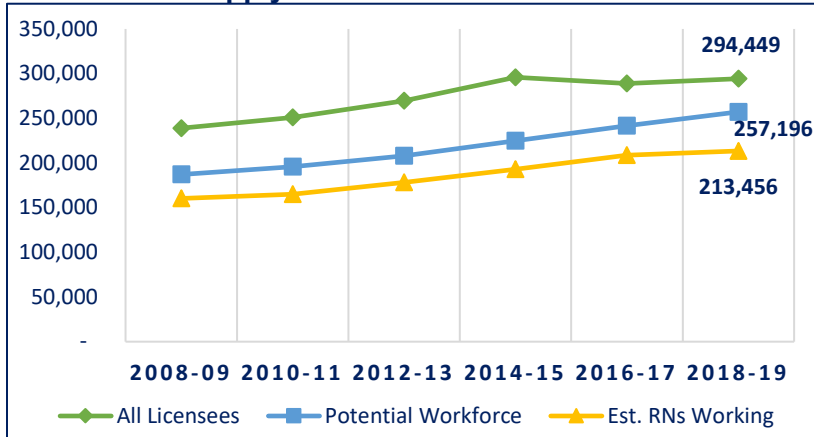


KEY FINDINGS

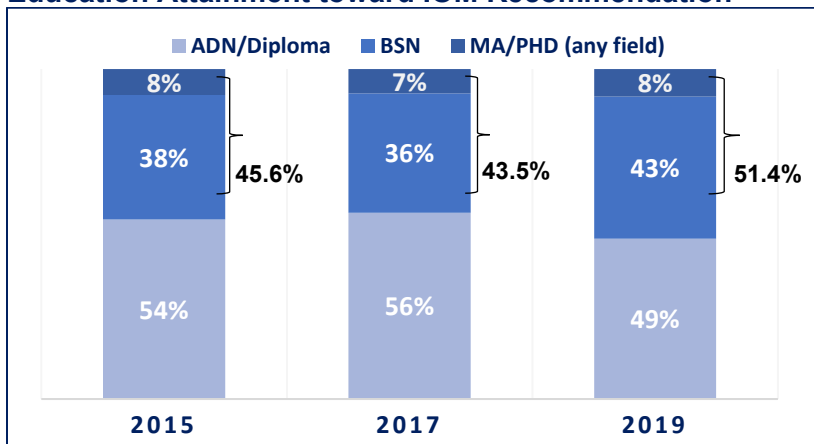
The following information represents **key findings** on Florida's Registered Nurse (RN) workforce supply as of the 2018-2019 renewal cycle. Trends, implications, and recommendations are provided.

Florida's RN Supply Trend

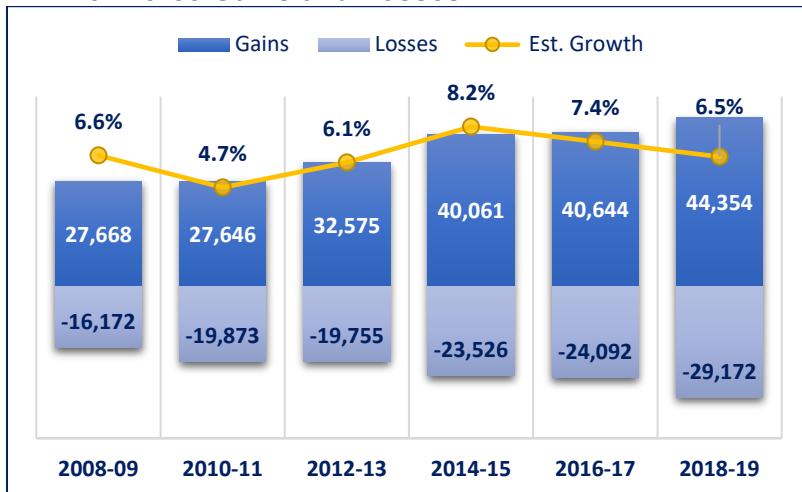


- Florida's potential RN workforce **has grown 6.5%** since 2017.
- Almost 36,000 RNs were **newly licensed** in 2018-2019.
- 83% of clear and active RNs are **estimated to be working** in nursing.
- Hospitals (63%), home health care sites (6%), and extended care facilities (5%) remain the **most common workplaces** for RNs.
- Two-thirds of working RNs are **staff nurses** (67%) and 9% are nurse managers.
- 51% have a **BSN or graduate degree**.
- Over 2,000 fewer nurses over 60 were estimated to be working in Florida, highlighting the likelihood that large numbers of older nurses are beginning to **phase out of the workforce** through reduced hours and retirement in the next 5 to 10 years.
- Most working nurses are **white** (61%) and **female** (87%).
- Reasons for **unemployment** among clear and active nurses varied by age.
- About 9% of RNs in the potential workforce reported holding a **multistate license**.
- Almost 2,000 RNs **deactivated** their Florida license to pursue a multistate license with another home state.

Education Attainment toward IOM Recommendation



RN Workforce Gains and Losses



Recommendations

1. **Support FCNs research efforts** and analysis.
2. **Improve retention** of Florida's nurse workforce. Identify patterns in attrition and changes needed to work environments.
3. **Promote career pathways** and facilitate educational and career advancement.
4. Support state and industry collaboration to strengthen tracking of **impact of NLC membership**.



Florida's 2018-2019 Registered Nurse (RN) Workforce Supply: Characteristics and Trends

June 2020



Addressing Nurse Workforce Issues for the Health of Florida

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BACKGROUND

The Florida Center for Nursing (FCN, the Center), in partnership with the Florida Board of Nursing (FBON) and Florida Department of Health Division of Medical Quality Assurance (MQA) has collected nurse workforce data since 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 **registered nurse (RN)** population using data collected during the biennial license renewal cycle of January 2018 – December 2019.¹ Data used for this report represent the best approximation of renewal statuses as of December 31, 2019 to describe the current population of licensees. Findings describe characteristics of Florida’s nurse population, such as size, demographics, and employment information.



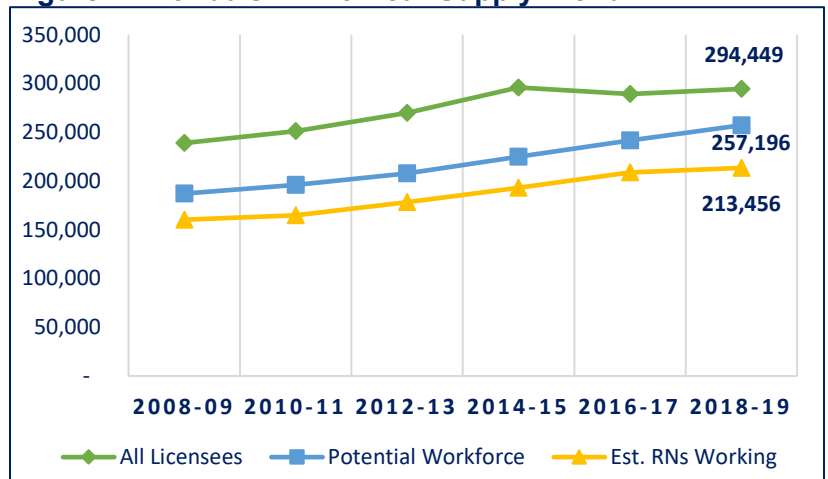
Implications and trends over time are discussed when possible. Data on the state’s supply of nurses provides valuable information to nurse employers, nursing schools, nurse faculty, workforce planners, and policy makers.

FLORIDA’S RN SUPPLY AS OF DECEMBER 2019

More than 247,000 renewing and 47,000 newly licensed RNs held a Florida license in December 2019.² Among them, 257,196 (87%) met the criteria to be counted in the **potential RN workforce: an active license, Florida address, and no disciplinary restrictions.**³ The potential RN workforce includes 221,296 renewing and 35,900 newly licensed nurses.

Among the potential workforce, 213,456 (83%) RNs are estimated to be employed in nursing in Florida (Figure 1). The number of licensed RNs in the potential workforce and RNs estimated to be working increased slightly since the 2016-2017 renewal cycle. However, estimated counts are partially based on last known practicing/ mailing address provided to the Board of Nursing, the accuracy of which is not known.

Figure 1: Florida's RN 10-Year Supply Trend



¹ Renewal deadlines are April 30th of year 1 and year 2, and July 30th of year 2. December data are used to provide an extra window of time for renewals to best represent nurses’ license status immediately prior to the start of the next calendar year/renewal cycle.

² Based on MQA License Status Definitions (<https://apps.mqa.doh.state.fl.us/MQASearchServices/LicStatus.html>). Includes all statuses that maintain a Florida license. Does not exclude those ineligible to practice.

³ Excludes some nurses that may be eligible to practice based on MQA License Status Definitions. Includes only nurses with a Florida address and maintaining a Clear and Active license, or a Temporary Military/Military Active license. Also excludes RN license of nurses who maintain an APRN license.

Nurse Licensure Compact (NLC) Multi-State License



The Nurse Licensure Compact allows nurses to become licensed to practice in any member state without obtaining a separate license per state (National Council of State Boards of Nursing, Inc., 2020). Florida joined the Nurse Licensure Compact in 2018. As a result, the current renewal cycle is the first where nurses whose home state is Florida could renew, or become newly licensed, with a compact/multistate license.

In the 2018-2019 renewal cycle about **9% of RNs in the potential workforce reported that they held a multi-state license – representing an estimated 22,562 RNs in the potential workforce.**⁴ Among those with a multi-state license, 77% reported working the most hours per week in Florida, followed by California (2.2%) and New York (1.6%).⁵

Only 8.5% of those who held a multistate license reported working in two or more states/territories in the two years prior to renewal. This suggests that only a small number of RNs with an NLC license based in Florida are utilizing the mobility that it offers. California (5.5%), Georgia (4.8%), and New York (4.3%) were the most reported states where nurses in the potential workforce worked, other than Florida. Tracking compact licensure and out of state employment among Florida nurses holding a multistate license remains preliminary and should be interpreted with caution.

Since Florida joined the NLC, more than 2,000 RNs deactivated their Florida license to obtain a multistate license with primary residence in another state. These nurses remain eligible to practice in Florida but do not maintain residency in Florida. They were not exposed to the nurse workforce survey as they no longer renew their license through the Florida system. Although they are eligible to practice with an NLC license, they are not included in the potential workforce.

257,196 *Renewing RNs & New Licensees in the Potential Workforce*

POTENTIAL RN WORKFORCE GAINS AND LOSSES

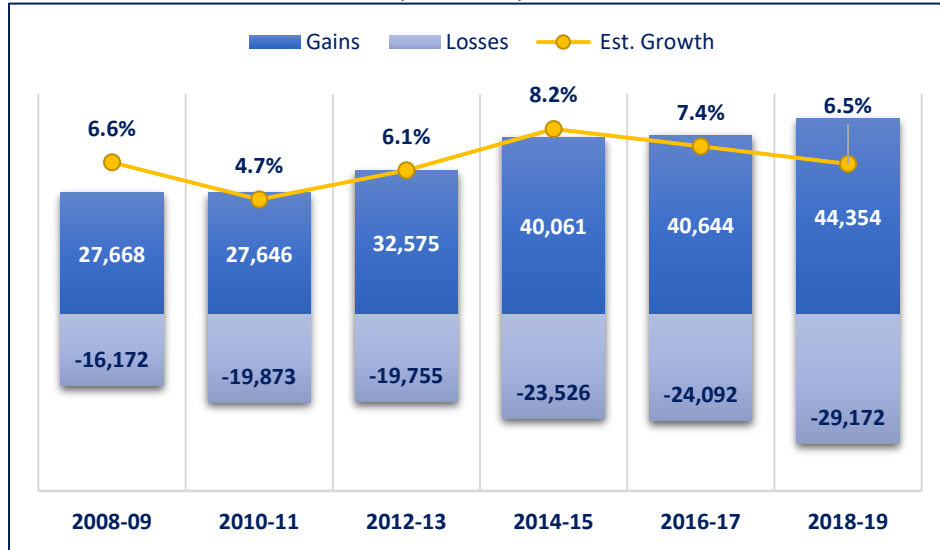
The estimated growth of the RN workforce is defined as the overall difference between a given renewal cycle's potential workforce and the previous group's potential workforce. **The 2018-2019 potential workforce cohort gained more than 44,000 RNs but lost over 29,000 during the same period.** This resulted in a net increase of 15,182 RNs (6.5%) since the previous renewal cycle.

While Florida maintains a net increase in RNs eligible to work in the state, the rate of growth has declined for the second year in a row. During the 2014-2015 renewal cycle the potential RN workforce increased 8.2 percentage points, while the potential workforce increased 7.4 percentage points in the 2016-2017 renewal cycle. The current renewal cycle reflects an additional growth rate decrease of about one percentage point (Figure 2, next page).

⁴ Self-reported counts among survey respondents only. Only includes nurses renewing/becoming licensed through the state of Florida. Will not include nurses working in Florida under a multi-state license with another home state.

⁵ 10% of multi-state respondents did not provide a response to this question. Proportions should be interpreted with caution. Less than 1% of responding participants reported working the most hours in states other than those listed above.

Figure 2: Potential RN Workforce Gains, Losses, and Estimated Growth 2008-09 to 2018-19



The sections below provide additional details regarding gains and losses to the potential workforce. It is also important to note that **growth to the potential workforce⁶ does not directly reflect those working as nurses in the state of Florida**. The potential workforce includes actively licensed RNs with no licensure restrictions and a last known Florida address. The proportion of the potential workforce estimated to be working in Florida will be discussed in a later section.

Potential RN Workforce Gains

The potential RN workforce gained **44,354 additional nurses** in 2018-2019 (Table 1). Among them, 81% were newly licensed RNs.⁷ Compared to the 2016-2017 renewal cycle, the number of RNs newly licensed by exam increased.

Another 7,449 RNs (17%) were added to the potential workforce by adding a valid Florida mailing and/or practicing address. This may include RNs who were previously licensed in Florida but were practicing out of state in the past. Additionally, 861 nurses previously holding statuses rendering them ineligible to practice (e.g. delinquent, suspended), and 96 RNs previously holding inactive licenses were added to the potential workforce as a result of updating their license status (Table 1).

Table 1: RN Potential Workforce Gains, 2017 to 2019

	2017	2019
New License by Exam	22,712	25,045
New License by Endorsement	9,717	10,739
Valid Florida Address	7,020	7,449
Changed to Eligible	905	861
New Licensee - Other	130	113
Changed to Active	70	96
Other Addition Reason	90	51
Total Gains	40,644	44,354

⁶ Clear and active nurses with a last known Florida address

⁷ Newly licensed by exam or endorsement based on reported original license date. However, this date may be 'reset' if a nurse allows their license to expire but later becomes relicensed in the state. Thus, counts may include some nurses that have been in the workforce in the past.

Potential RN Workforce Losses

The potential RN workforce lost 28,679 RNs that were eligible to practice during 2016-2017 (Table 2). About 41% failed to renew their license during the 2018-2019 renewal cycle. Seven percent (7%) deactivated their Florida license to maintain an NLC license in another home state. Another 15% maintained a Florida license reported non-Florida mailing and/or practicing addresses and are not estimated to be contributing to the Florida workforce.

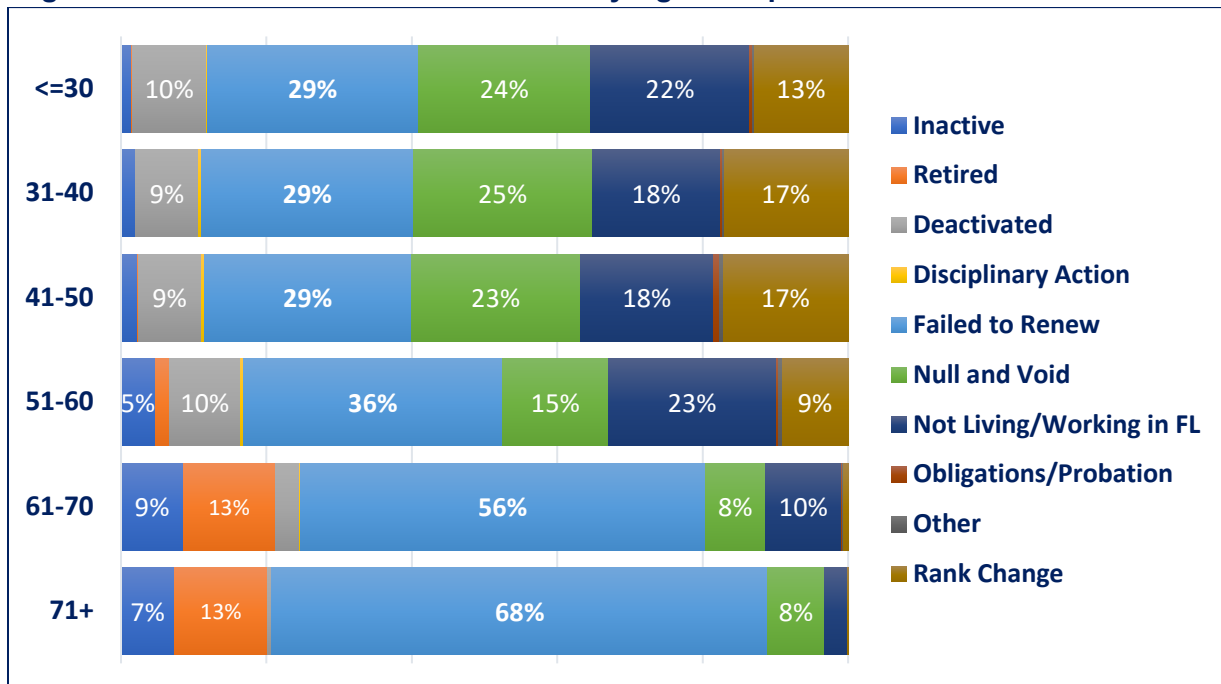
RNs lost due to null and void licenses quadrupled (17%) compared to 2017, while almost half as many RNs upgraded to an advanced practice license. However, these variations may be impacted by changes in the FL Department of Health's tracking of nurses by rank. RNs that upgraded their licenses after the conversion of ARNPs to APRNs receive a new file number and license number and may be inadvertently coded as null and void when records were unable to be matched. Many of those considered null and void may have upgraded to an APRN license but are not currently trackable. Future analyses may be more precise as FCN actively works with FDOH to obtain a new unique and consistent identifier for future cohorts. None-the-less, though it would be beneficial if Florida retained these nurses as APRNs, it is still a loss to the RN potential workforce.

About 1,400 RNs (5%) transitioned to a *retired* status, an increase of about 300 retirements compared to 2016-2017 (Table 2). Retirement was the second most common reason nurses between 61 and 70 (13%) and those 71 or older (13%), followed by failures to renew (Figure 3).

Table 2: RN Potential Workforce Losses, 2017 to 2019

Reason for Attrition	2017	2019
Failed to Renew (Delinquent)	11,588	11,807
License went Null and Void	1,026	4,874
Not Living/Working in FL	4,563	4,420
Rank Change	4,294	2,728
Deactivated	-	1,923
Changed to Retired	1,048	1,392
Changed to Inactive	1,339	1,303
Obligations/Probation	118	87
Other Reason for Attrition	46	76
Disciplinary Action	70	69
Total Attrition	24,092	28,679

Figure 3: RN Potential Workforce Losses by Age Group



The reasons younger nurses were no longer in the potential workforce were more diverse compared to older nurses (Figure 3, previous page). Rank changes were most common among 31 to 50-year-old nurses. Nurses 30 or younger as well as those between 51 and 60 were most likely to report non-Florida addresses while maintaining a Florida license.

Characteristics of Newly Licensed Nurses

A total of 47,068 RNs newly licensed between 2018 and 2019 held a valid license as of December 31, 2019. Among them, **35,900 newly licensed RNs were added to the potential workforce in 2018-2019.** This includes nurses who (a) received their original license by exam, endorsement, or other method (i.e. military licensure) between January 1, 2018 and December 31, 2019, (b) maintain an active license, (c) have no disciplinary restrictions, and (d) have a valid Florida address.

There were 3,109 fewer newly licensed RNs with valid Florida licenses compared to 2017, yet the proportion of newly licensed RNs in the potential workforce increased. In December 2017, 65% of new nurses with valid licenses were in the potential workforce, while 76% of new nurses were in the potential workforce in December 2019.

About 70% of newly licensed nurses in the potential workforce were licensed by exam, compared to 30% of new nurses licensed by endorsement (Table 3). Nurses licensed by exam were younger, on average, compared to other newly licensed nurses. Nurses licensed by exam were also slightly less likely to be white compared to other new nurses in Florida.

Overall, 48% of newly licensed nurses in the potential workforce were white, and about 15% were male (Table 3). The average age for all newly licensed nurses was 32 years old and 72% were 40 or younger. Approximately 84% of newly licensed RNs in the potential workforce were estimated to be working in Florida.⁸

Table 3: Characteristics of Newly Licensed RNs in the Potential Workforce by License Type

	Newly Licensed, by...			
	Endorse	Exam	Other	Total
Race/Ethnicity (%)				
Asian	8.3	4.8	4.3	5.8
Black	14.3	17.6	6.9	16.6
Hispanic	17.3	22.5	4.3	20.9
White	52.5	45.8	70.7	47.9
Other	1.9	2.9	5.2	2.6
Gender (%)				
Female	83.9	80.3	87.1	81.4
Male	13.1	16.5	6.0	15.4
Age Group (%)				
30 or younger	18.3	56.1	21.6	44.7
31-40	27.7	27.6	49.1	27.7
41-50	24.0	12.1	18.1	15.7
51-60	18.5	3.9	9.5	8.3
61-70	10.0	0.3	1.7	3.2
71 or older	1.6	0.01	-	0.5
Est. Working (%)				
No	18.26	11.84	20.69	13.8
Yes	79.13	85.49	74.14	83.6
Average Age				
	43.5	31.7	37.5	32.2
Total (N)	10,739	25,045	116	35,900

Note: Includes nurses in the potential workforce only; Proportions may not equal 100% due to missing data

⁸ This value should be interpreted with caution. There are limited survey responses among new nurses. When survey data are not available, employment is estimated using licensee's practicing address reported in their licensure application.

However, only 15% of newly licensed nurses in the potential workforce participated in the Nurse Workforce Survey. As a result, aside from the characteristics above, few details are known about the employment characteristics of RNs newly licensed between 2018 and 2019.

In total, 222,819 RNs participated in the Nurse Workforce Survey, including 217,287 renewing RNs and 5,532 nurses newly licensed between 2018 and 2019. Survey response represents about 87% response rate among RNs in the potential workforce. Responses were used to estimate the number of clear and active RNs working in nursing in Florida, resulting in an estimated total of 213,456 new and renewing RNs working in Florida.

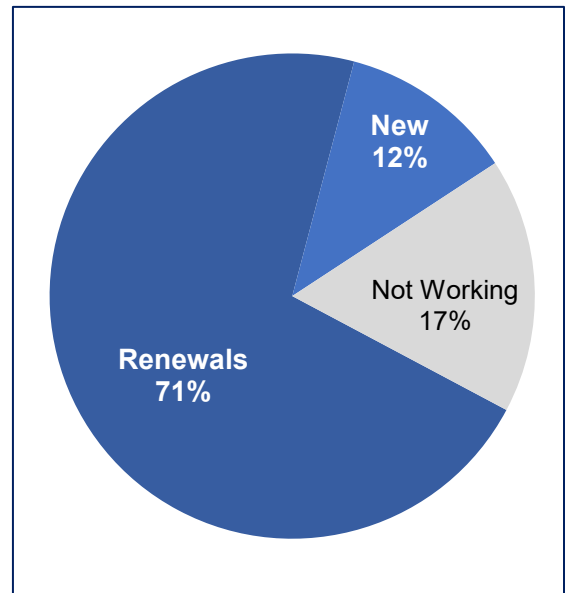
An estimated **213,456** new and renewing RNs are working in Florida

The following sections consider employment and demographic characteristics of RNs estimated to be working in Florida during the 2018-2019 renewal cycle, based on responses to the Nurse Workforce Survey.

EMPLOYMENT CHARACTERISTICS

An estimated 81% of all RNs in the potential workforce are working in Florida (Figure 4), including 183,461 renewing and 29,995 newly licensed RNs.⁹ The proportion of renewing RNs estimated to be working decreased about six percentage points since the 2016-2017 renewal cycle.

Figure 4: Estimated Employment of 2018-2019 Potential RN Workforce



Employment Settings

Consistent with previous renewal cycles, most RNs are working in hospitals (63%). Home health care sites (6%) were the second most common workplaces, followed by extended care facilities (e.g. nursing homes) (5%) (Table 4, next page).

RNs were least likely to work in policy/planning settings, staffing agencies, occupational health, or urgent care. Beginning in 2018, two new setting categories were added (dialysis centers and telehealth). About 1,900 respondents (1%) worked in dialysis centers and 1,140 participants worked in telehealth (0.6%).

⁹ Working status is estimated using survey responses to employment variables, reported addresses, and statistical imputation methods among non-responders to most closely approximate the total workforce in Florida.

Table 4: RNs Employed by Setting, 2010-2011 to 2018-2019

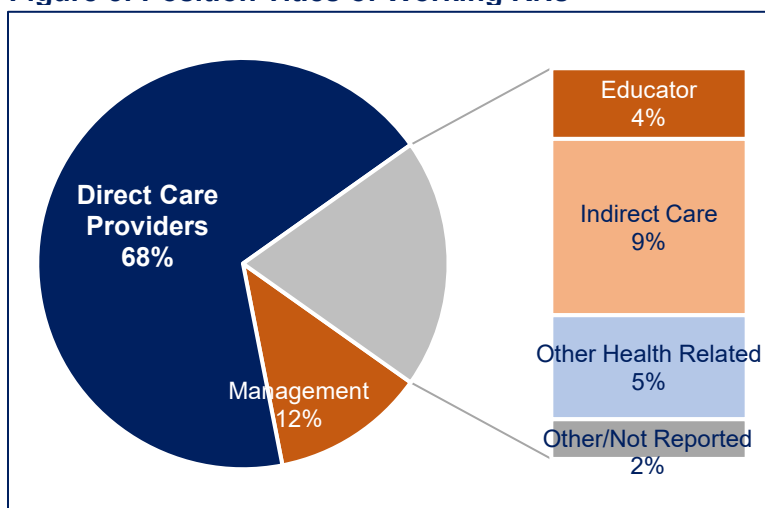
Employment Setting	2010-11	2012-13	2014-15	2016-17	2018-19
Academic Setting	1.6%	1.7%	1.8%	1.7%	1.7%
Ambulatory Care	4.5%	4.7%	4.4%	4.7%	4.2%
Corrections Facility	0.9%	0.8%	1.0%	0.7%	0.8%
Dialysis Center †	-	-	-	-	1.0%
Healthcare Consulting / Product Sales	0.5%	0.6%	0.7%	0.5%	0.7%
Home Health Care	8.6%	8.1%	6.4%	6.6%	6.4%
Hospice *	-	-	3.2%	3.0%	2.5%
Hospital	63.7%	63.9%	63.5%	62.6%	62.6%
Insurance Claims/Benefits	1.5%	1.8%	2.3%	2.0%	2.1%
Nursing Home, Extended Care, Assisted Living	5.4%	5.3%	4.8%	5.0%	5.4%
Occupational Health	0.3%	0.3%	0.7%	0.3%	0.3%
Other	6.6%	6.7%	5.2%	5.5%	4.5%
Physician or other Health Provider Office	3.1%	3.0%	2.6%	2.6%	2.3%
Policy, Planning, Regulatory, Licensing Agency *	-	-	0.2%	0.1%	0.1%
Public/Community Health	2.2%	2.0%	1.6%	1.7%	1.8%
School Health Services	1.1%	1.0%	1.0%	1.0%	0.8%
Telehealth †	-	-	-	-	0.6%
Temporary/Staffing Agency	0.3%	0.2%	0.3%	0.2%	0.1%
Urgent Care/Walk-in Clinic *	-	-	0.4%	0.3%	0.5%

Note: Beginning in 2016-2017, data represents working survey respondents in potential workforce only, totals may not equal 100% due to missing data/non-response, * Categories added in 2014-15 cycle; † Categories added in 2018-19 cycle

Position Titles and Practice Areas

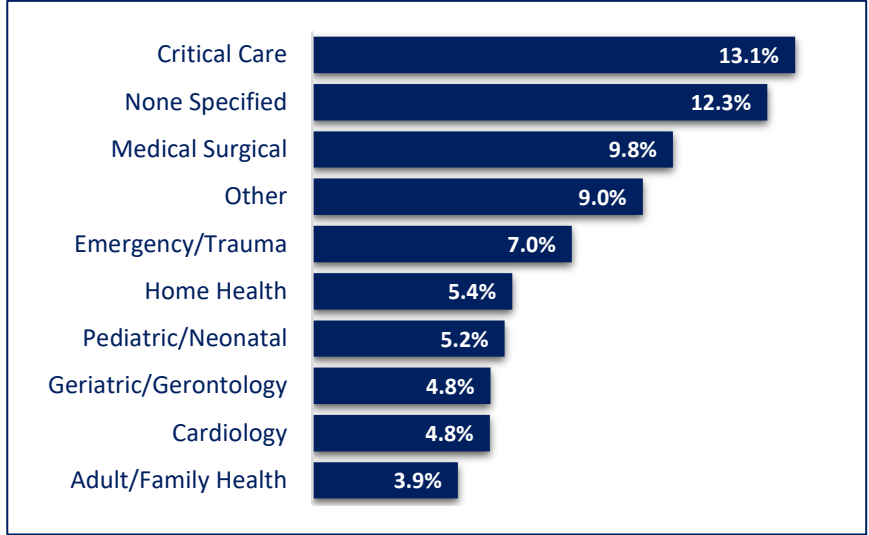
An estimated 145,700 RNs (68%) were working as direct care providers including staff nurses (67%) and travel nurses (1%) (Figure 5). Another 12% were employed as nurse managers or nurse executives and 9% were in indirect care positions (e.g. quality/risk management, case management, utilization review/infection control, or non-faculty researchers). About 4% were nurse faculty or educators, and 5% held some “other” health related role. Two percent (2%) worked in non-healthcare settings or did not provide a response.

Figure 5: Position Titles of Working RNs



Critical care (13%) and medical surgical (10%) were the most common specialty areas (Figure 6). However, 12% did not specify a specialty area and 9% reported some other specialty. This may suggest that a substantial portion of working RNs consider themselves generally specialized.

Figure 6: Top 10 RN Clinical Practice Specialty Areas



Among the working RNs that did not provide a specialty or specified some “other” area...

- 50% worked in hospitals
- 52% were staff nurses
- 41% were over the age of 55
- Their average number of years licensed in Florida was sixteen (16).

Separate analyses are needed to explore open ended responses provided for “other” specialties to identify patterns. In the future, the Florida Center for Nursing may need to consider revising specialty categories to reflect the experiences of working nurses more closely.

Three new categories were added to the survey during this cycle. Cardiology (5%) was among the top ten most common specialty areas (Figure 6), while nephrology (1%), and telehealth (1%) were among the least commonly selected along with school health (0.7%), information technology (0.7%), occupational health (0.4%), and anesthesia (0.3%).

Employment Detail

The proportion of RNs working full-time (83.1%) decreased a fractional amount since the 2016-2017 cycle (83.7%). Florida continues to estimate higher proportion of nurses actively employed in nursing full-time compared to national estimates (65.4%).¹⁰

About 60% of employed RNs worked 36-40 hours and about 18% worked more than 40 hours. The average FTE for RNs was about 0.91, although the

Table 5: Employment Detail for Working RNs, 2010-11 to 2018-19

	2010-11	2012-13	2014-15	2016-17	2018-19
Employment Status					
Full-Time	82.5%	82.7%	83.0%	83.7%	83.1%
Part-Time	9.5%	9.2%	8.6%	8.4%	8.8%
Per Diem/Agency	8.1%	8.2%	8.4%	8.0%	8.1%
Hours Per Week					
20 or fewer	6.7%	6.6%	6.6%	5.9%	6.6%
21-30	7.6%	7.5%	7.3%	7.0%	7.0%
31-35	4.1%	3.9%	3.5%	3.5%	2.9%
36-40	60.3%	61.8%	61.8%	60.8%	60.5%
41-50	16.3%	15.5%	15.9%	16.0%	13.0%
51 or more	5.1%	4.8%	4.9%	5.0%	4.8%
Multiple Jobs	12.0%	11.5%	11.5%	11.4%	11.0%
Average FTE	0.88	0.89	0.89	0.93	0.91

Proportions may not equal 100% due to missing/implausible values excluded

¹⁰ According to the 2017 National Nursing Workforce Survey (Smiley, et al., 2018)

median value was 1.0, indicating that the average is skewed downward by lower outliers.

Nurse Workforce by State Population

Changing patient populations and population size drive the demand for healthcare. As of July 2019, Florida’s population comprised an estimated 21,477,737 people.¹¹ Examination of the 2018-2019 renewal cohort estimates about 213,456 RNs working in nursing in Florida, resulting in about 994 RNs per 100,000 population in 2019. However, not all nurses estimated to be working in Florida provide direct care in patient care settings.



An estimated 89.8% of working nurses are employed in in-patient, outpatient/office, or other settings which are most likely to provide patient care.¹² Among them, 75% were direct care providers.¹³ When these proportions are considered, there are an estimated **670 RNs providing direct care in patient care settings, per 100,000 people** in the Florida population.

In 2018-2019 there were about 305 working RNs or 205 direct care RNs per 100 hospital beds in the state. All counts should be interpreted with caution as they are based on estimates and do not consider FTE status which may reduce the hours of care provided by each working RN.

The gap between estimates of RNs employed in nursing in Florida and estimates of those providing direct care in patient care settings highlights the importance of detailed analyses and the need for accurate, nurse employer driven demand data. This information also raises the question of the nurses that are *eligible* to practice direct care in Florida yet work in non-direct care settings as it pertains to assumed shortages in bedside nursing.

FULL TIME EQUIVALENCY (FTE) STATUS

A full-time equivalency (FTE) value represents the annual workload of employees. FTE is the ratio of hours worked by an employee in a given time period by the number of hours considered full-time for that same period.¹⁴ **The estimated average FTE for all working RNs was 0.91.**¹⁵

FTE by Age Group

Figure 7 depicts the average FTE and estimated number of working RNs by age group. The average FTE is relatively consistent for each age group, except for a sharp decrease among the oldest RNs estimated to be working. Working RNs between 66 and 70 had an average FTE of 0.77 and working RNs over the age of 71 had an average FTE of 0.60. These may be nurses transitioning out of the workforce and/or retired nurses who are actively employed part-time, per diem, or providing services and expertise as needed.

¹¹ Based on US Census Bureau Quick Facts estimates (<https://www.census.gov/quickfacts/fact/table/FL,US/PST045219>)

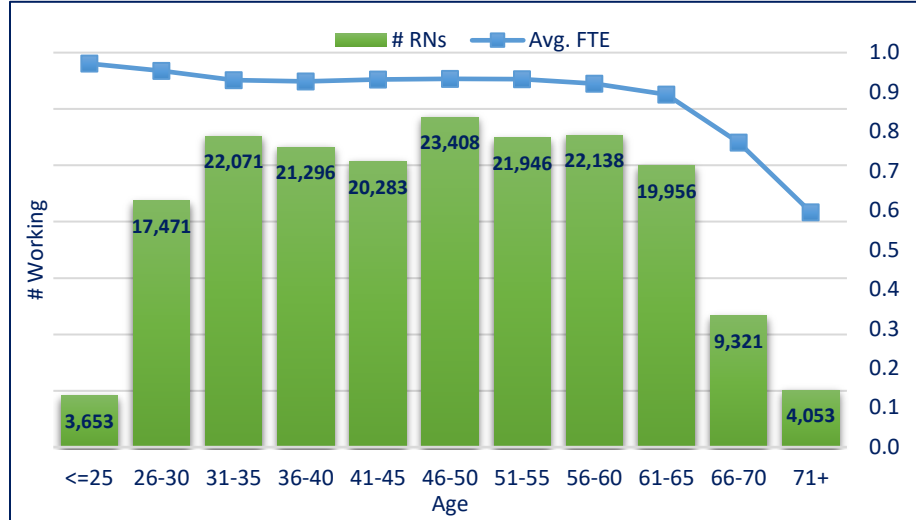
¹² Based on weighted proportions. Excludes academic settings, healthcare consulting/product sales, insurance claims/benefits, policy, planning, regulatory, licensing agency, and all listed as “other”.

¹³ Based on weighted proportions. Includes advanced practice nurse, staff nurse, and travel nurse positions only. Beginning in 2020, the survey asks if participant provides direct care services in their primary position. Preliminary impact of this revision will be available in the 2022 report.

¹⁴ 1,872 hours per year are considered full-time to represent a minimum of three 12 hour shifts per week (36 hours), year-round.

¹⁵ Excludes nurses who reported that they were working, but indicated 0 hours per week

Figure 7: Average FTE and Number Working RNs by Age, 2018-2019



Younger nurses were more likely to have an average FTE higher than other age groups, although, like the oldest nurses, younger nurses comprised a smaller proportion of the working population.

FTE by Employment Setting

Table 6 shows the proportion of working RN survey respondents in each industry with a 1.0 FTE value.¹⁶ A 1.0 FTE indicates full-time, year-round employment of at least 36 hours per week.¹⁷ Lower ratios indicate more nurses working less than full-time.

Hospitals employ the most RNs. Among them, 73% have an FTE value of 1.0. The second largest employer of RNs were home health settings. Sixty percent (60%) of RNs working in home health have an FTE status of 1.0, indicating that about 40% of home health RNs and 27% of RNs in hospitals work less than full time.

Overall, the proportion of 1.0 FTE RNs (70%) has decreased since 2017 (76%). Previously, 82% of hospital RNs were working at least 1,872 hours per year, compared to 73% in the current survey

Table 6: Proportion of 1.0 FTE Working RNs and Average FTE by Employment Setting, 2018-2019

Setting	% with 1.0 FTE	Overall Avg. FTE
Academic Setting	58%	0.82
Ambulatory Care Setting	61%	0.86
Correctional Facility	77%	0.93
Dialysis Center	83%	0.96
Healthcare Consulting/ Sales	68%	0.84
Home Health	60%	0.83
Hospice	75%	0.92
Hospital	73%	0.94
Insurance Claims/Benefits	88%	0.96
Nursing Home/Extended Care	71%	0.90
Occupational Health	71%	0.87
Other	69%	0.87
Physician's Office	68%	0.87
Public/Community Health	84%	0.94
Policy/Planning/Reg./Licensing	70%	0.87
School Health Service	37%	0.82
Telehealth	83%	0.95
Temporary / Staffing Agency	42%	0.75
Urgent Care/Walk-in Clinic	65%	0.89
Total (All Settings)	70%	0.91

Note: Represents working RNs with an FTE value of 1.0/est. total RNs working in that industry. Lower % and ratios indicate more RNs reporting part-time positions.

¹⁶ Employment setting is only available for survey participants who provided information for this question (n = 182,902). Estimated proportion of 1.0 FTEs is based on survey respondents only.

¹⁷ See FCN's 2020 Technical Report for more details about FTE calculation

cycle. Similarly, the proportion of home health RNs employed at 1.0 FTE (60%) decreased five percentage points since 2016-2017 (65%).

RNs working in insurance claims/benefits and dialysis centers have the highest average FTE (0.96). Eighty-eight percent (88%) of RNs working in insurance were considered 1.0 FTE. On the other hand, only 37% of school health service RNs have an FTE value of 1.0.

UNEMPLOYMENT

While 83% of the potential RN workforce was estimated to be working in nursing in Florida, **17% were either unemployed or working outside of nursing at the time of their license renewal** (Figure 8). This group only includes RNs that remain eligible to practice, with no disciplinary restrictions, and a Florida address, yet do not appear to be working in nursing.

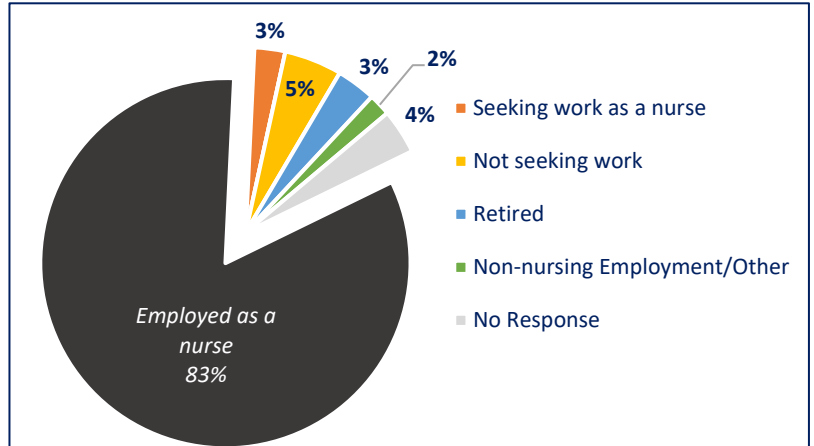
The largest portion of RNs that were not working as nurses reported they were not seeking work at this time (5.0% of all RNs), followed by 3.4% of RNs that were retired (but still have an active license and remain in the potential workforce). Another 2.7% of all RNs were seeking work as a nurse (about 6,100 RNs).

Unemployment Reasons

Among unemployed RNs that were not seeking employment (5%) at the time of their renewal...

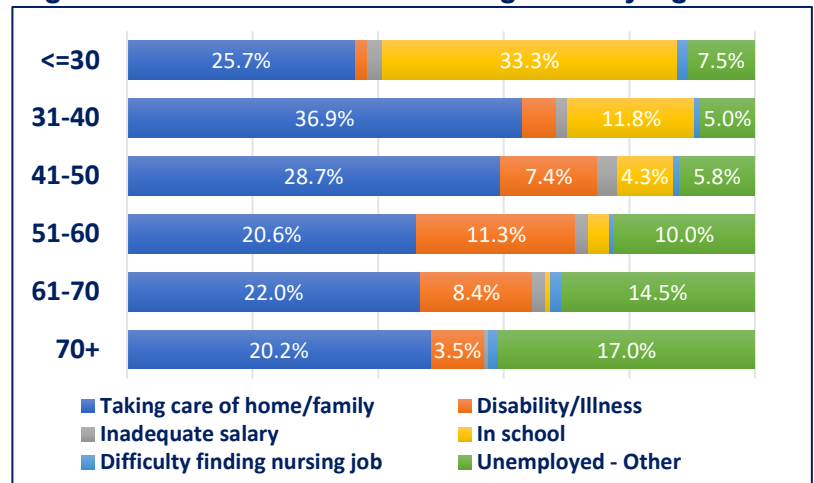
- 26% were taking care of home/family
- 7% were unemployed due to disability or illness
- 6% were in school
- Less than 2% reported inadequate salaries in nursing (n = 106) or difficulty finding nursing positions (n = 67).

Figure 8: Employment Status of RNs



Weighted to represent all RNs, including non-responders. "Employed in non-nursing/Other" includes "Not Applicable (Employed for Pay)" category removed in 2019. Beginning in 2019, display logic restricted unemployment status question to participants indicating they were not employed.

Figure 9: Reasons RNs Not Seeking Work by Age



Weighted to represent total unemployed/not seeking population

Unemployment reasons among RNs not seeking employment varied by age group (Figure 9). Participants 30 or younger were most likely to be in school (33%) or taking care of home and family (26%). Family obligations were most common among the 31-40 (37%) and 41 to 51 (29%) age groups. Disability/illnesses were most common among 51-60-year-old RNs that were unemployed and not seeking employment (11%).

“Other” unemployment reasons were increasingly common among older age groups, suggesting that older RNs not seeking work were more likely to be transitioning out of the workforce entirely.

DEMOGRAPHICS

RN Workforce Diversity

Table 7 shows demographic characteristics of RNs estimated to be working in nursing compared to the potential RN workforce¹⁸ and Florida population.¹⁹ RNs estimated to be working in Florida closely resembles the race/ethnicity and gender characteristics of the total potential RN workforce.

Asian and White nurses are overrepresented in the RN workforce, compared to the Florida population. Hispanics appear to be underrepresented in the RN workforce, although proportions should be interpreted with caution as Hispanics are represented in multiple categories within US Census data.

The RN workforce remains largely female dominated, although compared to 2016-2017, the proportion of males working as RNs in Florida increased about one percentage point.

Age Distribution

The average age of RNs estimated to be working (45.9)²⁰ is slightly lower than that of the total potential RN workforce (47.3).

Sixteen percent (16%) of the RN workforce is over the age of 60, compared to about 21% of those in the potential workforce. About 4% of RNs in the potential workforce and 2% of those estimated to be working were over the age of 70. The potential workforce may be slightly older, in part, due to nurses transitioning out of the workforce while maintaining an active Florida license.

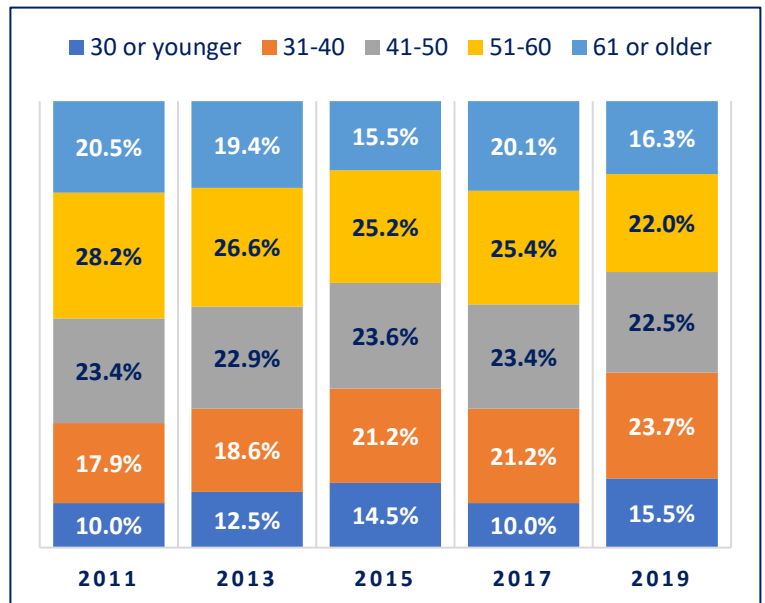
Table 7: Florida RNs and Population Demographics

	Working RNs	Potential Workforce	Florida Population
Race/Ethnicity			
Asian	6.8%	6.3%	3.0%
Black	15.1%	14.4%	16.9%
Hispanic	14.7%	14.3%	26.1%†
White	60.7%	61.6%	53.5%
Other	2.5%	2.4%	2.8%
Gender			
Female	87.0%	86.9%	51.1%
Male	12.3%	12.2%	48.9%

† Hispanic category may be overrepresented as US Census includes Hispanics in multiple race categories.

Working RN proportions are weighted to represent the total estimated population of working RNs

Figure 10: Age Distribution Trend, Working RNs



Comparisons may vary due to exclusion of newly licensed nurses in some survey cycles. 2018-2019 counts reflect weighted proportions among survey respondents.

¹⁸ Clear and active RN licenses with Florida address(es)

¹⁹ As of July 1, 2019, (United States Census Bureau, 2019)

²⁰ Weighted value to approximate total population estimated to be working

About 20.5% of the Florida population were 65 or older, compared to 17% of the potential RN workforce and 10% of RNs estimated to be working. Compared to 2017 (Figure 10, previous page), there were proportionally more working RNs that were 40 or younger and fewer over the age of 50. However, proportions should be interpreted with caution as the 2017 cycle did not include nurses newly licensed during that period.

In total, **almost 35,000 RNs in the potential workforce estimated to be working were over the age of 60 and may leave the workforce in the next five to ten years.**²¹ More research is needed to explore whether and when RNs are retiring and/or transitioning to non-bedside work environments as they age. This report does not explore age by employment setting, although estimates of the proportion of RNs providing direct care in patient care settings highlight that additional research is needed to identify where nurses work as they age, and how their years of experience in nursing are being utilized prior to retirement.

ACADEMIC ACHIEVEMENT

In 2010, the Institute of Medicine’s (IOM) published recommendations to “support efforts to improve the health of the U.S. population through the contributions nurses can make to the delivery of care” (p. 4). IOM stated that growing demands on nurses in care delivery indicated the need for higher levels of education and training for nurses. IOM provided a recommendation to increase the proportion of RNs with a Bachelor of Science in Nursing (BSN) or a higher degree (i.e. MS, MPH, PhD, etc.) in nursing or a related field to 80% of the employed workforce by 2020.

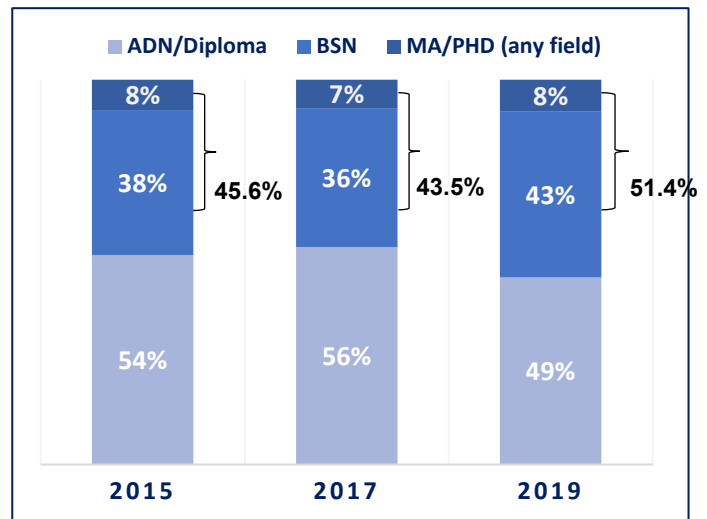
51% of working RNs have a BSN or graduate level degree

The Future of Nursing – Highest Education (IOM Categories)

At the end of 2019, **51% of RNs estimated to be working in nursing in Florida had a BSN or graduate degree.** Specifically, about 43% of working RNs held a Bachelor of Science in Nursing (BSN) and 8% held master’s or doctoral degrees in nursing or another field (Figure 11).²²

The proportion of nurses with a bachelor’s degree or higher increased about eight percentage points compared to 2016-2017, although the previous cohort excluded newly licensed nurses due to a 0% survey response. Efforts to increase RN graduates of BSN or higher programs and hospital hiring preferences may impact newer nurses’ education more directly than those more established in the workforce.

Figure 11: Education Attainment toward IOM Recommendation



²¹ From total population estimated to be working regardless of survey participation (n=213,456)

²² Initial degree in nursing was substituted for highest degree in nursing when the highest degree was left blank but initial degree was provided (n=3,153). This may result in a slight overestimation of less advanced degrees for a small subset of the population. When neither survey question was answered (n = 1,212), values were defaulted to ADN level to represent the minimum requirements to practice as a licensed nurse.

Nationally, about 57% of working nurses held a baccalaureate degree or higher in nursing in 2018 (Campaign for Action, 2020). Florida remains slightly lower than the national proportions, although rates appear closer than those reported in the previous cohort. IOM also recommended doubling the number of nurses with a doctorate by 2020. In the 2014-15 renewal cycle, 1,427 nurses had a doctorate degree. In 2016-2017, 2,039 doctorates in any field were reported, and in the current cohort, 3,167 doctorates were reported (any field). Florida has met the IOM recommendation for working nurses with a doctorate degree.

Highest Education (All Degrees)

Table 8 describes a more detailed assessment of the education attainment of RNs estimated to be working as nurses in Florida. In total, 42% held an ADN or diploma as their highest degree, and 46.5% held a bachelor's degree. Only 6% of working nurses held a bachelor's degree in a field other than nursing, in addition to their minimum nursing certifications, while 40.5% of working nurses held a nursing baccalaureate.

Eleven percent (11%) of working RNs held a master's or doctorate degree in any field. Master's degrees in nursing remain more common (6%) than non-nursing master's degrees (3%), while it was more likely that working RNs held a non-nursing doctorate (1%), compared to a DNP (0.3%) or PhD/other nursing degree (0.4%). In total, working RNs educated at the doctoral level represent 1.7% of all working RNs. Many MSN programs have transitioned to DNP curriculum as the American Association of Colleges of Nursing promotes doctoral education. As a result, the proportion of doctorally-trained nurses will increase, although this will likely have a greater impact on APRN licensees.

Compared to 2016-2017, working RNs with bachelor's degrees or higher *in nursing* increased. In the previous renewal cycle, about 12% of participants reported a non-nursing degree higher than their last nursing degree. In 2018-2019, this proportion decreased to 10% of working RNs with a higher non-nursing degree than their highest reported nursing degree.

DISCUSSION

Florida's RN population and workforce continue to show overall growth, yet the growth rate has slowed. In 2016-2017, the potential workforce grew 7.4% compared to 6.5% in the current cycle. Additionally, counts of nurses estimated to be working as RNs in Florida grew about 2%. In the current renewal cycle, there were an estimated 257,196 new and renewing RNs in the potential workforce. Eighty-three percent (83%, n = 213,456) were estimated to be working in Florida. The Florida Center for Nursing's review of the 2016-2017 cohort suggested a potential "leveling off" of

Table 8: Detailed Highest Education of Working RNs

Highest Education (All Degrees)	2016-2017	2018-2019
ADN or Diploma	48.3%	42.2%
Baccalaureate Degrees	40.7%	46.5%
BSN	33.3%	40.5%
Non-Nursing Bachelors	7.4%	6.0%
Master's Degrees	8.7%	9.2%
MSN	4.9%	5.9%
Non-Nursing Masters	3.8%	3.2%
Doctoral Degrees	1.4%	1.7%
DNP	0.1%	0.3%
PhD/Other Nursing Doctorate	0.2%	0.4%
Non-Nursing Doctorate	1.1%	1.0%

NOTE: Proportions may not equal 100% due to missing data; Non-Nursing bachelor's degrees shown here were grouped with ADN/Diplomas when reporting IOM percentages

growth in the RN workforce, while current assessments suggest that **the rate of growth is, in fact, declining.**

Overall, estimated counts of working RNs in Florida approaches 1,000 RNs per 100,000 people in Florida. However, in the current survey cycle, preliminary results were available to provide an important distinction between licensed RNs working in patient care areas as direct care providers, and those in other non-patient centered roles. When these distinctions are considered, the estimated count of RNs reduced to **about 670 direct care providers per 100,000 people in the Florida population, or 205 direct care RNs per 100 hospital beds.** At the same time, the Florida population is growing and aging, implying a greater demand for care providers as more people need acute or recurring care. Similarly, the global COVID-19 pandemic sheds light on the critical need for an adequate, qualified, and resilient healthcare workforce. RNs are on the frontlines of meeting the care needs of COVID-19 patients through triage, emergency services, intensive care, discharge planning, home health care, and across the full continuum of care. Sadly, the pandemic also demonstrates the risks associated with nursing practice. As of June 18, 2020, more than 200 nurses (American Nurses Association, 2020), have lost their lives due to the Coronavirus, including at least nine (9) in Florida. This is but one example of the risks associated with the work of a registered nurse where exposure to high risk factors including violence and abuse occurs at greater frequencies.

With or without the impact of a global pandemic, Florida's aging and growing population raises additional questions about the future supply of nurses. Between 2018 and 2019, 35,900 newly licensed nurses were added to the potential workforce, indicating that as of December 2019, they held clear and active licenses, and Florida address(es). Among them, an estimated 29,995 were working in Florida in 2019. Florida's nursing education programs have shown increased graduation rates in pre-licensure RN programs during AY 2017-18 and AY 2018-19 (Florida Center for Nursing, 2020). However, graduation alone is not sufficient to practice as a nurse in Florida. Nursing graduates cannot practice in nursing until they successfully pass the RN NCLEX and are awarded a license. Among the graduates taking the NCLEX exam for the first time in the 2019 calendar year, only about two-thirds of ADN graduates successfully passed the exam, and about 89% of bachelor's degree graduates passed. Passage rates were similar in 2018, suggesting that a substantial proportion of graduates who could have become newly licensed during the current renewal cycle were not adequately prepared to pass their licensure exams, and must retake the exam at a future date to be included in the potential workforce and/or become employed as registered nurses.

Higher NCLEX passage rates among bachelor's degree programs paired with hospital industry hiring preferences of RNs trained at the baccalaureate level is resulting in Florida's RN workforce becoming more highly educated as recommended by the Institute of Medicine (IOM). In 2018, national estimates indicate about 57% of RNs held at least a bachelor's degree. Florida's proportion is about six percentage points lower than national estimates. Florida's proportion of RNs educated with at least a bachelor's degree increased about eight percentage points since the 2016-2017 renewal. This may suggest that IOM recommendations and hiring preferences may be impacting newer nurses more directly than those more established in the workforce.²³

In 2018, Florida joined the Nurse Licensure Compact (NLC). This enables nurses to be eligible to work in any participating member state via a multi-state license. Though this may increase the

²³ 2016-2017 counts included only renewing licensees as there were no newly licensed respondents. Increased rates of BSN or higher education may be impacted by the inclusion of newer nurses.

likelihood of nurses from other member states becoming eligible to work full-time or temporarily in RN positions in Florida, this also increases the likelihood of Florida nurses working outside of Florida or relinquishing their Florida license. NLC licenses must be issued by the state in which a nurse maintains their primary residence. According to survey responses, about 9% of the potential workforce (an estimated 22,562 RNs) maintain multistate licenses issued in the state of Florida. On the other hand, almost 2,000 RNs deactivated their Florida license in favor of a multistate license issued by another state. These nurses remain eligible to practice in Florida but would not be considered in the potential workforce as they do not maintain residency in the state of Florida.

Current tracking processes do not allow for the Center to estimate how many additional nurses are contributing to Florida's workforce while maintaining a multistate license based in another member state. The Center does not know if a portion of deactivated nurses are actively employed in Florida or whether nurses with a multistate license based in Florida are likely to favor employment in another member state. More information is needed to identify the impact of Florida's NLC membership on Florida's RN workforce. This is one of many reasons that industry must become an active partner and provide the critically needed data describing the demand for nurses of all licensure categories. Without clear statements of employer need the ability to identify shortages by number, employment setting, specialty, etc. compromises the ability to plan and ensure an adequate supply of qualified nurses to care for the people of Florida on a daily basis, let alone in the event of a hurricane, pandemic, or other disaster.

Further research is needed to understand the nurse population. Survey results indicate that an estimated 6,100 RNs are unemployed and seeking work as a nurse. Without knowing the barriers and challenges preventing them from securing a nursing position, they simply represent a lost resource. Additionally, questions remain regarding the almost 35,000 RNs in the potential workforce over the age of 60. For instance, how can their work-life be extended? Where are they working/do they want to work as they age? How can their years of experience and knowledge be utilized prior to retirement? Finally, it is also important to explore the diverse professional challenges among the nearly 180,000 RNs age 60 or younger. For example, what reasons contribute to job dissatisfaction and potential decisions to leave the profession? Do younger generations have unique challenges or contributions to advance the nursing profession? Do the middle-aged "sandwich"²⁴ generation RNs face challenges related to their workload as they prepare to become the most experienced nurses as older nurses retire?

While the field of nursing remains largely female dominated, previous generations of women often exercised a passion for caregiving through nursing as one of few professions accessible to them (Moon, 2011). As more opportunities continue to emerge, anticipated shortages of nurses may not be limited to the aging workforce, but also smaller replacement cohorts and attrition as educated nurses pursue other career paths. The Coronavirus placed an unprecedented global microscope on healthcare delivery and the nursing profession providing industry leaders and policymakers with an opportunity to strengthen the nation's most ethical profession (Reinhart, 2020), including efforts to ensure an adequate and qualified workforce with the mental and physical resiliency needed during times of crisis and beyond.

²⁴ The "sandwich generation" term refers to middle-aged adults who, in family settings, are simultaneously supporting their aging parents and children and are uniquely pulled in many directions at once (Parker & Patten, 2013).

RECOMMENDATIONS

- Recommendation 1.* Support the Center’s research efforts and analysis of workforce trends to ensure the Center attains the best data on the supply of all types of nurses to enhance the ability to propose policy recommendations and to maximize the use of limited resources.
- A. Continue to require the Florida Department of Health and Board of Nursing to support the Center’s data collection efforts and Nurse Workforce Survey revisions designed to increase clarity and efficiency for participants and minimize errors in responses.
 - B. Promote nurse employer participation in providing demand data and consider a role for the Agency for Health Care Administration (AHCA) in industry data collection to improve accuracy of shortage projections and recommended interventions.
- Recommendation 2.* Increase activities to improve retention of Florida’s existing nurse workforce and extend the work-life of the older nurse population as well as the retention of the one in five nurses who leave their first nursing job within the first year (Kovner, Brewer, & Fatehi, 2014). Efforts should include addressing work environment dissatisfaction and accommodating the effects of aging on a nurses’ ability to continue to practice.
- A. Industry leaders and researchers must incorporate the needs and experiences of nurses to identify patterns in attrition or modifications needed to the work environment to be more amenable to an intergenerational workforce. Efforts should include accommodating the effects of aging on nurses’ ability to practice as well as identifying the diverse needs to attract and retain younger and middle-aged nurses.
 - B. Activities may involve efforts to transition nurses from one practice environment to another, modifications to the traditional 12-hour shift assignments, identification of new roles to capture the skills and experience of older nurses prior to their retirement. Additional examples include introducing technological developments to reduce nurse workload and increase efficiency, identifying efforts to support work-life balance among nurses of childbearing age and/or caring for dependents.
- Recommendation 3.* Promote career pathways and facilitate educational and career advancement along the hierarchy of nursing opportunities, from on-the-job training of assistants, to LPN to RN Bridge programs, BSN to DNP curricula, and clinical promotion opportunities. This will encourage bright, talented, caring people to enter the field of nursing, and encourage incumbent worker education and training to meet industry needs and counteract the looming large numbers of nurses nearing retirement.
- Recommendation 4.* Florida’s involvement in the National Licensure Compact creates opportunities for non-Florida residents to work in our state and for Florida residents to work out of state. However, “there is no clear picture about the implications of NLC on comprehensive state nursing workforce data or policy planning” (Reichhardt & Bitton, 2020, p. 6). State and industry leaders must collaborate to gather data on the work patterns of nurses with a multi-state license regardless of their home state of licensure.

ACKNOWLEDGEMENTS

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