survey, the richness of the data and information are enhanced by the ability to report seven-year trends in results. Thus change, or the lack of it, is evident and provides the opportunity to consider the effect of interventions, such as efforts to increase production of new graduates to enter the workforce. With trends, one can monitor outcomes and identify promising practices for replication.

## Results

### Programs, Curriculum Options, and Accreditation

Table 2 provides detail of the programs and curriculum options as of October 2013, based on survey responses. Eighty-eight LPN programs responded to the survey. Eight of these programs reported a bridge curriculum that moves students with some health sciences training (e.g., a certified nursing assistant) through the program more rapidly. Fifteen LPN programs reported they had no students enrolled yet.

**Table 2. LPN Programs and Curriculum Options Reported by Respondents, AY 2012-2013**

	Number
<b>Pre-licensure Programs</b>	
<b>LPN Programs</b>	
Number of LPN Programs Responding	88
- <i>No students enrolled</i>	15
- Generic/Traditional Curriculum	71
- Bridge Curriculum	8

Note: The number of curriculum counts exceeds the number of program counts because many programs offer multiple curriculum options.

Table 3 shows the National League for Nursing Accrediting Commission (NLNAC) accreditation status of LPN programs in AY 2012-2013. Schools that have not yet admitted students are not eligible to apply for accreditation. Ten percent of LPN programs reported being accredited, the majority of which are state schools.

**Table 3. Accreditation Status in AY 2012-2013 by Program Type**

Accreditation Status	LPN N (%)	Non-Profit Schools	Proprietary Schools
<b>Not accredited</b>	66 (90%)	88%	94%
<b>Accredited by NLNAC</b>	7 (10%)	12%	6%

\*Schools with no students yet were not counted in the accreditation.

## LPN Program Capacity

Measures of program capacity (the ability of nursing programs to enroll new students) for generic and bridge LPN programs in operation last year are displayed in Table 4. The gray rows in the table show the number and proportion of *qualified* applications that were not processed for admission to programs during AY 2012-2013 due to capacity issues. Florida nursing programs responding to the survey declined 1,818 qualified applications to LPN programs. At present it is not possible to distinguish the number of *people* denied admission to nursing schools from the number of *applications* declined. A single prospective student may be denied admission (or accepted) by more than one school. This phenomenon may also contribute to the differences in the number of new enrollees compared to the number of students admitted.

**Table 4. Program Capacity Measures for LPN Programs, AY 2012-2013**

	Generic LPN Curriculum	Bridge LPN Curriculum
# of QUALIFIED applications	6,288	102
# of student SEATS	5,099	107
# of students ADMITTED	4,470	80
# declined applications	1,818	22
% declined applications	29%	22%
# of NEW enrollees	4,071	77
# Seats Left Vacant	1,028	30

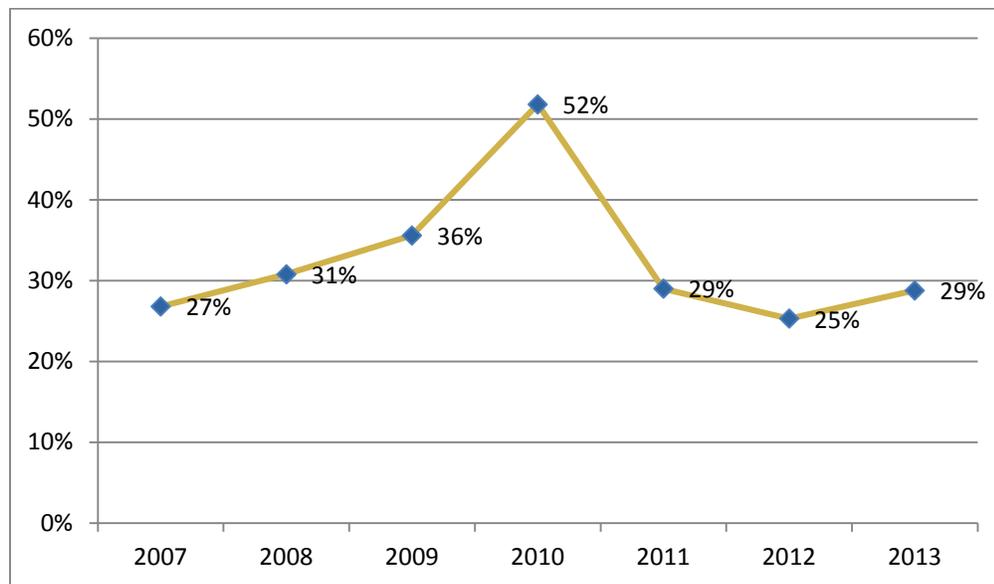
Over 4,500 students were admitted to LPN programs in AY 2012-2013, and more than 4,100 enrolled in generic and bridge LPN programs combined. Generic LPN programs declined 29 percent of qualified applications, yet had over 1,000 potential seats left vacant. Bridge LPN programs had fewer qualified applicants than available seats, and still declined 22 percent of qualified applications.

Program capacity differences can be seen between non-profit and proprietary nursing education programs (Table 5). Non-profit schools declined a higher percentage of qualified applications in LPN programs (32% non-profit schools, 24% proprietary schools). Nonetheless, proprietary schools had a larger proportion of seats left vacant in LPN programs relative to non-profit schools (28% proprietary, 14% non-profit schools).

**Table 5. State and Private Schools Program Capacity Measures for LPN Programs, AY 2012-2013**

	Non-Profit Schools	Proprietary Schools
# of QUALIFIED applications	3,841	2,549
# of student SEATS	2,825	2,381
# of students ADMITTED	2,608	1,942
# declined applications	1,233	607
% declined applications	32%	24%
# of NEW enrollees	2,424	1,724
# Seats Left Vacant	401	657

The percentage of qualified applications that were denied admission to LPN nursing programs has remained consistently between 25 and 29 percent the past three years (Figure 1). As the number of new LPN nursing programs grows and existing programs increase capacity, the programs are able to accommodate more students. Growth in existing LPN programs and differences among programs responding to each year’s survey may also account for the changes. However, there were over 1,000 seats in LPN programs left vacant this year, and if schools were able to fill these seats they would be able to accommodate many more potential students.



**Figure 1. Trend in Percentage of Qualified Applications Declined by LPN Programs, 2007-2013**

The total number of pre-licensure LPN students enrolled in programs varies by curriculum track. Responding LPN programs reported 3,783 currently enrolled students (Table 6). Because the

survey response rate is less than 100 percent, this number is an undercount of all students enrolled in LPN programs in Florida.

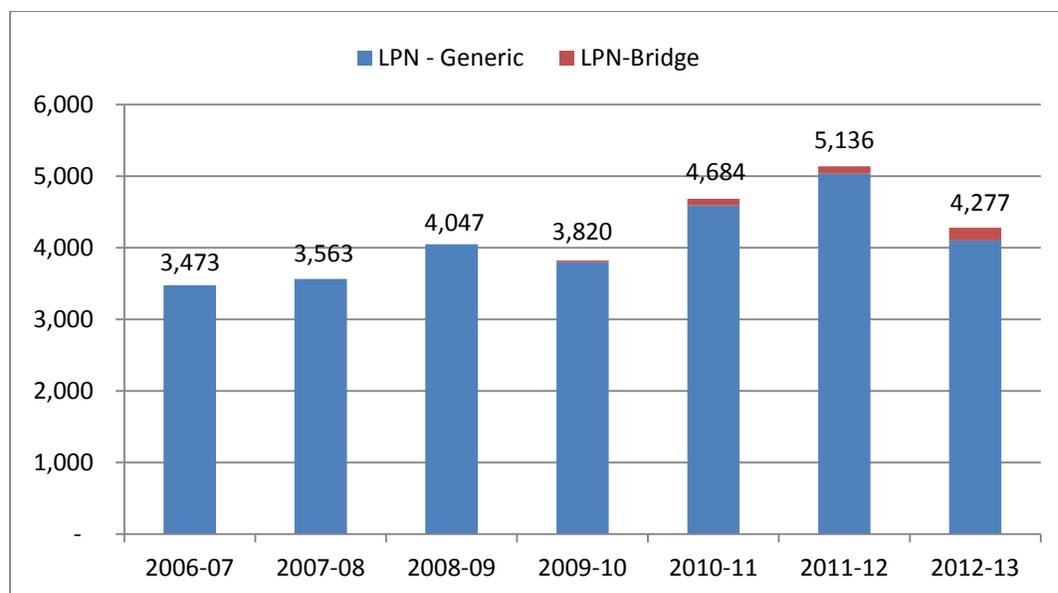
**Table 6. Enrollment of LPN Students by Curriculum Track, AY 2012-2013**

Pre-Licensure Curriculum Track	Enrollment on 9/30/2013
Generic/Traditional LPN	3,720
Bridge LPN	63
<b>Total LPN</b>	<b>3,783</b>

### LPN Graduates

Florida statute mandates that all nursing programs participate in a data collection by the Office of Program Policy Analysis and Government Accountability (OPPAGA) for a five year period ending in 2015. OPPAGA publishes the number of nursing program graduates which the Center believes is preferable to report. Therefore, this report uses the number of graduates as reported by OPPAGA.<sup>1</sup>

In AY 2012-2013, there were 4,277 graduates from LPN programs. The number of graduates from LPN nursing programs decreased 17 percent from AY 2011-12 to AY 2012-13 (Figure 2), the first decrease seen in four years. The decrease in graduates results from a decrease in graduates of generic LPN programs, from 5,035 to 4,101. The number of LPN bridge program graduates increased by 75 people. The trend of graduates will need to be monitored over the next few years. Given the number of student seats left vacant, the number of LPN graduates may continue to decrease next academic year.

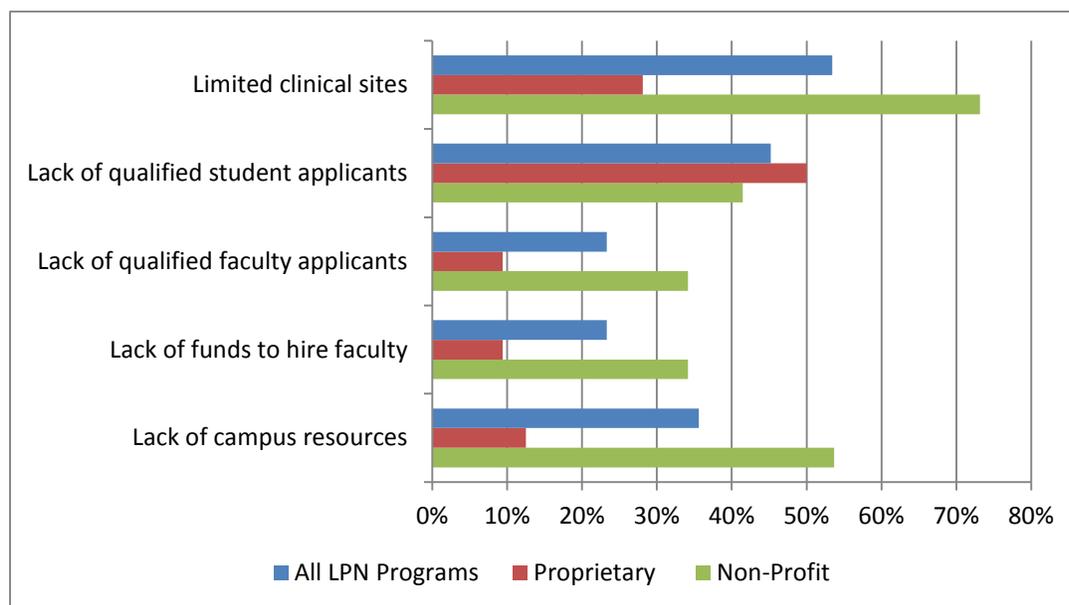


**Figure 2. Trend in Number of LPN Graduate Nurses, 2007-2013**

Note: Graduate data are from OPPAGA.<sup>1</sup>

### Barriers to Maximizing LPN Program Capacity

Fifty-three percent of LPN program Deans and Directors reported that “limited clinical sites” was the most common barrier to fully admitting students or expanding the program to admit more students (Figure 3). Differences in barriers to maximizing program capacity were reported by non-profit schools relative to proprietary schools. Seventy-three percent of non-profit schools reported limited clinical sites as a barrier, compared to 28 percent of proprietary schools. A larger proportion of non-profit schools also reported lack of funds to hire faculty, lack of qualified faculty applicants, and lack of campus resources as problems. In contrast, 50 percent of proprietary schools reported lacking qualified student applicants relative to 41 percent of non-profit schools. Fourteen percent of LPN programs reported that student financial issues were an important barrier to maximizing capacity. In AY 2011-2012, a similar percentage of LPN schools reported on each of these problems, signifying a lack of progress on these issues.

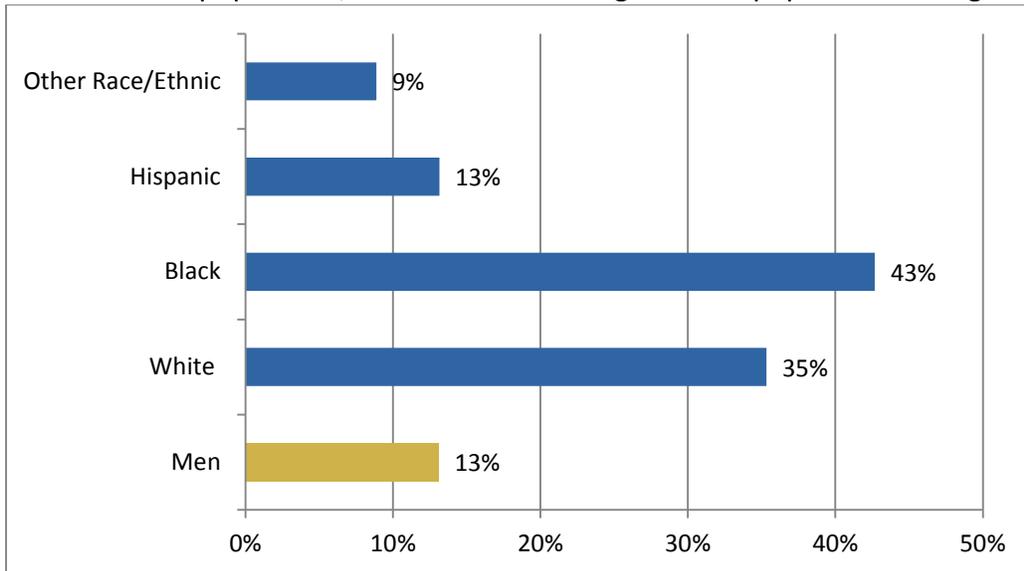


**Figure 3. Reported Barriers to Maximizing LPN Program Capacity in AY 2012-2013**

### LPN Student Demographics

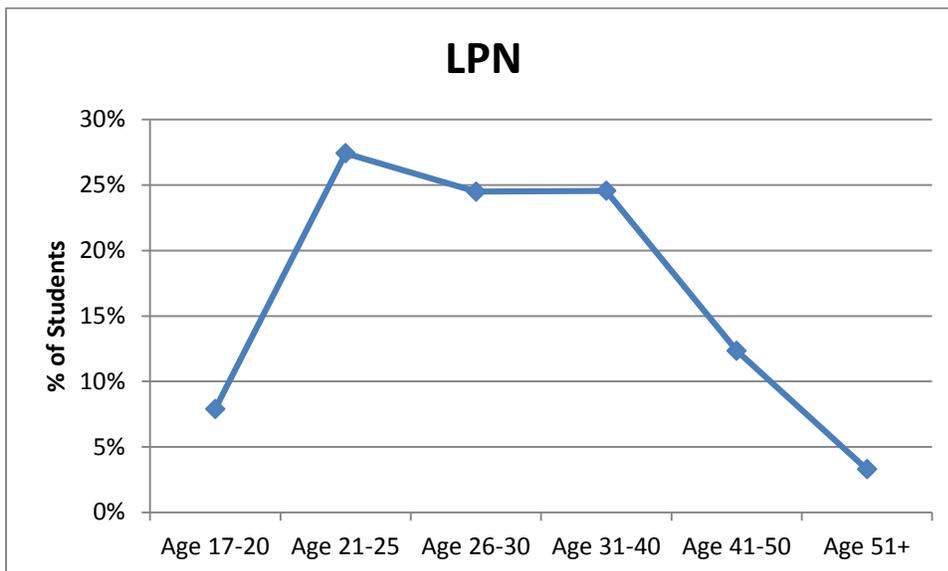
The racial and ethnic diversity of the nursing student population is more reflective of Florida’s diverse population than that of its existing nurse workforce. Forty-three percent of LPN students are Black and 13 percent are Hispanic (Figure 4). In contrast, 55 percent of Florida’s LPNs working in nursing are white, 28 percent are black, and 9 percent are Hispanic.<sup>2</sup> Thirteen percent of LPN students are men, compared to 9.5 percent of LPNs working in nursing. As the race/ethnicity and gender of the student population continues to diversify and the older

population of nurses retire from work, diversity will gradually increase within the entire licensed nurse population, thus better mirroring Florida’s population at large.



**Figure 4. Race/Ethnicity and Gender of LPN Students, 9/30/2013**

LPN students by age group are shown in Figure 5. Sixty percent of LPN students are under age 30, which will bring a large contingent of younger people into the profession. Twenty-five percent of LPN students are age 31-40, and these may be people going back to school for a second career.

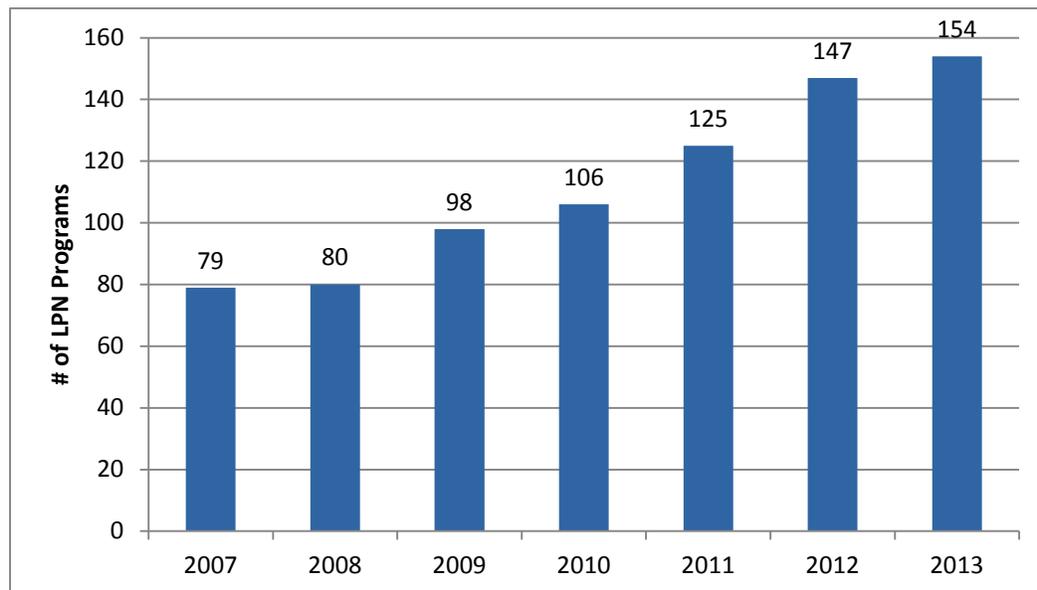


**Figure 5. Percentage of LPN Students by Age Group, 9/30/2013**

## Discussion

Florida’s tremendous growth in LPN programs has slowed from 2012 to 2013, with the addition of 7 programs this academic year relative to 22 new programs from 2011-2012 (Figure 6). The Center’s reports have repeatedly stated that nursing programs’ capacity to grow may be reaching a bottleneck imposed by limited fiscal, human, and clinical resources. Indeed, fifty-three percent of LPN programs reported that their ability to maximize capacity and admit more students is inhibited by limited clinical sites. Programs also report lacking funds to hire faculty, lacking campus resources, and lacking qualified faculty applicants. The LPN program growth slowdown may be reflecting these realities.

The Center maintains its position from last year: It is crucial to evaluate the impact of these new programs, in terms of student quality, cost-benefit analysis, health industry assessment of program graduates meeting employment needs, and the impact on an already significant nurse faculty shortage. Thus far, these objective evaluations of new programs have not occurred.



**Figure 6. LPN Program Growth, 2007-2013.**

Note: 2013 data are from the Board of Nursing as of August, 2013. Several programs closed over the course of a year, and new programs opened, thus the number of new programs takes these changes into account.

The response rate to the Center’s survey was 57 percent among LPN programs. A high survey response rate with school data that accurately represent the students and faculty in **all** nursing schools in Florida is necessary for accurate strategic nurse workforce planning. This data is used to align needs of nurse employers to new graduates needing jobs, to align future student capacity in nursing programs with anticipated future nurse employment needs in the local community, to plan for strategic expansion of nursing programs, to plan for faculty workforce needs, to forecast future nurse graduates, and to ensure continued availability of adequate clinical space.

In AY 2012-2013, there were 4,277 graduates from LPN programs, a decrease of 17 percent from AY 2011-12. This is a big change from the two previous years of strong growth – a 9 percent increase during AY 2011-2012 and the 22 percent increase during AY 2010-2011. This decrease in graduates combined with the over 1,000 vacant seats in LPN programs may be the result of limited clinical sites for LPN students. Nursing program Deans and Directors continue to report that limited clinical sites and lack of campus resources are barriers to maximizing program capacity.

Thoughtful expansion of nursing education programs must be balanced with the present ability of healthcare employers to hire newly licensed nurses into the workforce; as well as the state’s future anticipated increased need for nurses as the population ages, older nurses retire or work fewer hours, and the Patient Protection and Affordable Care Act (PPACA) is implemented. The home health industry reported a strong need for LPNs in the Center’s nurse demand report. There were an estimated 1,767 vacant LPN positions as of June 2013, and an estimated 1,859 new LPN positions will be created in 2014.<sup>3</sup> The majority of these positions are or will be in the home health industry. Both the skilled nursing and home health industry reported that LPN positions were difficult to fill with the proper personnel, and 77% of skilled nursing facilities and 24% of home health agencies reported they hire new graduate LPNs. The evidence indicates that demand for LPNs remains high.

## Recommendations

The Center puts forward the following research and policy recommendations related to Florida’s nurse education system with the goal of addressing nurse workforce issues for the health of Florida. These recommendations are not intended to be for the Center alone to implement, but should be a starting point for other groups and policy makers working to make valuable contributions to the nurse workforce.

1. **A critical assessment of new programs and expansion of existing programs is needed to determine their quality and impact on the students and the nurse workforce.** The addition of programs and new students is not a guarantee of new nurses joining the workforce. An assessment of whether or not students are completing the appropriate level of education, successfully passing the national examination for licensure, and securing employment in Florida must be completed. Additional critical evaluations are a cost benefit analyses of the output of state funding, and a health industry assessment of the contributions of each program’s graduates toward meeting employment needs and health consumer demand. An interdisciplinary group of key agency and workforce stakeholders should be involved in these analyses.
2. **Create incentives for LPNs to seek advanced education, from LPN to RN, and engage in lifelong learning.** The Center’s 2013 nurse demand report indicates that LPN positions are difficult to fill in home health and skilled nursing, and that 77% of skilled nursing facilities hire new graduate LPNs.<sup>3</sup> Yet demand remains highest for registered nurses. In addition to

maximizing the capacity of Florida’s LPN programs, LPNs should be encouraged to seek additional education and enter ADN Bridge programs. A personal dedication to continued lifelong learning is essential for nurses to develop professionally in their careers and learn about advancements in nursing and technology. Advancing education creates professional progression opportunities and opens positions for new graduate LPNs to enter the nursing workforce.

3. **A consistent, long-term data collection, analysis, and reporting system must be maintained and adequately funded.** The Florida Legislature established the Florida Center for Nursing in 2001 to address issues related to the nursing shortage in Florida. Number one of the three mandates given in statute (FS 464.0195) is to develop a strategic statewide plan for nursing manpower in this state by:

- Establishing and maintaining a database on nursing supply and demand in the state, to include current supply and demand, and future projections; and
- Selecting from the plan priorities to be addressed.

To achieve this mandate, the Center needs fiscal resources and the authority to collect appropriate data. Florida’s legislature should put in place a sustainable funding mechanism for the Center to accomplish its statutory mandate and require nurse education programs within the state to provide appropriate data for analysis.

**Staff Contributors:** Michelle M. Yore, MSPH and Mary Lou Brunell, MSN, RN

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