

The South Carolina Registered Nurse Workforce | 2018

December 2020



South Carolina Office for Healthcare Workforce
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Report Preparation

This document was produced by the South Carolina Office for Healthcare Workforce (SCOHW) – a part of the South Carolina Area Health Education Consortium (SC AHEC) in Charleston, South Carolina. It contains information about the registered nurses actively employed as nurses in South Carolina as reported by the nurses themselves during their biennial license renewal process ending on April 30, 2018.

For additional information about nurses and many other health professionals in South Carolina, please call us at 843-792-4430 or visit our website: www.scohw.org.

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About the South Carolina Office for Healthcare Workforce

The South Carolina Office for Healthcare Workforce within the South Carolina Area Health Education Consortium is dedicated to coordinating the development and publication of policy-relevant workforce research across the spectrum of health professions in South Carolina. Funded by the state of South Carolina, SCOHW’s primary goal is the development and analysis of accurate, reliable information on the supply of healthcare professionals and the demand for health services in South Carolina in order to support a wide array of workforce planning efforts.



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Acronyms and Abbreviations

ADN	Associate Degree in Nursing
APRN	Advanced Practice Registered Nurse
BSN	Bachelor of Science in Nursing
CNM	Certified Nurse Midwife
CNS	Clinical Nurse Specialist
CRNA	Certified Registered Nurse Anesthetist
DNP	Doctor of Nursing Practice
eNLC	Enhanced Nurse Licensure Compact
IOM	Institute of Medicine (now known as the National Academy of Medicine, or NAM)
LLR	South Carolina Department of Labor, Licensing and Regulation
MSA	Metropolitan Statistical Area
MSN	Master of Science in Nursing
NCLEX	National Council Licensing Examination
NCSBN	National Council of State Boards of Nursing
NP	Nurse Practitioner
QI	Quality Improvement
RIBN	Regionally Increasing Baccalaureates in Nursing
RFA	South Carolina Revenue and Fiscal Affairs Office
RN	Registered Nurse
SC	South Carolina
SC AHEC	South Carolina Area Health Education Consortium
SCBON	South Carolina Board of Nursing
SCOHW	South Carolina Office for Healthcare Workforce
US	United States

Executive Summary

Registered nurses (RNs) are the largest licensed profession within the broader healthcare workforce, and the largest occupation in hospitals, where they account for 30% of total hospital employment (Bureau of Labor Statistics, 2020). Understanding the supply and distribution of RNs across the state, as well as their demographic, education, and employment characteristics, is critical for effective workforce planning, decision-making, and policy development, particularly in a time of labor and economic instability. This report, produced by the South Carolina Office for Healthcare Workforce at the South Carolina Area Health Education Consortium, describes the RN workforce in South Carolina based on data reported by RNs during their biennial license renewal process ending on April 30, 2018. This analysis includes only nurses working as RNs. Advanced Practice Registered Nurses (APRNs) are discussed in a separate report.

Data Highlights

1. Of the 73,904 nurses licensed in South Carolina in 2018, **41,572** were actively practicing as a registered nurse (RN) within the state in a nonfederal setting.
2. The number of RNs in SC grew at a slow and steady pace, increasing by 3.0% since 2016 and 14.8% since 2010.
3. Most RNs identified as female (93%) and as Caucasian (79.9%). African American and Hispanic RNs were underrepresented in SC in 2018. About one in ten RNs (11.2%) identified as African American, compared to 27.4% of the state's population. One percent (1%) identified as Hispanic, compared to 5.3% of the state's population.
4. The average age of RNs in SC in 2018 was 45. Just over one third (35%) were age 50 or older.
5. Sixty-seven percent of RNs earned their entry nursing degree for licensure – diploma, associate's degree, or bachelor's degree – in SC.
6. The Institute of Medicine's (IOM) landmark report in 2010, [The Future of Nursing](#), called for increasing the proportion of RNs with a baccalaureate degree (BSN) to 80% by 2020. SC began with a goal of reaching 50%. In 2018, the state exceeded this goal, with 54% of nurses holding a BSN or higher degree.
7. RNs in 2018 worked an average of 36.8 hours per week across primary and secondary practice locations. About 80% of RNs reported working full time. Just over half (53%) were employed in a hospital setting. Nearly 30% worked in ambulatory and long term care combined, up from 25.9% in 2010.

This report describes the pre-pandemic workforce.

This report does not address the effects of COVID-19 on the South Carolina nursing workforce. The data analyzed in this report were collected in 2018, well before COVID-19 was discovered. Any measurable impacts will be explored when data from the 2020 nurse licensure renewal period become available.

Key Takeaways

The RN workforce in South Carolina continues to show slow and steady growth, although growth has slowed slightly since 2010.

Despite the statewide increase, the number of RNs practicing outside of metropolitan counties declined. Continued efforts to support health careers programs, faculty development, preceptors and sufficient clinical placements are needed to ensure a sufficient supply of RNs to care for patients at all life stages.

The RN workforce does not reflect the diversity of the state's population.

There is a need for continued support of diversity and inclusion initiatives, such as health careers programs in middle and high schools, student support services at technical colleges and universities, and mentorship programs, as well as initiatives to ensure more racial, ethnic and gender diversity in those appointed to educational, clinical and administrative leadership positions.

Work settings have shifted since 2010, with RNs in 2018 slightly less likely to work in an inpatient hospital setting and more likely to work in ambulatory and long-term care settings.

As care shifts from the hospital to the community, education and clinical models must continue to adapt so nurses are better prepared to provide care in non-hospital settings.

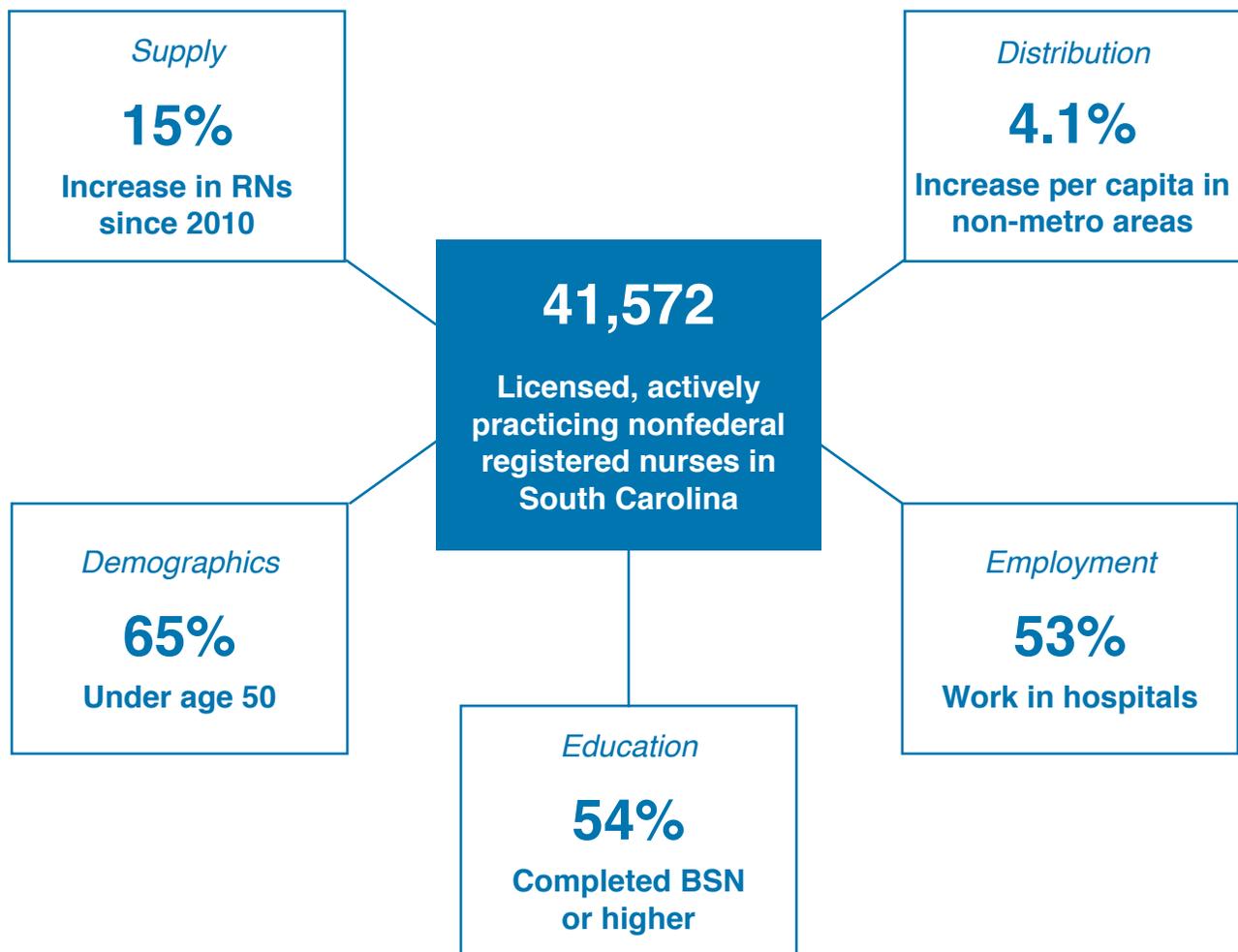
The state has achieved its goal of 50% BSN attainment by 2020, but more work is needed to meet the Institute of Medicine's recommendation of 80%.

While the state has made strides in its efforts to increase the number of baccalaureate-prepared nurses, there is room for further growth toward meeting the Institute of Medicine's goal of having 80% of the RN workforce attaining a BSN or higher.

Introduction

Registered nurses (RNs) are the largest licensed profession within the healthcare workforce. They are also the largest occupation in hospitals, where they account for 30% of total hospital employment.¹ Understanding the supply and distribution of RNs across the state, as well as their demographic, education, and employment characteristics, is critical for effective workforce planning, decision-making, and policy development, particularly in a time of labor and economic instability. This report, produced by the South Carolina Office for Healthcare Workforce (SCOHW) at the South Carolina Area Health Education Consortium (SC AHEC), describes the registered nurse workforce in South Carolina based on data reported by RNs during their biennial license renewal process ending on April 30, 2018. This analysis includes only nurses working as RNs. Advanced Practice Registered Nurses (APRNs) are discussed in a separate report.

Understanding the 2018 South Carolina Registered Nurse Workforce



The data in the report represent the South Carolina RN workforce in 2018, prior to COVID-19. Because of the ways the pandemic has disrupted RN availability and employment patterns, caution should be used in interpreting this report for current workforce needs.

Defining the Registered Nurse Workforce

Data Source and Limitations

Licensure data were obtained from the South Carolina Revenue and Fiscal Affairs Office (RFA), the official repository of data collected from the state's licensing boards under the South Carolina Department of Labor, Licensing and Regulation (LLR). All data were self-reported to the South Carolina Board of Nursing (SCBON) by RNs during the biennial license renewal period ending on April 30, 2018, or at the time of initial application for newly licensed nurses.

The analyses in this report include only those nurses who hold an active license and are currently employed as a nurse in South Carolina in a nonfederal or nonmilitary facility. The results present a conservative estimate of the nursing workforce in South Carolina for several reasons:

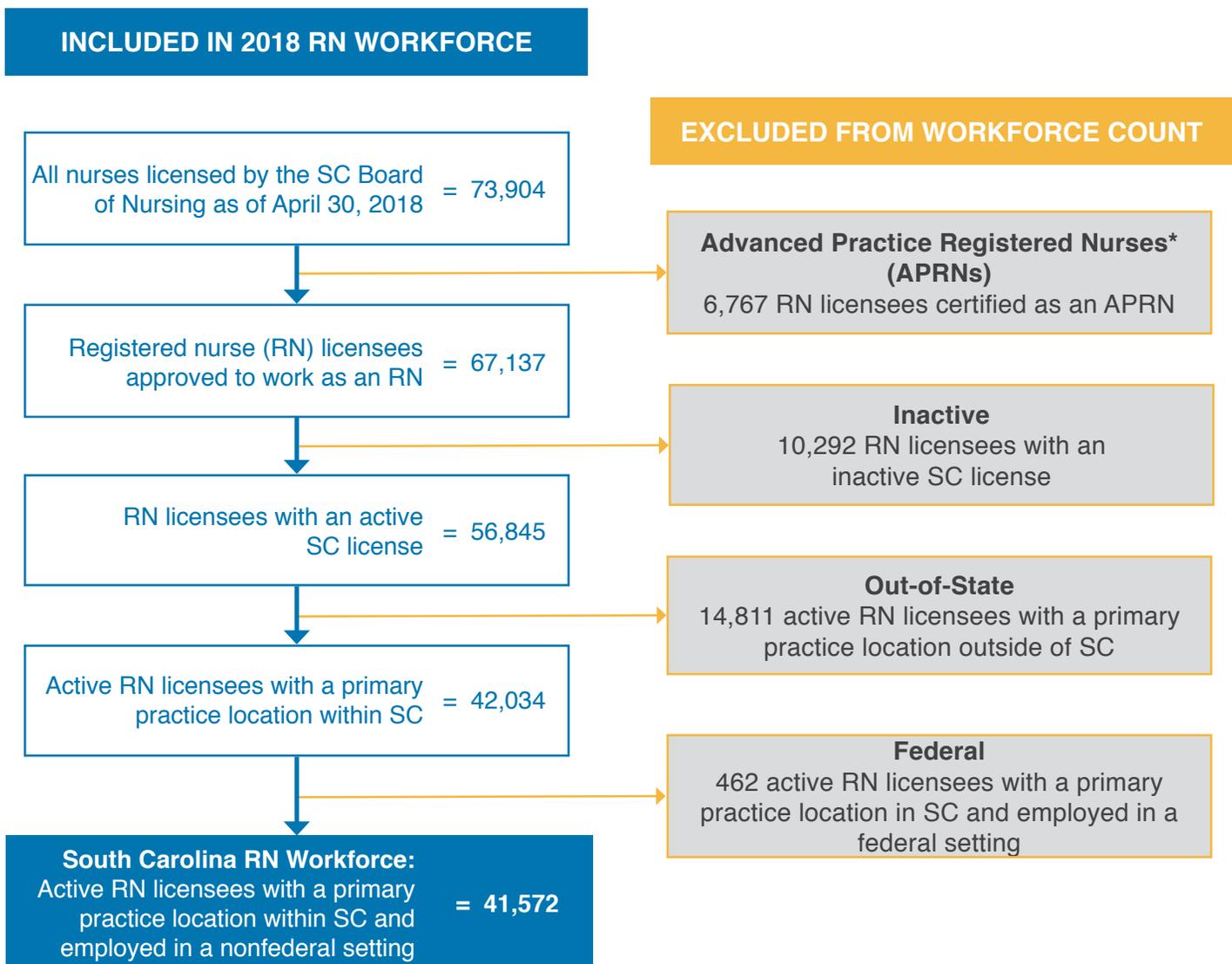
1. Licensee information is updated on a biennial cycle, making it difficult to count RNs that enter or leave the workforce in between renewal periods.
2. New licensees are not required to report their employment location or practice status in their initial license application. Until they report a practice address and activity status during the biennial license renewal process, they are not captured in the active workforce definition. Depending on when new licensees receive their initial license to practice, they may be a productive part of the workforce for as much as two years before they are reflected in official workforce counts.
3. In this report, as in previous reports in this series, only nonfederal nurses are included in the analyses. Nurses practicing at a federal or military facility, such as a Veterans Administration hospital or military base, are excluded for two reasons. As long as RNs are licensed in one state or territory, they can work under federal employment in any state;² therefore, we are unable to identify federal RNs who do not hold a license in SC. Additionally, federal nurses serve only specific populations and not the general public. However, because they do provide critical access to care for these populations, the decision to exclude federal RNs may be re-evaluated for future analyses.
4. South Carolina participates in the enhanced Nurse Licensure Compact (eNLC).³ RNs in eNLC states and territories may apply for a single-state or multi-state license. A single-state license allows them to practice only within their state of permanent residence (home state). A multi-state license, much like a driver's license, allows them to practice within their home state and in any other participating eNLC state without having to obtain additional licenses or registrations. Nurses who hold a current multi-state license with SC as their home state and indicate an active practice location within South Carolina are counted in the 2018 analyses. Because they are not required to register with the SCBON, eNLC nurses licensed in a home state outside of SC are not captured in the 2018 SC licensure data.

Enumerating the South Carolina Registered Nurse Workforce: Who is Counted?

It is important to understand how nurses are counted for the purposes of workforce analysis. While nurses must be licensed by the SCBON or within an eNLC state to practice in South Carolina, not all nurses holding a South Carolina license are actively practicing within the state. The 2018 RN workforce described in this report includes only active licensees with a primary practice location in South Carolina who were currently employed in their field in 2018 as an RN in a nonfederal or nonmilitary setting.

Of the **73,904** nurses licensed by the SCBON in 2018, **41,572** (56.3%) were actively working as an RN in a nonfederal setting within South Carolina. **Figure 1** illustrates how the RN workforce total was derived. RNs who were working as an advanced practice registered nurse (APRN) are excluded from this analysis.

Figure 1. Identifying active, in-state, non-federal registered nurses in South Carolina, 2018.



*APRNs can be certified as nurse practitioners (NPs), certified registered nurse anesthetists (CRNAs), clinical nurse specialists (CNSs) or certified nurse midwives (CNMs).

Trends in RN Supply and Distribution, 2010-2018

The RN workforce has grown steadily since 2010. Between 2010 and 2018, the number of RNs increased by 14.8%, from 36,213 in 2010 to 41,572 in 2018 (Table 1). Relative to the state's population, this growth translates to an additional 1.9 nurses per 10,000 population over the 8-year period. Figures 2 and 3 show the distribution of RNs across the state.

Despite the statewide increase, the number of RNs in micropolitan counties declined since 2010 on both an absolute (-6.4%) and per population (-7.8%) basis. The number of RNs in the state's 12 nonmetropolitan counties has been steady, although the percentage of RNs practicing in these counties – which, in 2018, contained 6.1% of the state's population – has decreased from 3.5% in 2010 to 3.0% in 2018.

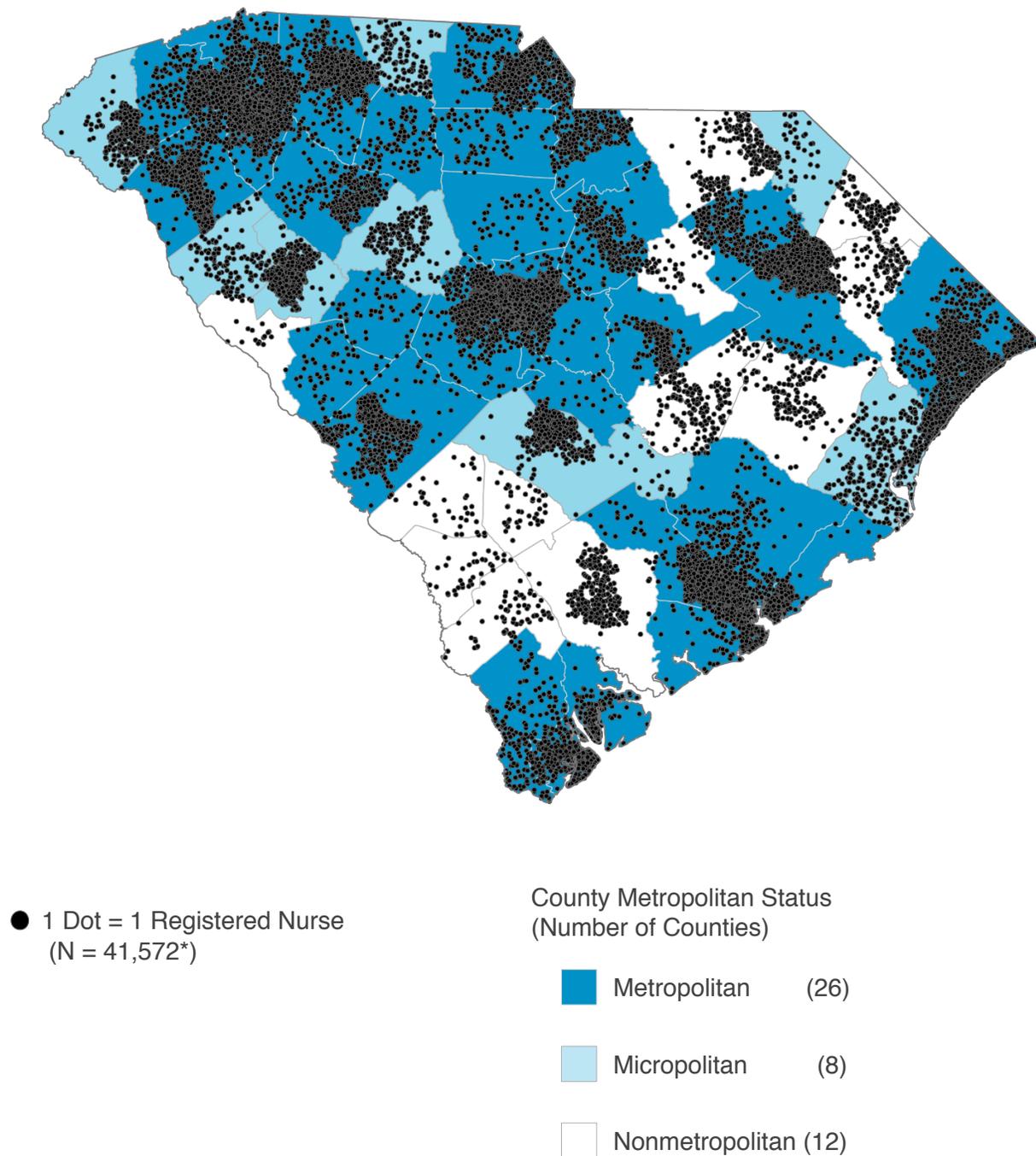
Table 1. Changes in the Size of the South Carolina RN Workforce, 2010-2018

	2010	2012	2014	2016	2018	% Change 2010-2018
Number of RNs						
Metropolitan counties (<i>n</i> = 26 counties)	31,757	33,312	35,170	35,976	37,308	17.5%
Micropolitan counties (<i>n</i> = 8 counties)	3,190	3,184	3,198	3,073	2,985	-6.4%
Nonmetropolitan counties (<i>n</i> = 12 counties)	1,266	1,258	1,273	1,281	1,266	0.0%
Total state (<i>n</i> = 46 counties)	36,213	37,754	39,641	40,365	41,572	14.8%
RNs per 10,000 population						
Metropolitan counties	85.2	86.3	88.6	86.8	87.2	2.4%
Micropolitan counties	73.0	71.7	75.4	69.4	67.3	-7.8%
Nonmetropolitan counties	40.3	39.3	38.4	41.8	41.9	4.1%
Total state	80.8	81.6	83.9	82.4	82.7	2.4%
State Population						
Metropolitan counties	3,728,219	3,861,857	3,967,769	4,146,729	4,278,588	14.8%
Micropolitan counties	437,215	443,793	424,330	442,689	443,848	1.5%
Nonmetropolitan counties	314,366	319,714	331,624	306,728	301,933	-4.0%
Total state	4,479,800	4,625,364	4,723,723	4,896,146	5,024,369	12.2%

Note: Counts across regions are lower than state totals in 2016 and 2018 because county information was not available for all nurses in those years.

Metropolitan Statistical Area (MSA) designations were based on 2010 census data and the MSA designation standards published by the U.S. Office of Management and Budget in February 2013. A metropolitan area contains a core urban area of 50,000 or more persons. A micropolitan area contains an urban core of at least 10,000 (but less than 50,000) persons. Areas not designated as metropolitan or micropolitan are defined as nonmetropolitan. See <https://www.census.gov/programs-surveys/metro-micro.html> for more information.

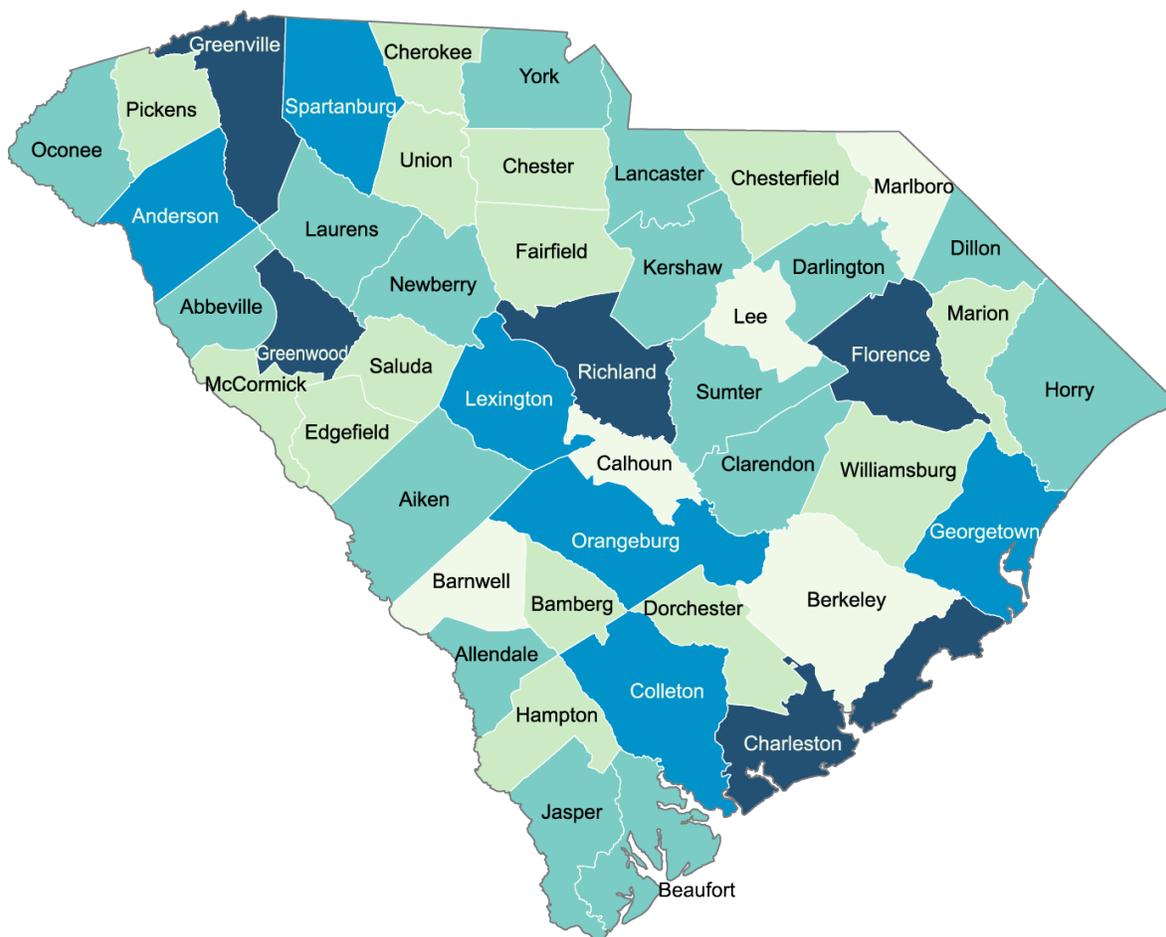
Figure 2. Active Registered Nurses by Primary Practice Location, South Carolina, 2018.



Note: Data include all nonfederal registered nurses (excluding advanced practice registered nurses) with an active license to practice and a practice location in South Carolina as reported during the license renewal period ending 04/30/2018. Locations plotted here are the primary practice zip code locations. Dots are randomly placed within the zip code area and may not represent the street location of the practice. *This map omits 45 RNs who did not have a valid South Carolina zip code.

Sources: SC Office for Healthcare Workforce, SC AHEC, derived from data collected by the South Carolina Department of Labor, Licensing and Regulation and obtained from the South Carolina Revenue and Fiscal Affairs Office, 2018; Metropolitan status based on 2010 Census counts, U.S. Census Bureau, <https://www.census.gov/programs-surveys/metro-micro.html>.

Figure 3. Registered Nurses per 10,000 Population, South Carolina, 2018.



Number of Registered Nurses per 10,000 Population (N = 41,572*)
(Number of Counties)

 110.0 to 185.9	(5)
 70.0 to 109.9	(6)
 40.0 to 69.9	(16)
 20.0 to 39.9	(14)
 14.2 to 19.9	(5)

Counties in SC range from a low of 14.2 to a high of 185.9 registered nurses per 10,000 county residents

This information is based on all nonfederal registered nurses (excluding advanced practice registered nurses) with an active license to practice and a practice location in South Carolina as reported during the license renewal period ending 04/30/2018. Provider counts are based on their primary practice location. *Map excludes 13 RNs who were missing location information.

Source: SC Office for Healthcare Workforce, SC AHEC, derived from data collected by the South Carolina Department of Labor, Licensing and Regulation and obtained from the South Carolina Revenue and Fiscal Affairs Office. Population data (2018) from SCAN, Division of Biostatistics and Health GIS, PHSIS, SCDHEC, https://apps.dhec.sc.gov/Health/SCAN_BDP/tables/populationtable.aspx, retrieved 11/19/2020.

Demographic Characteristics of the RN Workforce

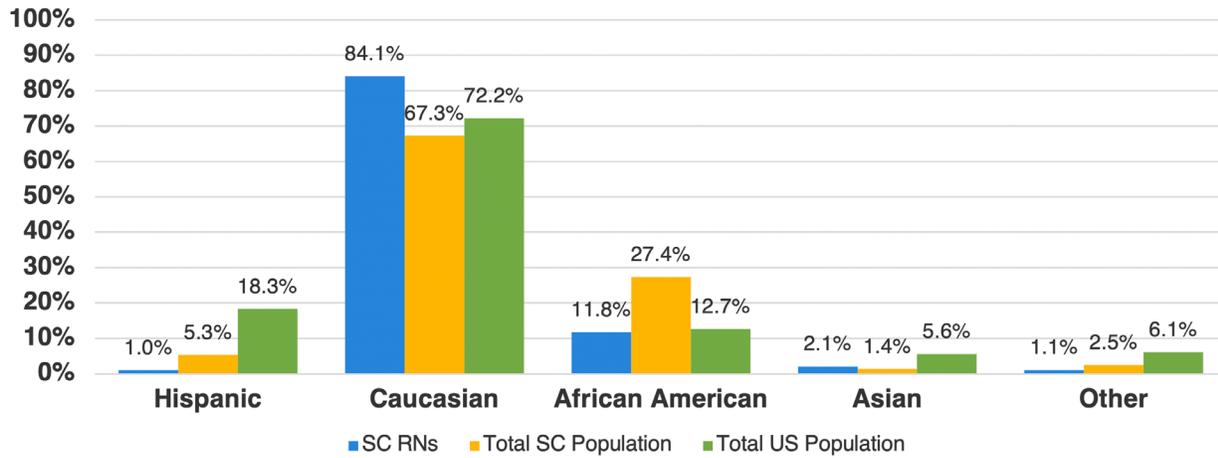
Table 2 summarizes the demographic characteristics of RNs in 2010 and 2018. In 2018, the RN workforce was primarily female; only 7% of RNs were male, a proportion that has remained essentially unchanged since 2010. Nearly 80% of RNs actively working in SC identified as Caucasian. African American and Hispanic nurses were underrepresented, with 11.8% identifying as African American and 1% identifying as Hispanic, compared to 27.4% and 5.3%, respectively, of the total SC population (**Figure 4**). The average age of RNs in 2018 was 45, and more than a third (35%) were age 50 or older (**Table 2**). As a group, nurses age 50 and younger were more diverse than nurses older than 50 (**Figure 5**).

Table 2. The Registered Nurse Workforce in South Carolina, 2010 and 2018

	2010		2018	
	Count	Percent	Count	Percent
Total	36,213	100.0%	41,572	100.0%
County of Primary Employment				
Metropolitan	31,757	87.7%	37,308	89.7%
Micropolitan	3,190	8.8%	2,985	7.2%
Nonmetropolitan	1,266	3.5%	1,266	3.0%
Unknown	0	0.0%	13	< 0.01%
Sex				
Male	2,156	6.0%	2,894	7.0%
Female	34,057	94.0%	38,678	93.0%
Race/Ethnicity				
Caucasian	30,631	84.6%	33,201	79.9%
African American	4,175	11.5%	4,644	11.2%
Native American	70	0.2%	81	0.2%
Asian	739	2.0%	830	2.0%
Other	238	0.7%	343	0.8%
Hispanic	183	0.5%	398	1.0%
Unknown	177	0.5%	2,075	5.0%
Age				
25 or Younger	1,601	4.4%	1,908	4.6%
26 - 30	3,618	10.0%	4,676	11.2%
31 - 35	4,170	11.5%	5,069	12.2%
36 - 40	4,584	12.7%	5,193	12.5%
41 - 45	4,370	12.1%	5,015	12.1%
46 - 50	4,924	13.6%	5,034	12.1%
51 - 55	5,020	13.9%	4,785	11.5%
56 - 60	4,221	11.7%	4,506	10.8%
61 - 65	2,404	6.6%	3,465	8.3%
66 - 70	880	2.4%	1,310	3.2%
71-75	310	0.9%	456	1.1%
76 or Older	96	0.2%	155	0.4%
Unknown	15	0.0%	0	0.0%
Average Age	45 years		45 years	

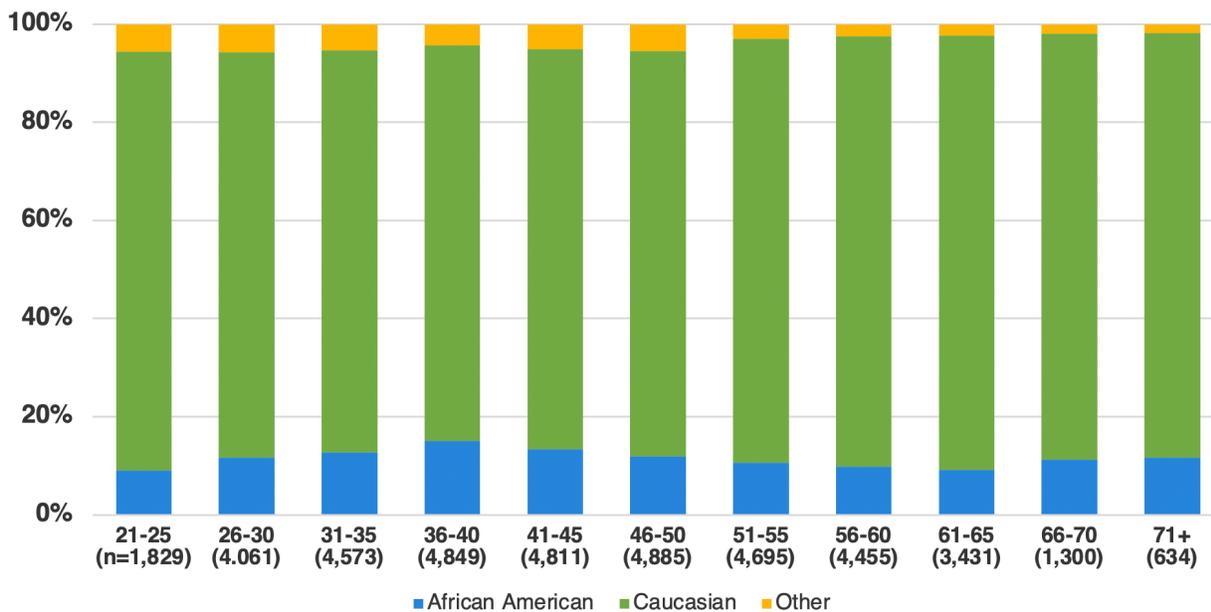
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Figure 4. Race/ethnicity of registered nurses in South Carolina relative to state and national total population, 2018.



Note: US population data retrieved on November 30, 2020 from [U.S. Census data](#).⁴ State population data retrieved on November 30, 2020 from [U.S. Census data](#).⁵

Figure 5. RN racial diversity by age group, South Carolina, 2018.*



* Note: The data in this figure do not include 2,075 nurses for whom race/ethnicity was unknown (N = 39,497).

Nursing Education

Entry and Highest Nursing Degree

Nurses are qualified to take the National Council Licensing Examination, or NCLEX, after earning a pre-licensure (entry) nursing credential, including a nursing diploma, an Associate Degree in Nursing (ADN), or a Bachelor of Science in Nursing (BSN). Some nurses with baccalaureate or higher degrees in other fields may also begin their nursing education in direct-entry master's degree programs, in which the first phase of their education prepares them for the licensure examination.

Table 3 summarizes entry and highest degree for RNs in the state, and where these degrees were earned. In 2018, 67.2% of RNs earned their initial degree for licensure from a South Carolina nursing program. A slim majority (46.3%) held an ADN as their highest degree, down slightly from 51% in 2010. Nurses entering the field with an ADN were more likely than those entering with a nursing diploma or BSN to have been educated in the state (74.6% versus 13.7% and 62.3%).

Table 3. Education Characteristics of Active Registered Nurses in South Carolina, 2018

	Total		Location of nursing education program							
			South Carolina		Other US, Canada		International		Missing Location	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Degree for Initial Licensure										
Diploma	2,242	5.4%	308	13.7%	1,457	65.0%	220	9.8%	257	11.5%
ADN	25,965	62.5%	19,380	74.6%	5,710	22.0%	51	0.0%	824	3.2%
BSN	13,248	31.9%	8,254	62.3%	3,912	29.5%	362	2.7%	720	5.4%
Other	77	.2%	10	13.0%	25	32.5%	1	1.3%	41	53.2%
Missing	40	0.0%	3	0.0%	2	0.0%	0	0.0%	35	87.5%
Total	41,572	100.0%	27,955	67.2%	11,106	26.7%	634	1.5%	1,877	4.5%
Highest Degree										
Diploma	1,751	4.2%	238	14.0%	1,114	63.6%	159	9.1%	240	13.7%
ADN	19,246	46.3%	14,051	73.0%	4,396	22.8%	47	0.0%	752	3.9%
BSN	18,060	43.4%	10,408	57.6%	6,549	36.3%	392	2.2%	711	3.9%
MSN	2,183	5.3%	770	35.3%	1,383	63.4%	10	0.5%	20	0.9
Doctorate	261	0.6%	47	18.0%	83	31.8%	1	0.3%	130	49.8%
NP Certificate Program	5	0.0%	0	0.0%	5	100.0%	0	0.0%	0	0.0
Unknown	66	0.2%	0	0.0%	0	0.0%	0	0.0%	66	100.0%
Total	41,572	100.0%	25,514	61.4%	13,530	32.5%	609	1.5%	1,919	4.6%

About three quarters of RNs entering the field with a diploma or ADN did not go on to earn a higher degree (Figure 6). RNs entering the field with an ADN were more likely than those entering with a nursing diploma to later earn a BSN (21.5% vs. 15.9%, respectively).

Progress Toward an 80% Baccalaureate-Prepared Nursing Workforce

The Institute of Medicine’s (IOM) landmark report in 2010, *The Future of Nursing*,⁶ called for increasing the proportion of nurses with a BSN to 80% by 2020, citing the need for a nursing workforce that is equipped with a broad range of competencies and a readiness to meet the challenges of an increasingly complex system of care.

Degree Progression

It should be noted that the 80% goal applies to the nursing workforce as a whole, comprised of RNs and APRNs. The data presented in Figure 6 include both RNs and APRNs to describe the state’s progress more consistently with national benchmarks.

The percentage of all nurses in South Carolina holding at least a baccalaureate degree has slowly, but steadily, increased over the past ten years (Figure 7). In 2018, South Carolina exceeded the state goal of 50% BSN by 2020⁷ with 54.1% of all nurses in the state earning a baccalaureate degree or higher. South Carolina lags slightly behind national attainment levels⁸ and is still below the IOM goal of 80%.

Figure 6. Percent of RNs in South Carolina moving from their entry level degree to a higher degree, 2018 (N = 41,490).

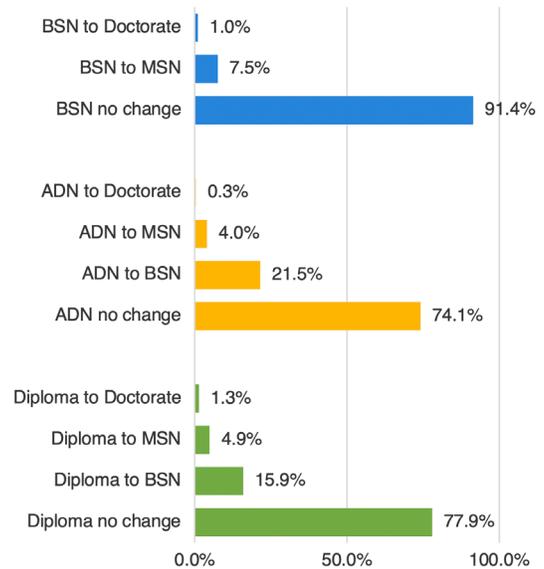
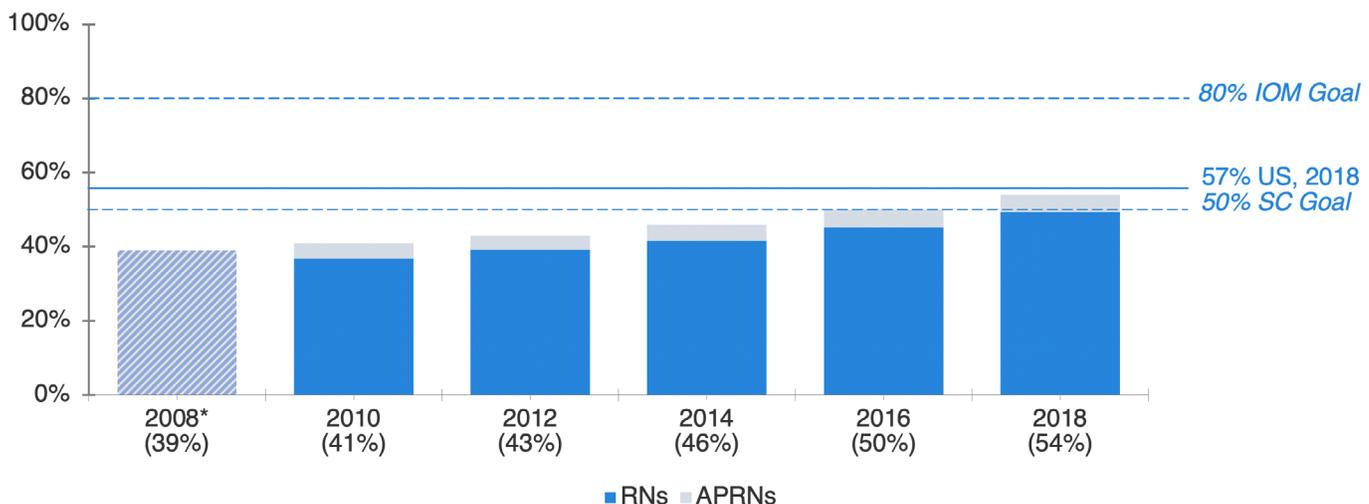


Figure 7. Percent of nurses in South Carolina with a BSN or higher degree, 2008-2018.



* Data for RNs and APRNs were not available separately for 2008.

RN Employment and Practice

When RNs renew their license every two years, they are asked to provide information on their employment status, hours, primary and secondary practice setting, and position title. Specifically, they are asked to do the following:

- indicate their employment status and whether they are full-time, part-time or as needed;
- indicate the number of hours they work per week in their primary and secondary practice locations;
- identify the type(s) of setting(s) that most closely corresponds with their nursing practice position; and
- identify the position title(s) that most closely corresponds with their nursing practice position(s).

RN Practice Hours

The majority of RNs in 2018 (82%) indicated that they work full-time. Two thirds (68.9%) reported working between 36 and 40 hours per week across primary and secondary practice locations (Table 4). RNs age 65 and older worked fewer hours than did those younger than 65 (Figure 8). Those younger than 65 worked at least 35 hours, on average, regardless of their age category.

Table 4. Total hours worked per week by RNs across primary and secondary practice locations by age group, SC, 2018. (N=41,326)

Total Weekly Hours	Number of RNs	Percent
1-5	265	0.6%
6-10	703	1.7%
11-15	677	1.6%
16-20	1,390	3.4%
21-25	2,229	5.4%
26-30	996	2.4%
31-35	1,526	3.7%
36-40	28,466	68.9%
41-45	1,465	3.5%
46-50	2,013	4.9%
51-55	540	1.3%
56-60	503	1.2%
61-65	145	0.4%
66-70	64	0.2%
71-75	210	0.5%
76-80	134	0.3%

Figure 8. Total hours worked per week by RNs across primary and secondary practice locations by age group, SC, 2018.

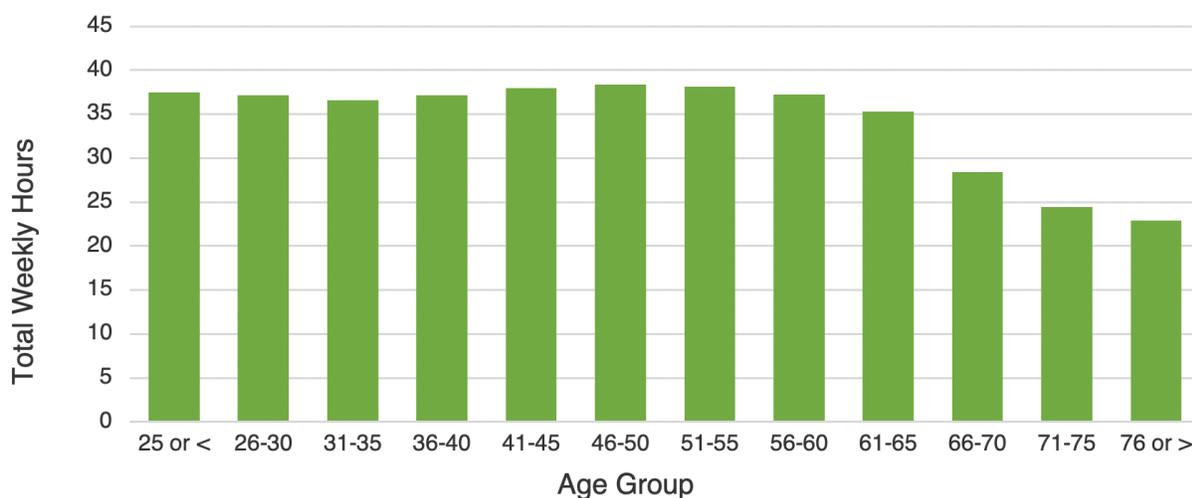


Table 5. Detailed RN Practice Settings, SC, 2018 (N= 41,441)

RN Practice Settings	Count	Percent
Academic	824	2.0%
Academic Setting (Nursing)	675	1.6%
Academic Setting (Other)	149	0.4%
Behavioral Health	598	1.4%
Alcohol/Drug Detox Center	88	0.2%
Mental Health Center	510	1.2%
Ambulatory Care	7,061	17.0%
Ambulatory Care Setting	508	1.2%
Ambulatory Surgery Center	853	2.1%
Community Health	454	1.1%
Dialysis	923	2.2%
Federal Clinic	118	0.3%
NP Provider Clinic	7	< 0.1%
Occupational Health	252	0.6%
Physician/Medical Office	1,905	4.6%
Public Health Department	343	0.8%
Retail/In-Store Clinic	7	< 0.1%
Rural Health Center	35	0.1%
School Health Service	1,484	3.6%
Urgent Care	172	0.4%
Long-Term Care	5,089	12.2%
Assisted Living Facility	259	0.6%
Home Health	2819	6.8%
Hospice (Inpatient only)	176	0.4%
Nursing Home	1835	4.4%
Hospital Inpatient	22,176	53.3%
Hospital – Emergency Room	2,620	6.3%
Hospital – General Inpatient	12,449	30.0%
Hospital – Other Inpatient	5,120	12.4%
Hospital – Subacute Care	373	0.9%
Hospital – Wide	1,614	3.9%
Hospital - Outpatient	2,575	6.2%
Hospital - Outpatient	2,575	6.2%
Other Settings	3,118	7.5%
Correctional Facility	245	0.6%
Insurance Company	1,238	3.0%
Multi-Setting	98	0.2%
Policy Planning	17	< 0.1%
Other	1,520	3.7%
Setting unknown	131	0.3%
Total RN Workforce	41,572	

RN Practice Settings

Just over half of RNs (53%) were employed in a hospital inpatient setting. Roughly three in ten (29%) were employed in ambulatory care and long-term care combined in 2018 (Table 5, Figure 9).

Since 2010, there has been a shift in practice settings, with RNs in 2018 being slightly less likely to work in a hospital setting (inpatient or outpatient), and more likely to work across a range of settings, including ambulatory and long-term care (Table 6).

Figure 9. Registered nurse primary practice settings, SC, 2018 (N = 41,441).

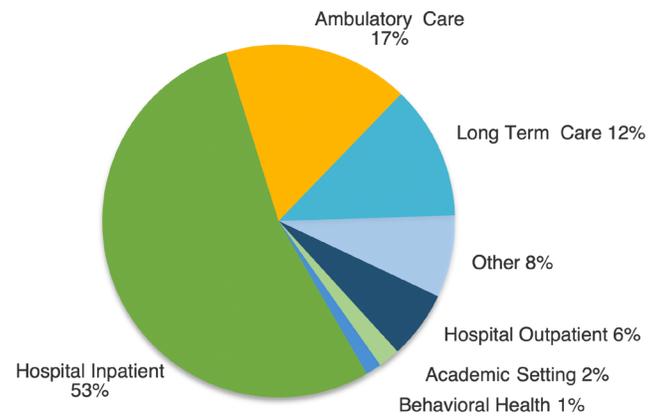


Table 6. Percent of RNs in Select Primary Practice Settings, SC, 2010 and 2018

	2010	2018
Hospital Inpatient	57.6%	53.3%
Ambulatory Care	15.7%	17.0%
Long Term Care	10.2%	12.2%
Other	6.1%	7.5%
Hospital Outpatient	8.2%	6.2%
Academic Setting	1.7%	2.0%
Behavioral Health	0.5%	1.4%
Unknown	0.0%	0.3%

RN Position Titles

While practice setting allows us to understand where nurses are working, position title is one way to understand nurses' roles. In 2018, two thirds of nurses indicated that their position title fell into the category of "Staff Nurse/Direct Care/General Duty Nurse" ([Table 7](#)).

Table 7. Position Titles Reported by RNs, SC, 2018 (N = 41,572)

Reported RN Position Titles	Count	Percent
Staff Nurse/Direct Care/General Duty Nurse	27,712	66.7%
Nurse Manager	3,218	7.7%
Care Coordinator/Case Manager/Discharge Planner	2,473	5.9%
School Nurse	1,413	3.4%
Quality Improvement, Utilization Review	1,403	3.4%
Nurse Executive/Administration	1,125	2.7%
Other - Health Related (Patient Focus)	743	1.8%
Faculty/Professor	718	1.7%
Nurse Educator (Including In-Service, Professional Development)	525	1.3%
Supplemental Staffing/Travel/Visiting Nurse	485	1.2%
Patient Educator	374	0.9%
Informatics Nurse/Informaticist	305	0.7%
Consultant (e.g., Legal, Educational, Practice Standards)	243	0.6%
Other - Health Related (Organizational/Operations Focus)	203	0.5%
Triage/Advice Nurse	176	0.4%
Nurse Researcher	144	0.3%
Telehealth Nurse	134	0.3%
Other - Non-Health Related	50	0.1%
Title unknown	128	0.3%

RN Position Titles by Setting

The vast majority of RNs working in emergency departments, inpatient units, or outpatient units held the position best described as Staff Nurse/Direct Care/General Duty Nurse (Figure 10). RNs not working in hospital inpatient, outpatient, or emergency department settings most often held executive/administration positions or positions in the areas of quality improvement and utilization review (Figure 11).

Figure 10. Percent of RNs holding Staff Nurse/Direct Care/General Duty Nurse position titles, by hospital setting, SC, 2018 (N = 20,102).

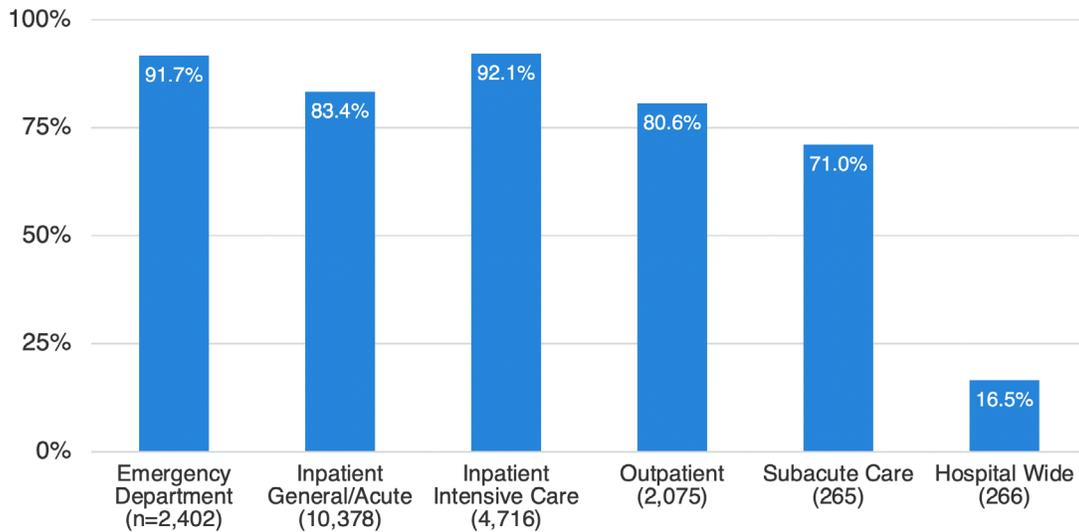
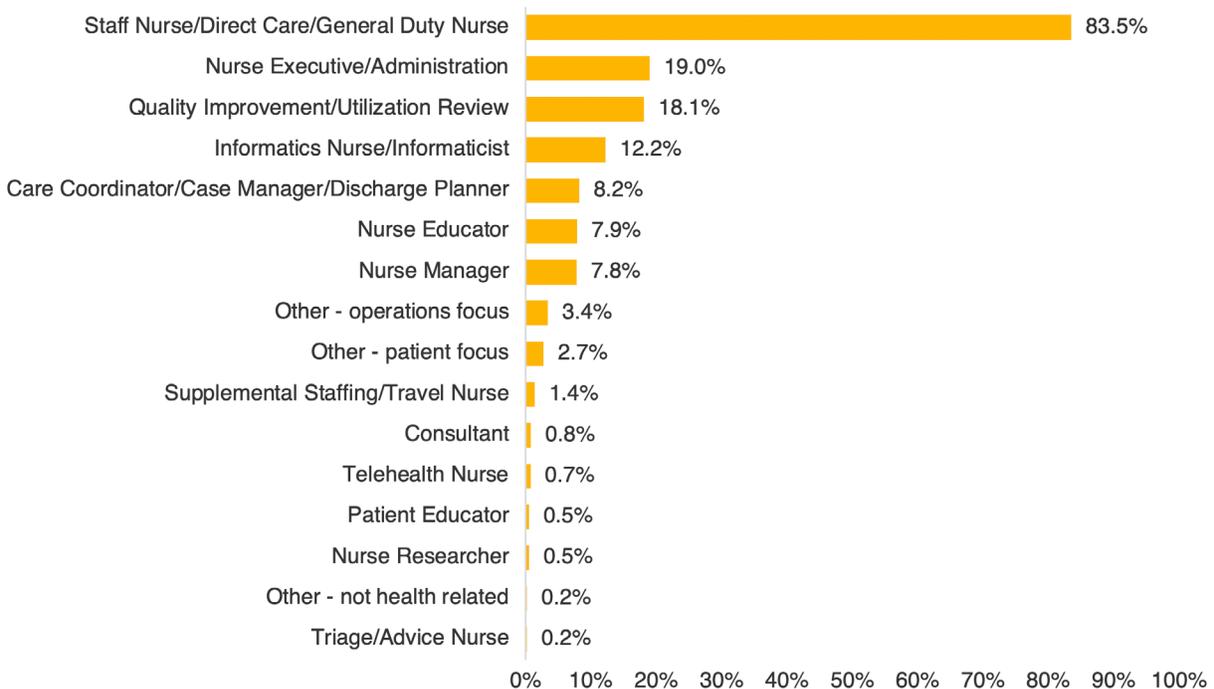


Figure 11. Position titles of RNs employed in hospital-wide settings, SC, 2018 (N = 1,614).



Characteristics of RNs Employed by Insurance Companies

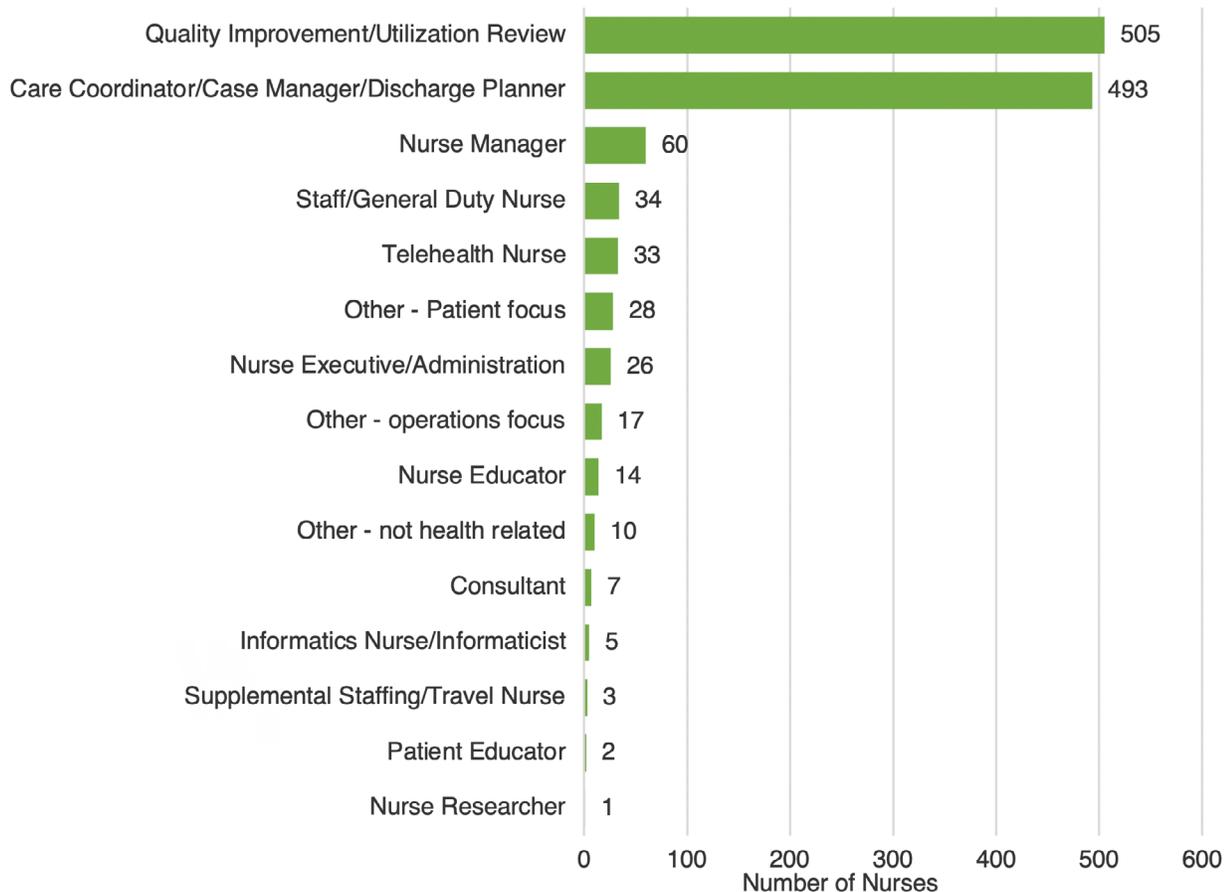
In 2018, 1,238 RNs were employed by insurance companies. Their numbers have increased significantly (by 84.5%) since 2010 when 671 RNs reported working in this setting. This growth is associated with an increase in the number of individuals with health insurance coverage as a result of the Affordable Care Act, a shift from fee-for-service to value-based models of payment, and a recognition that nurses are uniquely qualified to serve in care coordinator roles.⁹

In 2018, RNs employed by insurance companies were slightly older and more likely to be female and African American than RNs working in other settings (Table 8). They also were more likely to have a nursing diploma or an ADN as their highest degree and less likely to have earned their initial degree for licensure in SC. The vast majority held position titles in the categories of Quality Improvement (QI)/Utilization Review and Care Coordinator/Case Manager/Discharge Planner (Figure 12).

Table 8. Characteristics of RNs Employed by Insurance Companies, SC, 2018

	Insurance Company Setting		All Other Settings	
	Count	Percent	Count	Percent
Sex				
Male	40	3.2%	2,854	7.1%
Female	1,198	96.8%	37,480	92.9%
Race				
White	984	82.0%	32,217	84.1%
African American	189	15.8%	4,455	11.6%
Other	27	2.3%	1,625	4.2%
Mean Age	49.0 years		44.7 years	
Initial Licensure Degree				
Diploma	96	7.8%	2,146	5.3%
ADN	790	63.9%	25,175	62.5%
BSN	348	28.1%	12,900	32.0%
Other	3	0.2%	74	0.2%
Highest Degree				
Diploma	84	6.8%	1,667	4.1%
ADN	630	50.9%	18,616	46.2%
BSN	479	38.7%	17,581	43.6%
MSN	43	3.5%	2,140	5.3%
NP Certificate Program	0	0.0%	5	0.0%
Doctorate	1	0.1%	260	0.6%
Unknown	1	0.1%	65	0.2%
School Location (initial licensure degree)				
South Carolina	690	58.1%	27,265	70.8%
Other US/Canada	492	41.4%	10,614	27.6%
International	5	0.4%	629	1.6%

Figure 12. Position titles of RNs employed by insurance companies, SC, 2018 (N = 1,238).



Conclusions

The RN workforce is the state's largest licensed health profession. Across the nation, including in South Carolina, news of nursing shortages makes headlines. However, the notion of shortage is complex. More work is needed to understand the true issues of supply, demand and distribution that contribute to the shortage dialogue.

The data presented in this report describe the RN workforce in 2018 and can inform decisions affecting nurse education, recruitment and deployment. Key findings include:

- 1. The RN workforce in South Carolina continues to show slow and steady growth, although growth has slowed slightly since 2010.** Despite the statewide increase, the number of RNs practicing outside of metropolitan counties declined. Continued efforts to support health careers programs, faculty development, preceptors and sufficient clinical placements are needed to ensure a sufficient supply of RNs to care for patients at all life stages. As care shifts from the hospital to the community, education and clinical models must continue to adapt so nurses are better prepared to provide care in non-hospital settings.

- 2. The RN workforce does not reflect the diversity of the state’s population.** While nursing tends to be a more diverse profession than other healthcare professions, such as medicine, dentistry and pharmacy, the South Carolina nursing workforce remains primarily female and does not match the state’s racial and ethnic composition. Males, African Americans, and persons of Hispanic descent are underrepresented in the RN workforce. There is a need for continued support of diversity and inclusion initiatives, such as health careers programs in middle and high schools, student support services at technical colleges and universities, and mentorship programs, as well as initiatives to ensure more racial, ethnic and gender diversity in those appointed to educational, clinical and administrative leadership positions.
- 3. Work settings have shifted since 2010, with RNs in 2018 less likely to work in an inpatient hospital setting and more likely to work in ambulatory and long-term care settings.** As care shifts from the hospital to the community, education and clinical models must continue to adapt so nurses are better prepared to provide care in non-hospital settings.
- 4. The state has achieved its goal of 50% BSN attainment by 2020, but more work is needed to meet the Institute of Medicine’s recommendation of 80%.** Data in this report show that nurses with baccalaureate or higher degrees are more likely to obtain advanced degrees, which are required to become nursing faculty or advanced practice registered nurses. Some studies have shown improved patient outcomes when care is delivered by nurses with a BSN or higher.^{10,11,12,13} New York successfully passed legislation to require all nurses to have a BSN within 10 years of licensure,¹⁴ but there are other strategies that do not require new legislative mandates. Community colleges and four-year universities can execute articulation agreements or dual enrollment programs that allow for the recognition and transfer of nursing credits to encourage more seamless educational attainment. The Regionally Increasing Baccalaureates in Nursing (RIBN) Program in North Carolina¹⁵ dually enrolls students in a participating community college and university. The first three years are completed at the community college, at which point graduates receive their ADN and sit for the national licensing exam (NCLEX). The fourth year is spent at the partnering university, where they can work as an RN and complete their BSN degree.

Because the data analyzed in this report were collected in 2018 – well before the novel coronavirus was discovered in 2019 – these numbers should be used with caution in the context of COVID-19. The COVID-19 pandemic has caused many disruptions in healthcare. Hospitals have furloughed employees, discontinued non-essential services, and reassigned health professionals to different units and roles. Smaller clinics and community practices have closed temporarily or permanently, or reduced the number of patients they see in person. At the same time, the use of telehealth has increased. Healthcare workers have a higher risk of contracting COVID-19,¹⁶ and they have experienced high rates of stress and burnout.¹⁷ Of particular relevance for the nursing workforce, which is primarily female, women have disproportionately left the workforce to care for their children, oversee remote learning, and serve as caregivers to other family members.¹⁸ While the effects of COVID-19 on the South Carolina nursing workforce could not be examined in this report, it will be important to determine if there is measurable impact in the data collected during the 2020 nurse licensure renewal period.

References & End Notes

- ¹ Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Registered nurses made up 30 percent of hospital employment in May 2019. Retrieved on October 19, 2020 from <https://www.bls.gov/opub/ted/2020/registered-nurses-made-up-30-percent-of-hospital-employment-in-may-2019.htm>.
- ² For additional information, see <https://www.ncsbn.org/2018MilitaryFactsheetFINAL.pdf> and <https://public-inspection.federalregister.gov/2020-24817.pdf>.
- ³ The eNLC only applies to RNs. Licensed practical nurses and APRNs must still obtain a license for each state in which they wish to practice. While there is an effort to develop a licensure compact for APRNs, a minimum of 10 states must enact APRN Compact legislation before the compact can be implemented. For more information, refer to the National Council of State Boards of Nursing at <https://www.ncsbn.org/aprn-compact.htm>.
- ⁴ U.S. Census Bureau. Selected Characteristics of the Total and Native Populations in the United States. 2018: ACS 1-Year Estimates Subject Tables. Retrieved on November 30, 2020 from <https://data.census.gov/cedsci/table?q=us%20population%20by%20race%202018&t=Populations%20and%20People&tid=ACSST1Y2018.S0601&moe=false&tp=false&hidePreview=false>
- ⁵ U.S. Census Bureau. Selected Characteristics of the Total and Native Populations in the United States. 2018: ACS 1-Year Estimates Subject Tables. South Carolina. Retrieved on November 30, 2020 from <https://data.census.gov/cedsci/table?q=%20population%20by%20race%202018%20south%20carolina&t=Populations%20and%20People&tid=ACSST1Y2018.S0601&moe=false&tp=false&hidePreview=false>
- ⁶ IOM (Institute of Medicine). (2011). *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/catalog/12956/the-future-of-nursing-leading-change-advancing-health>.
- ⁷ Bachelor of Science in Nursing in South Carolina. Retrieved on November 9, 2020 from <https://www.bsnet.edu/south-carolina-pre-licensure-bsn/>
- ⁸ Future of Nursing: Campaign for Action Dashboard, updated January 28, 2020. Retrieved on November 9, 2020 from https://campaignforaction.org/wp-content/uploads/2019/07/r2_CCNA-0029_2019-Dashboard-Indicator-Updates_1-29-20.pdf
- ⁹ Cropley, S, & Sanders, ED. (2013). Care coordination and the essential role of the nurse. *Creative Nursing*, 19(4), 189-194. doi: 10.1891/1078-4535.19.4.189. PMID: 24494384. <https://pubmed.ncbi.nlm.nih.gov/24494384/>
- ¹⁰ Blegen, MA, Goode, CJ, Park, SH, Vaughn T, & Spetz, J. (2013). Baccalaureate education in nursing and patient outcomes. *Journal of Nursing Administration*, 43(2), 89-94. doi:10.1097/NNA.0b013e31827f2028 https://journals.lww.com/jonajournal/Fulltext/2013/02000/Baccalaureate_Education_in_Nursing_and_Patient.8.aspx
- ¹¹ Yakusheva, O, Lindrooth, R, & Weiss, M. (2014). Economic evaluation of the 80% baccalaureate nurse workforce recommendation: a patient-level analysis of medical care. *Medical Care*, 52(10), 864-869. doi: 10.1097/MLR.000000000000189 https://journals.lww.com/lww-medicalcare/Fulltext/2014/10000/Economic_Evaluation_of_the_80_Baccalaureate_Nurse.2.aspx
- ¹² Tourangeau, AE, Doran, DM, Hall, LM, Pallas, LO, Pringle, D, Tu, JV, & Cranley, LA (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of Advanced Nursing*, 57(1),32–44. doi: 10.1111/j.1365-2648.2006.04084. <https://pubmed.ncbi.nlm.nih.gov/17184372/>
- ¹³ Aiken, LH, Sloane, D, Griffiths, P, Rafferty, AM, Bruyneel, L, McHugh, M, Maier, CB, Moreno-Casbas, T, Ball, JE, Ausserhofer, D, & Sermeus, W. Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. (2017). *British Medical Journal*, 26 (7,) 559-568. DOI: 10.1136/bmjqs-2016-005567 <https://qualitysafety.bmj.com/content/26/7/559>
- ¹⁴ New York Education Law § 6905.2. See also S.B. 6768, 2017-2018 Regular Session (New York, 2017). <https://legislation.nysenate.gov/pdf/bills/2017/s6768>
- ¹⁵ North Carolina Community College System. <https://www.nccommunitycolleges.edu/academic-programs/nursing-education-options-nursing>
- ¹⁶ Nguyen, LH, Drew, DA, Graham, MS, Joshi, A D, Guo, CG, et al. Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort. (2020). *The Lancet. Public health*, 5 (9), e475-e483. Published online July 31, 2020 [https://doi.org/10.1016/S2468-2667\(20\)30164-X](https://doi.org/10.1016/S2468-2667(20)30164-X)
- ¹⁷ Giusti, EM, Pedrolì, E, D’Aniello, GE, Badiale, CS, Pietrabissa, G, Manna, C, Badiale, MS, Riva, G, Castelnuovo G, & Molinari, E. (2020). The psychological impact of the COVID-19 outbreak on health professionals: a cross-sectional study. *Frontiers in Psychology*, 11, 1684. Published online July 10, 2020. <https://doi.org/10.3389/fpsyg.2020.01684>
- ¹⁸ Lean In/McKinsey & Company. (n.d.) Women in the workplace - 2020. https://wiw-report.s3.amazonaws.com/Women_in_the_Workplace_2020.pdf



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