



# **State of the Nursing Workforce in Arkansas**

Nursing Education, Supply, and Demand Report

## **2022**



ARKANSAS  
CENTER FOR  
NURSING



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## EXECUTIVE SUMMARY

The Arkansas Center for Nursing, Inc. (ACN) is a non-profit organization that was developed in 2016 to serve as the state's nursing workforce center. The mission of the ACN is to promote a culture of health for the citizens of Arkansas by advancing nursing education, practice, leadership, and workforce development.

### Conclusions

- Until 2021, Arkansas's nursing education programs had more applicants than available seats. A decline in applications resulted in unfilled seats in some nursing programs in 2022. According to data released by the American Association of Colleges of Nursing (AACN), student enrollment in entry-level baccalaureate nursing programs increased by 3.3% in 2021, which is the slowest growth in nursing program enrollment since 2015. National data regarding 2022 enrollment has not yet been released.
- Nursing faculty salaries, on average, are well below the average salaries of other postsecondary faculty. Long-term employment projections suggest that the demand for nursing faculty will increase due to growth and the replacement of expected retirees.
- The COVID-19 pandemic dramatically impacted nursing education in Arkansas and across the country. Early in the pandemic, academic operations were affected by the suspension or cancelation of didactic courses and clinical sites, as well as increased student and faculty attrition. As the pandemic has progressed, clinical sites have reopened, and faculty and students have adapted to the circumstances. The full effect of this disruption in nursing education is still unknown.
- Despite increases in the number of newly licensed nurses, there was a net loss of actively licensed nurses in Arkansas. Nationally, the total supply of RNs decreased by over 100,000, the steepest decline in RN supply in four decades. The exodus from the nursing workforce disproportionately affected hospitals, where there was a 3.6% decrease in RN employment.
- In Arkansas, 39% of nurses are less than 40 years of age, an increase of almost 4% from 2013. A decline in the number of nurses aged 40–59 has occurred during the same period. The number of younger nurses in Arkansas may reflect the influx of new nurses graduating from nursing education programs. In contrast, younger RNs (under the age of 35) have left the national workforce at a higher rate than older nurses. The loss of younger nurses in the workforce reduces the potential years an employment as an RN. Ultimately, this will widen the experience-complexity gap, as the number of experienced RNs diminishes.
- Arkansas has seen tremendous growth in Certified Nurse Practitioners (CNPs) over the last 10 years, including a larger percentage entering the workforce before age 40. The number of Certified Registered Nurse Anesthetists (CRNAs) has also increased over the

last two years, and they are entering the workforce at earlier ages. CNPs and CRNAs are attaining doctoral degrees at a higher rate, as more advanced-practice programs move toward doctoral level entry to practice. This is encouraging as the population ages and the need for advanced care increases in Arkansas.

- RNs in Arkansas are slightly more gender-diverse than the national average, with continued growth in the percentage of male nurses each year. Arkansas nurses have not been required to report race and ethnicity for many years, so not much is known about racial diversity. As more data become available, it appears that most nurses are White/Caucasian (86% of RNs), followed by Black/African American (under 10% of RNs).
- RNs, Nursing Assistants, and Nurse Practitioners are among the fastest-growing occupations in Arkansas. This trend is expected to continue as the population ages.
- In 2021, the national RN turnover rate was 27.1%, with a 17% vacancy rate. While RN turnover and vacancy rates in Arkansas facilities were not available, 90% of Acute Care Facilities reported that demand exceeded supply for both new and experienced RNs.
- The long-term impact of the COVID-19 pandemic on the nursing workforce, as it relates to the balance between supply and demand, is unclear at this time.

## **METHODOLOGY**

The 2022 State of the Nursing Workforce Report presents data collected from the nursing re-licensure survey administered by the Arkansas State Board of Nursing [ASBN] during the biennial re-licensure period. The 2022 report includes re-licensure data from fiscal year 2019 and fiscal year 2020. Nursing education data were collected from the annual ASBN's Education Program Reports from fiscal year 2019 and fiscal year 2020.

Arkansas's nursing re-licensure survey and education program reports were adapted from the Minimum Data Sets (MDSs) created by the National Forum of State Nursing Workforce Centers. Links to the MDSs are included in Appendix B. Approximately 96% of nurses in Arkansas completed the online re-licensure survey during the biennial licensure renewal period. All undergraduate pre-licensure nursing programs are required to complete the annual education program report.

Labor market projections and wage information were gathered from the Arkansas Department of Workforce Services' "Discover Arkansas" data search tool. Methodologies for data collection and statistical modeling are provided on the Discover Arkansas website ([www.discover.arkansas.gov](http://www.discover.arkansas.gov))

### **Nurse Employer Perception Survey**

Following a national trend to survey nurse employers as an indication of workforce sufficiency rather than focusing on turn-over and attrition rates, the ACN developed a Nurse Employer Perception Survey. The ACN used a list of all healthcare facilities obtained from the Arkansas Department of Health to identify the recipients of the Nurse Employer Perception Survey. The ACN targeted the 112 hospital facilities via emails, inviting Chief Nursing Officers (CNOs) to complete the on-line survey between July 2020 and January 2021. The second round of surveys was sent to the remainder of healthcare facilities, including home health, hospice, long-term care, and rehab facilities. The ACN contacted the 56 nursing programs throughout the state and sought their assistance in distributing the link to the on-line survey to their clinical education partners. The second round of surveys was completed between January 2021 and July 2021. All surveys were collected using anonymous links via the Qualtrics surveying system.

### **Nurse Educator Survey**

The ACN developed the Nurse Educator Survey to better understand the challenges facing nursing education and the barriers to increasing enrollment in undergraduate nursing programs throughout the state. The link to the on-line survey was sent to the Deans and Directors of the 56 nursing programs throughout the state and responses were collected between January 2021 and March 2021.

**Limitations**

The analyses and data presented in this report have limitations that should be considered when interpreting these data. The information included in this report was gathered via self-reported responses on re-licensure surveys, education program reports, and a voluntary nurse employer survey. Any self-reported survey is subject to some level of response bias and reflects the individual's interpretation of the questions.

# NURSING EDUCATION

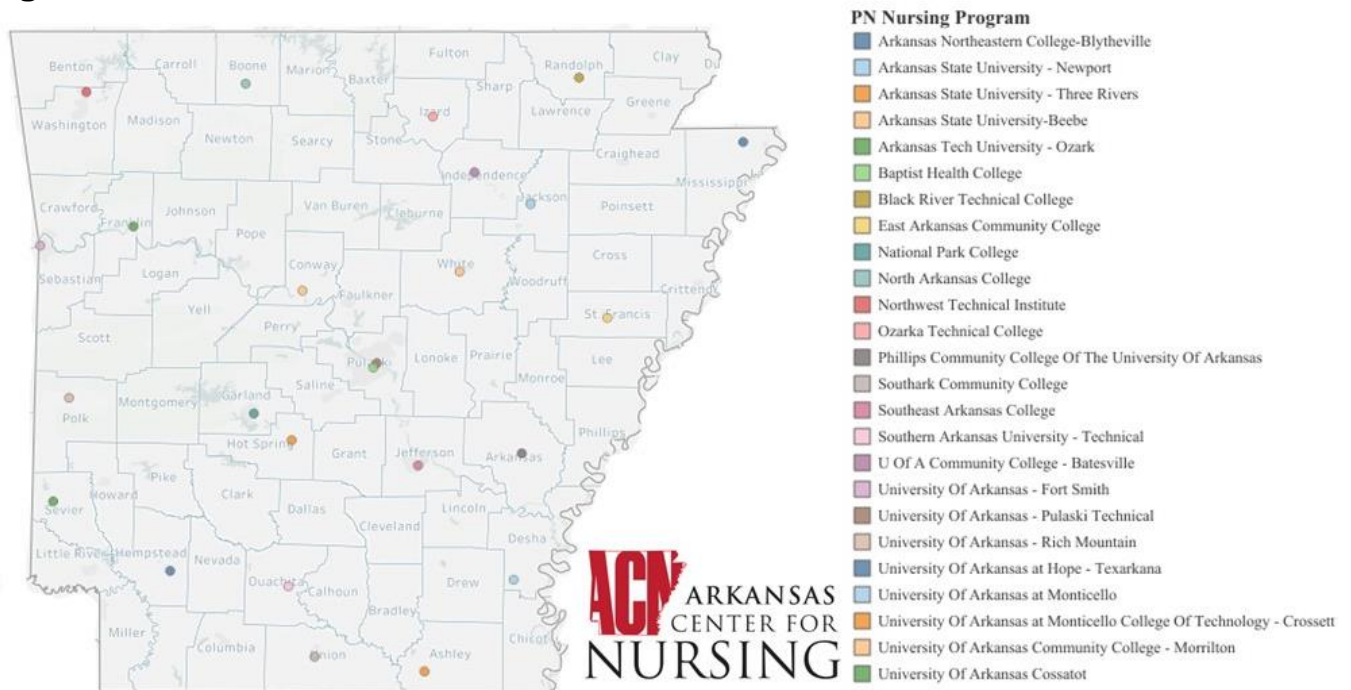
## Education Programs and Students

Arkansas currently has 56 nursing education programs, preparing students for licensure as Licensed Practical Nurses (LPNs) or Registered Nurses (RNs). Of those programs, 46% are Practical Nursing programs, 32% are Associate Degree (AD) programs, and 21% are Baccalaureate Degree (BSN) programs. Of the undergraduate pre-licensure RN programs, approximately 40% are baccalaureate-level programs (ASBN, 2020).

The ASBN collects extensive data on undergraduate pre-licensure nursing programs, students, and faculty. However, similar data are not currently collected for graduate programs in Arkansas. Therefore, the nursing education data in this report regarding nursing education reflects undergraduate pre-licensure programs in the state.

### Practical Nursing (PN) Programs (n=25)

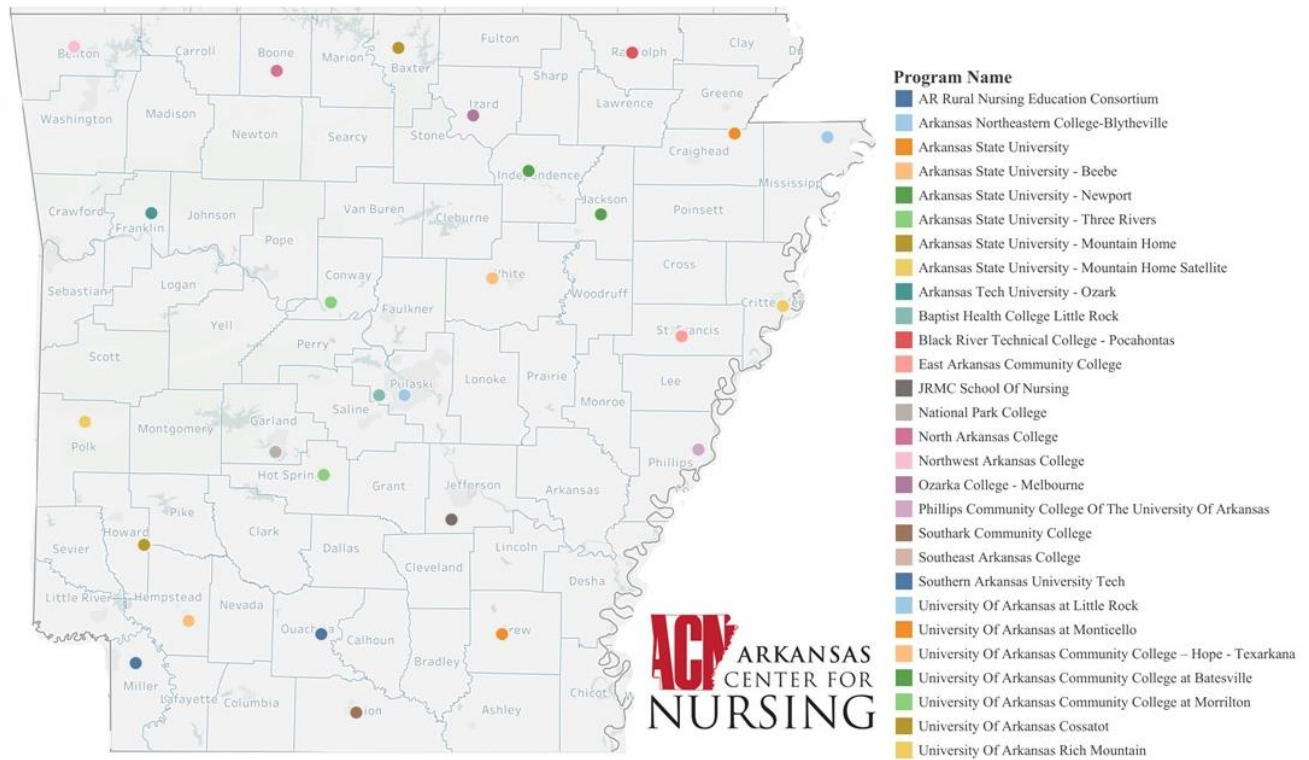
**Figure 1**





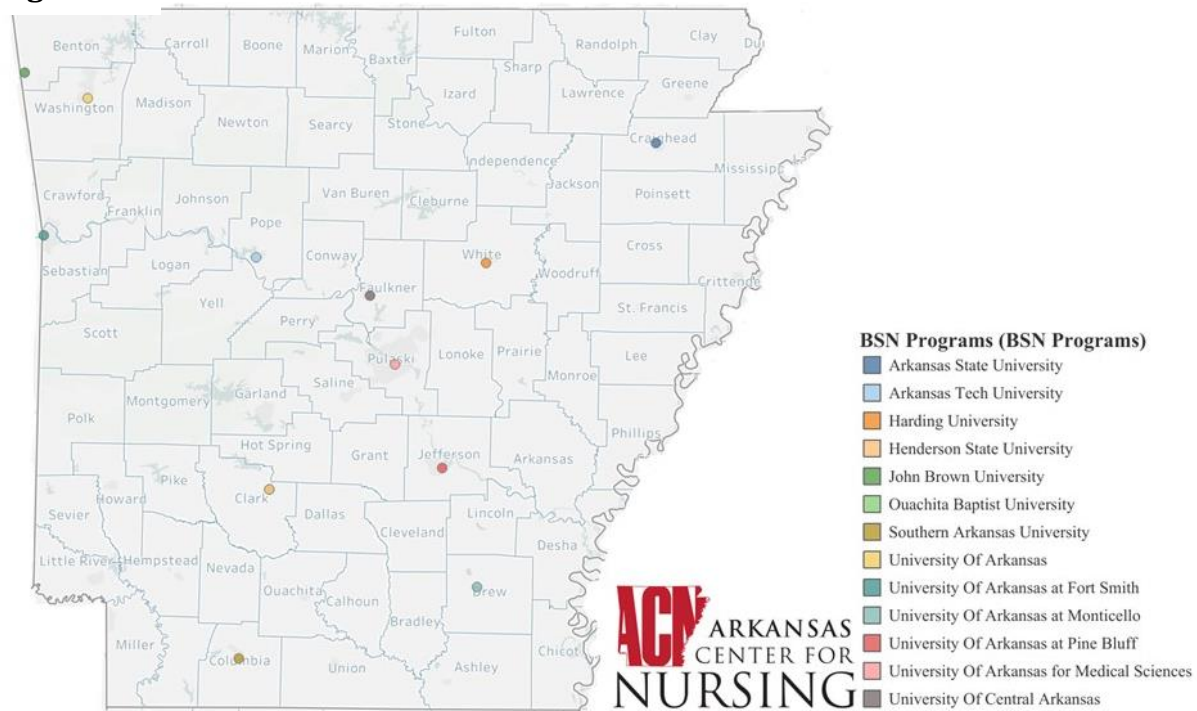
## Associate Degree (AD) Programs (n=18)

**Figure 2**



## Baccalaureate Degree (BSN) Programs (n=13)

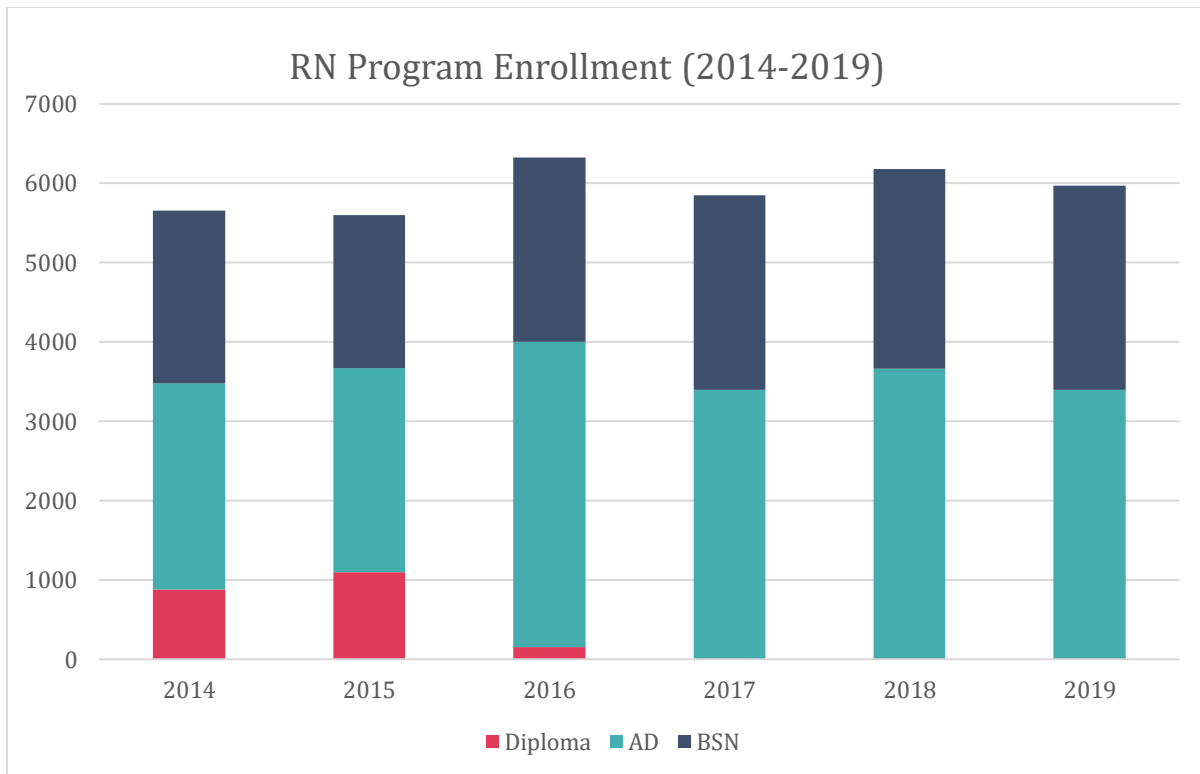
**Figure 3**



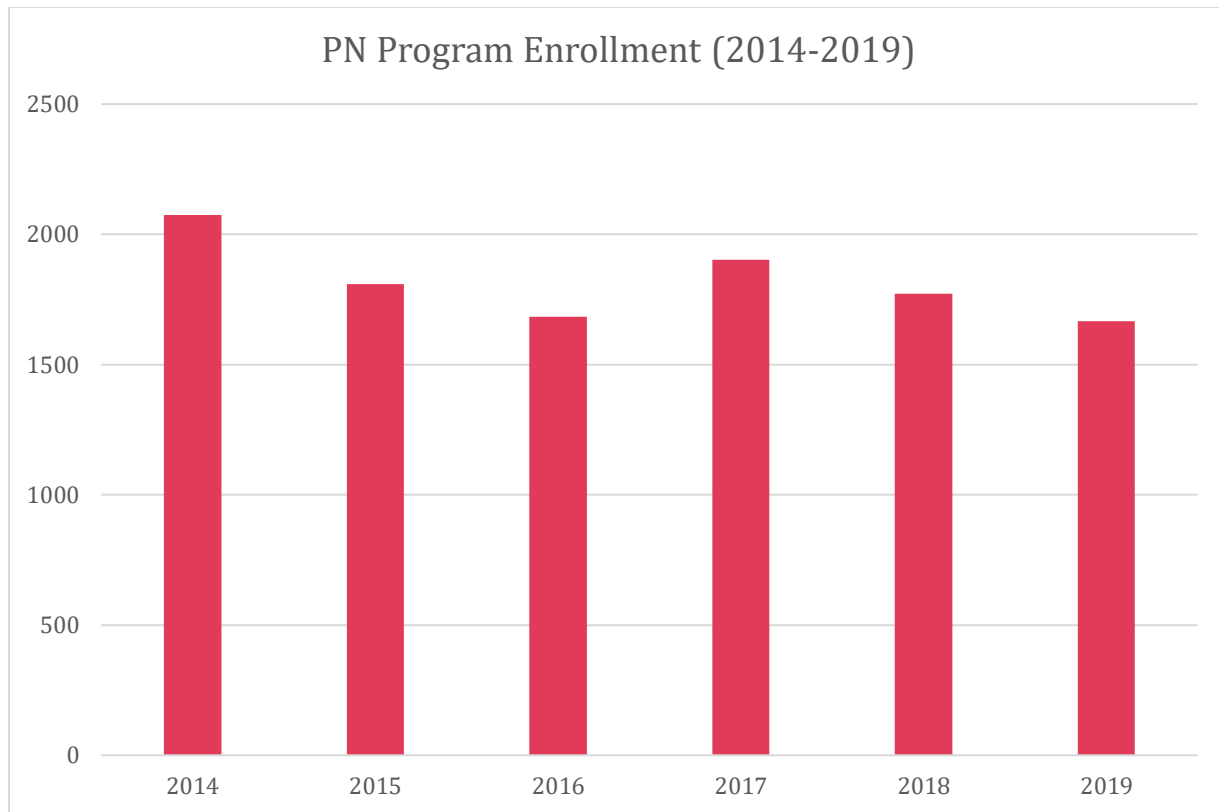
## Applications and Enrollment

Nursing programs in Arkansas vary in size and competitiveness for enrollment. Overall, the number of pre-licensure students has steadily increased since 2013. The enrollment of pre-licensure registered nurse programs (BSN and AD) has seen a steady increase since 2017 (Figure 4). In fact, 28% of AD Deans/Directors and 38% of BSN Deans/Directors reported an increase in applications from 2019 to 2020. However, the enrollment of pre-licensure practical nurse programs (PN) has progressively decreased since 2017 (Figure 5). Seventy-three percent of PN Deans/Directors reported that application numbers had fallen or remained the same from 2019–2020 (ACN, 2020).

**Figure 4**



**Figure 5**



### **Nursing Graduates**

Overall, the number of graduates from pre-licensure registered nursing programs has continued to increase, while the number of graduates from pre-licensure practical nursing programs has declined. Practical nursing graduates decreased by roughly 25% since 2012, while registered nursing graduates increased by roughly 10% during the same time period. Among registered nursing pre-licensure graduates, the number of associate degree graduates have seen the biggest increase since 2012, with an increase of nearly 30%. The figure below shows the trend of practical nursing and registered nursing graduates over the past eight years (ASBN, 2010–2020).

Figure 6

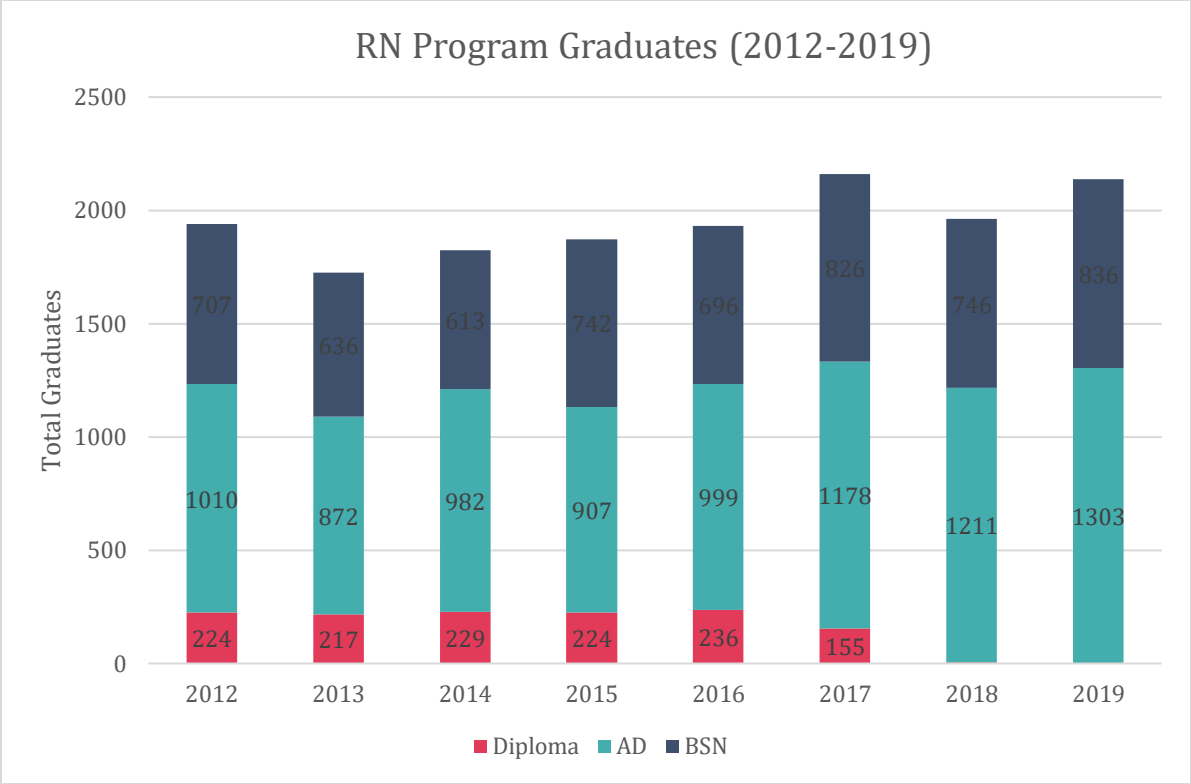
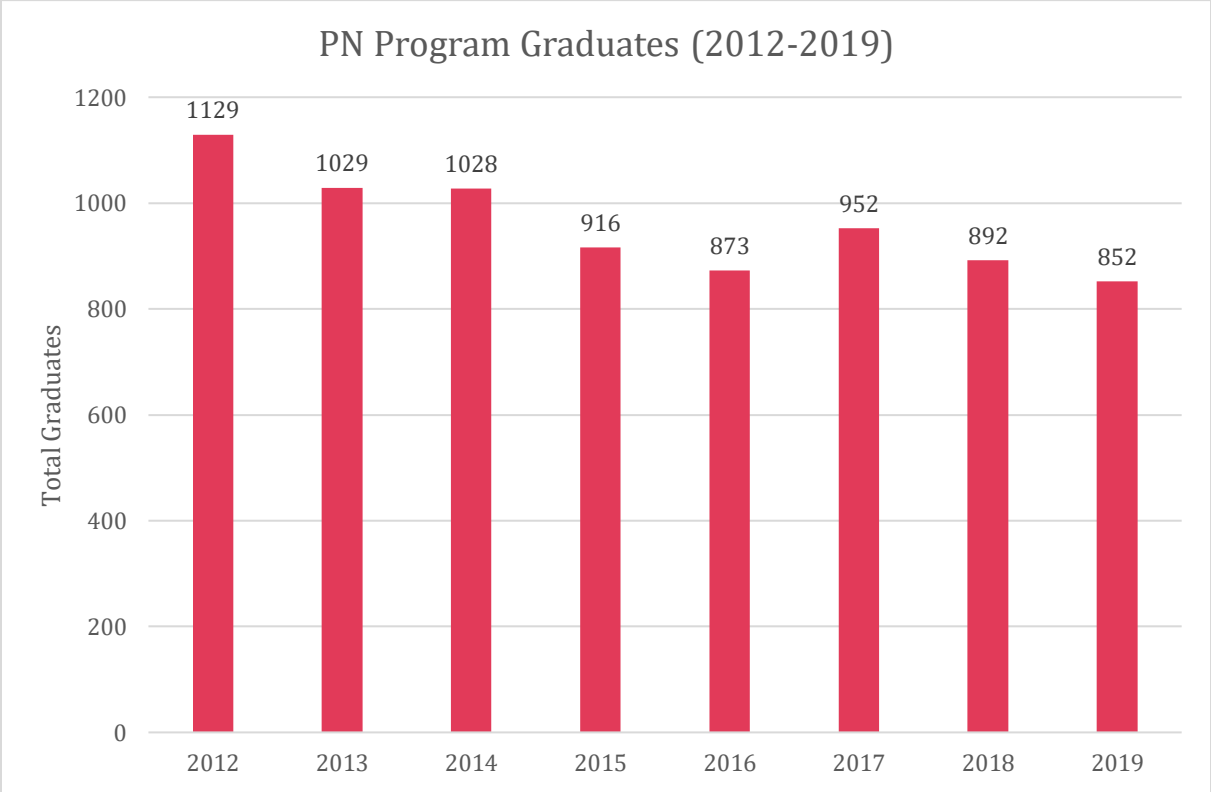


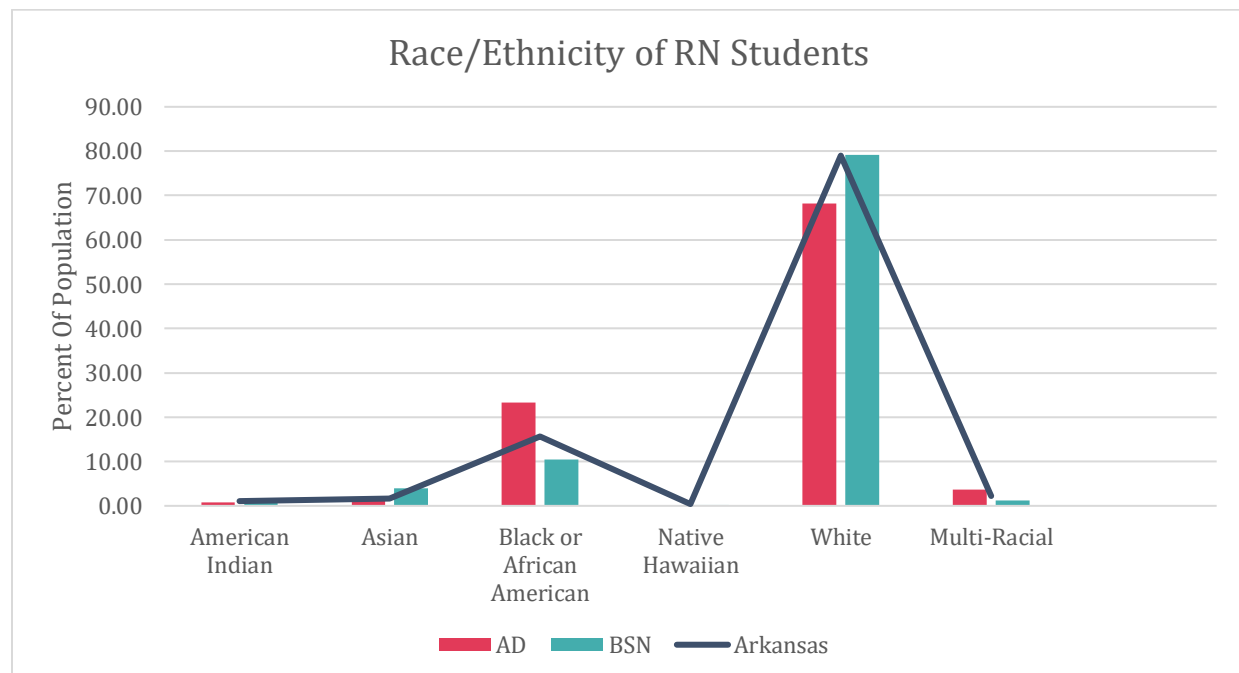
Figure 7



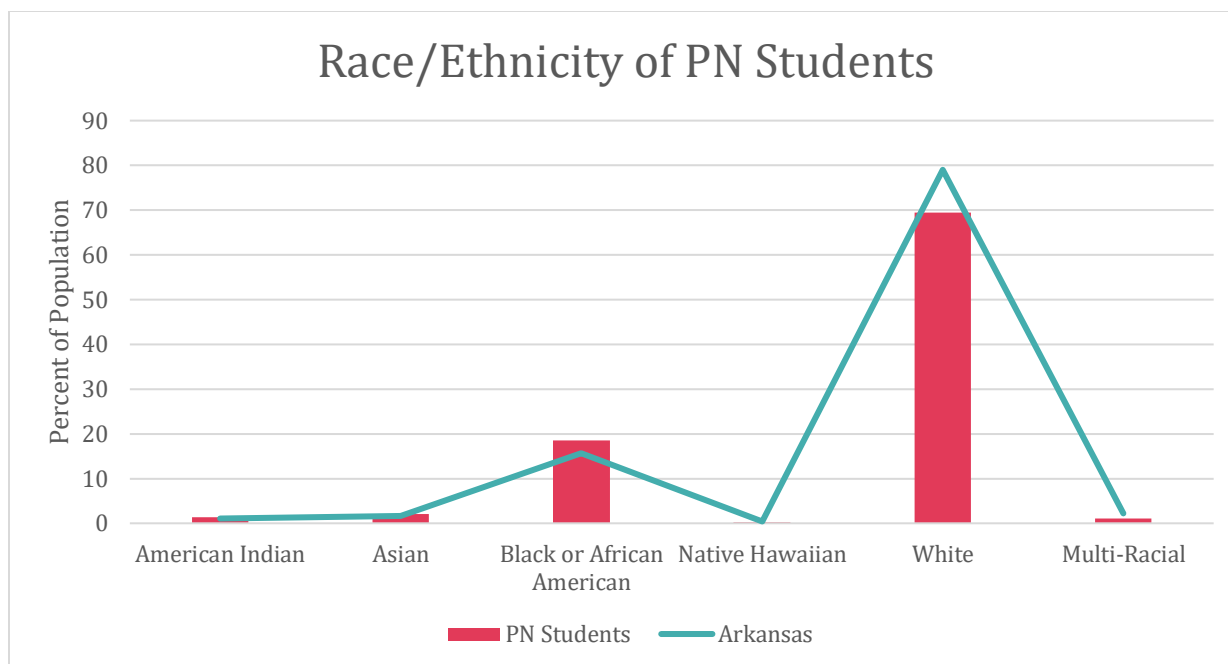
## Nursing Student Demographics

The average age of registered nursing students is 26. Among registered nursing students, the average age of BSN students is lower (23 years) than the average age of AD students (28.5 years). The average age of practical nursing students is relatively the same as registered nursing students, at 26.6 years (ASBN, 2020). Interest in preparing a nursing workforce that reflects the diversity of the population has grown. As the nation's race and ethnic composition changes, having a nursing workforce that reflects the nation's diversity has become a priority. The graph below shows the racial/ethnic diversity of nursing students in Arkansas. As depicted below, the overall RN student nurse demographics reflects an equally diverse, or slightly more diverse, future workforce when compared to the population demographics of the State of Arkansas (US Census, 2019). The AD student nurse population is the most diverse RN nursing student population. The PN student nurse population is relatively close to the AD nursing student population, reflecting a more diverse demographic than what is seen in citizens of Arkansas. Not surprisingly, the gender composition of the student nursing population does not come close to the 51% female and 49% male population composition of the State of Arkansas (US Census, 2019). However, the RN and PN student nurse population has a better representation of males (13.6% and 12.2%, respectively) than the Arkansas or the national nursing workforce (11% and 9% male, respectively) (ASBN, 2021; NCSBN, 2020).

**Figure 8**



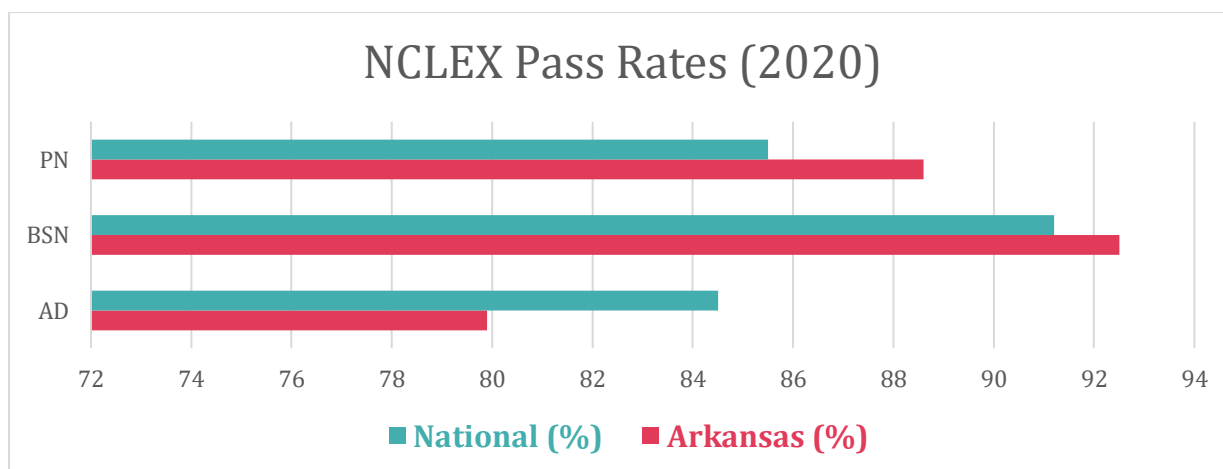
**Figure 9**



### NCLEX Results

In 2020, NCLEX passage rates for RN graduates of Arkansas nursing programs was below the national average. Graduates of BSN programs had the highest first-time NCLEX pass rates (92.5%), followed by graduates of PN programs (88.6%), while the lowest first-time NCLEX pass rates were among AD program graduates (79.9%) (ASBN, 2020).

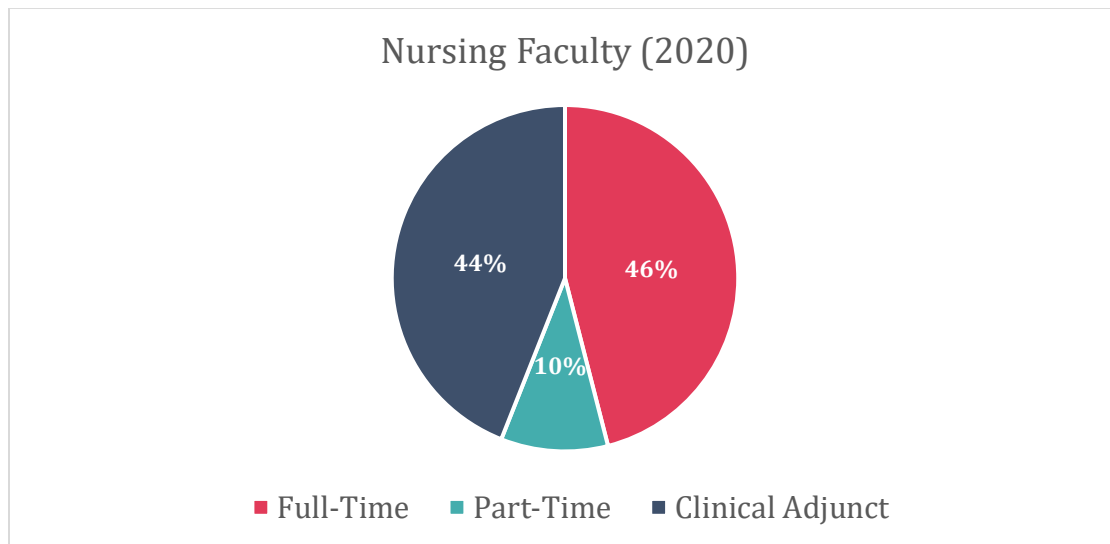
**Figure 10**



## Nursing Program Faculty

There are 910 nursing faculty employed in pre-licensure nursing programs in the state of Arkansas. These faculty fill full-time (n=416, 46%), clinical adjunct(n=402, 44%), and part-time positions (n=92, 10%). Of these 910 faculty, 678 (75%) teach in ADN and BSN programs and 232 (25%) teaching in PN programs (ASBN, 2020).

**Figure 11**

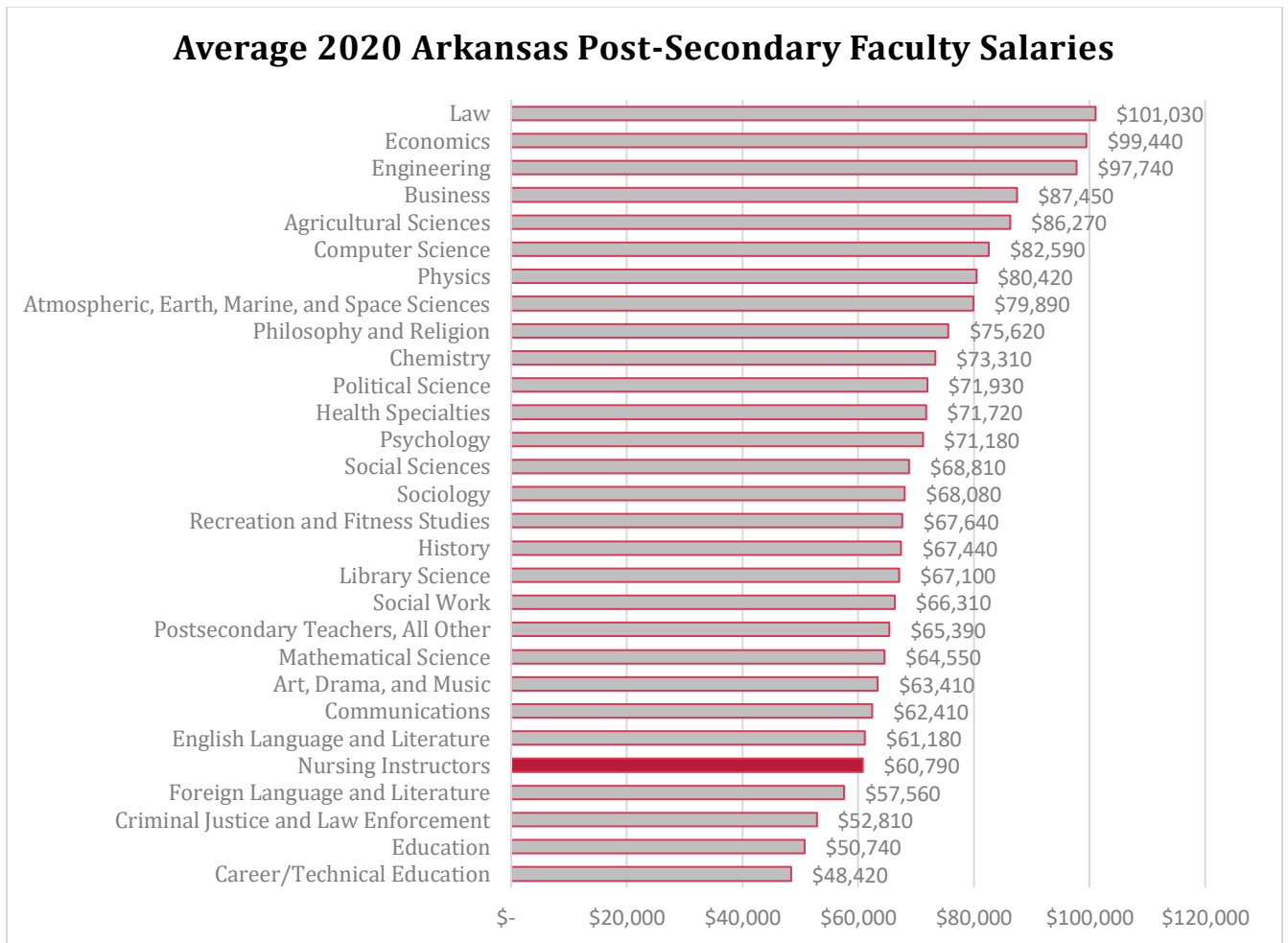


Roughly 75% of Deans and Directors reported that nurse faculty are in moderate to high demand in their areas of the state. There were 26 unfilled nursing faculty positions identified by 27 Deans and Directors in the 2021 Nurse Educator's Survey conducted by the ACN. The most common challenges to recruiting and retaining nurse faculty were salaries (43%), finding qualified faculty (20%), location of nursing program (10%), and workload of the job (8%). A notable concern of the Deans and Directors was the expected retirements of 27 nursing faculty during the next 2–3 years (ACN, 2020).

## Faculty Salaries

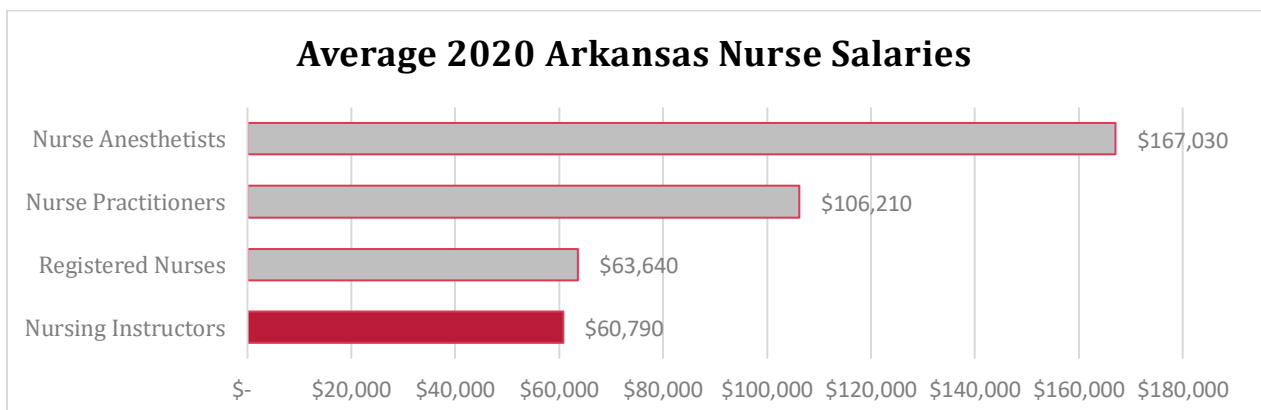
According to the Arkansas Department of Workforce Services Labor Market Information Section, the category of “Nursing Instructors and Teachers, Postsecondary” continues to have one of the lowest average salaries of post-secondary faculty. Out of the 29 types of faculty listed, nursing faculty salary ranks 25th, the fifth lowest among faculty positions. The average annual nursing faculty salary in Arkansas is \$60,790, with a median salary of \$60,300. Faculty salaries are not differentiated by degree type or contract length (United States Department of Labor, 2021).

**Figure 12**



While the comparison of nursing instructor average salaries to other postsecondary faculty is concerning, perhaps the most troubling comparison is nurses who work in the clinical setting. Nurse who work in clinical settings have a higher average salary than nursing faculty even though faculty typically have higher degrees. As noted in Figure 13, of the four most common nursing careers nursing faculty make the least, despite many having Master's or Doctoral degrees (ASBN, 2020).

**Figure 13**





<b>Table 1                      Arkansas Labor Market Salary Estimates</b>						
Occupation	Mean Salary	Wage at the 10th Percentile	Wage at the 25th Percentile	Median Wages	Wage at the 75th Percentile	Wage at the 90th Percentile
Nursing Faculty	\$60,790	\$23,600	\$50,170	\$60,300	\$72,040	\$82,040

According to the United States Department of Labor, the category of “Nursing Instructors and Teachers, Postsecondary” is a “Bright Outlook” occupation in the state of Arkansas, with a projected growth rate of 23% from 2018–2028 (Arkansas Division of Workforce Services, 2020–2030). Projections for Nursing Faculty positions show a projected increase of 170 positions (for a total of 900) by 2028. Both growth and replacement openings affect projected increase in employment (Arkansas Division of Workforce Services, 2020–2030).

<b>Table 2                      Arkansas Labor Market Projections 2018–2028</b>				
Occupation	Estimated 2018 Employment	Projected 2028 Employment	Percent Change	Total Annual Openings
Nursing Faculty	730	900	23%	80

### **Impact of COVID-19 on Nursing Education**

During Spring/Summer 2020, the COVID-19 pandemic impacted functionality and operations of 84% of Arkansas nursing programs (27 programs reported that COVID-19 caused a major disruption). Impacted programs were located in all regions of the state.. The specific aspects of nursing education that were affected by COVID-19 included didactic education (95% of programs), clinical experiences with patients in clinical sites (98% of programs), simulation labs (77% of programs), and skills labs (75% of programs). Functionality and operations in nursing programs seemed to slightly improve in the Fall 2020 semester; however, 76.8% of programs reported continued disruptions (NCSBN, 2021).

Administrative decisions regarding the suspension of in-person courses were made by the university, college, or educational organizational leadership at 98% of Arkansas nursing programs. This speaks to the rapid transition that nursing programs were required to make to didactic and clinical education delivery with little time for planning or autonomy (NCSBN, 2021).

### ***Suspension/Cancellation of Didactic Courses***

In Spring/Summer 2020, 98% of programs were required to make a change to the didactic delivery of nursing courses, of these programs, 82% of programs transitioned to fully online education, while the remaining 16% of programs transitioned to partial online education. Some additional methods used during this time for didactic educational delivery included the need for flexibility as the pandemic progressed, bridging the didactic delivery gap with increased skills labs/virtual simulation, usage of personal protective equipment and physical shields/barriers in the classroom/skills lab, and non-proctored, short answer exams. The majority of programs reported the usage of virtual simulation, as well as both synchronous and asynchronous online lectures and learning activities, to facilitate learning during the social-distancing requirements forced by the pandemic. Streaming online synchronous classes was an issue for some students, especially those living in rural areas (NCSBN, 2021).

In Fall 2020, 50% of nursing programs continued utilizing partial online education due to social distancing restrictions. Smaller class sizes via hybrid education and splitting students into groups in different lecture rooms were some of the strategies used to meet institutional room-capacity guidelines. The majority of lectures were also recorded for students who were quarantined due to exposure or a positive COVID-19 test. The Spring/Summer 2020 semester was focused on transition to online education, while Fall 2020 was focused on maintaining online education, but also institutional room-capacity guidelines as students slowly returned to campus. (NCSBN, 2021).

### ***Suspension/Cancellation of Clinical Sites***

Of the 56 nursing programs responding to the survey, 98.2% of programs reported some type of suspension or cancellation of in-person clinical experiences due to COVID-19 in Spring/Summer 2020. Additionally, 60.7% of programs reported that all of their clinical sites were unavailable for student placements at the onset of COVID-19. The types of clinical sites impacted were long-term care facilities, community sites, hospitals, and clinics based on state mandates and CDC guidelines (NCSBN, 2021).

The majority of programs reported that their students were not in contact with patients diagnosed with COVID-19 (a single program reported direct contact during clinical). However, the majority of programs were required to provide their own PPE for students while in clinical sites. In response to the lack of clinical experiences, 62.5% of programs decreased the number of clinical hours needed for graduation, while 42.9% of programs utilized in-person and hybrid simulation for clinical hour replacements. However, 88% of programs reported no change to grading criteria during the pandemic (NCSBN, 2021).

In Fall 2020, the majority of nursing programs reported a cancellation rate of at least 25% of in-person clinical experiences with patients. These data compared to Spring/Summer 2020 shows an improvement in access to clinical sites, as more was learned about COVID-19 and nursing programs remained flexible with clinical sites. Many clinical sites allowed

students back for Fall 2020. However, access to long-term care facilities remained limited due to state mandates and Centers for Disease Control (CDC) guidelines (NCSBN, 2021).

### ***Student/Faculty Attrition***

Student attrition was reported in 38% (n=21) of nursing programs specifically due to the pandemic. In addition, 13% (n=7) of the responding programs reported faculty attrition related to the pandemic. Additionally, some schools reported low faculty morale with increased faculty workload during the pandemic, partially due to the rapid transition to the online learning environment (NCSBN, 2021).

For Fall 2020, 32% of nursing programs reported student attrition with an average reported attrition rate of 7% due to COVID-19. Faculty attrition was reported in 9% of nursing programs with a faculty attrition rate of 5% specifically related to COVID-19. As time progressed and students/faculty adapted to the circumstances, the attrition for both students and faculty improved during the Fall 2020 semester (NCSBN, 2021).

### ***Academic Operations***

Regarding the quality of education in Spring/Summer 2020, 57.1% of programs rated a lower quality in education due to the pandemic, while 41% of programs reported the same quality compared to pre-pandemic education. There were some reported issues with test security and accessing at-home exam-proctoring software (NCSBN, 2021).

In Fall 2020, fewer nursing programs (28.5%) rated the quality of education lower during COVID-19 as compared to pre-pandemic education, while 58.9% of programs rated their programs as providing the same quality as before the pandemic. The data demonstrates an improvement in faculty perceptions of the quality of education as the pandemic progressed, suggesting that some faculty were able to adapt to necessary changes in didactic and clinical education (NCSBN, 2021).

## NURSING SUPPLY

Nurses are the largest group of practitioners in the healthcare workforce. Nurses practice with a wide range of credentials and in a variety of work settings. For the purposes of this report, nursing supply is measured by the number of Arkansas residents holding an active license. Data is reported by license type: Certified Nurse Practitioner (CNP), Certified Registered Nurse Anesthetist (CRNA), Clinical Nurse Specialist (CNS), Certified Nurse Midwife (CNM), Registered Nurse (RN), and Licensed Practical Nurse (LPN).

Table 3 shows the breakdown of the nursing workforce in Arkansas by license type and residency.

**Table 3**

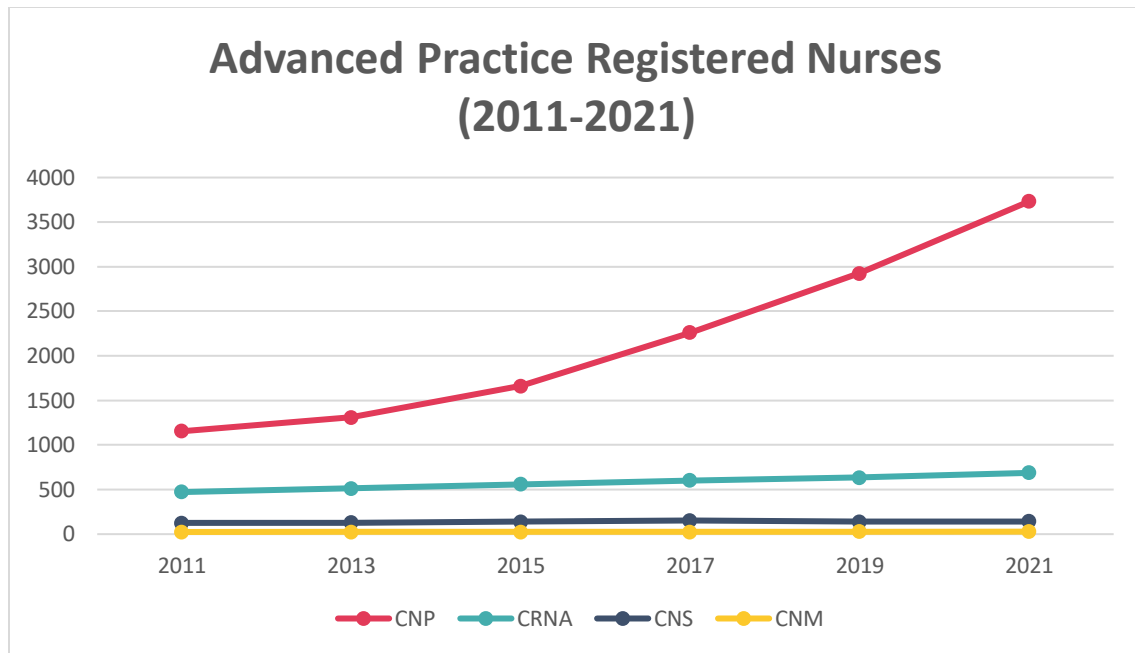
Nurses Licensed to Practice in Arkansas by License Type 2021			
License Type	Arkansas Residents	Nonresidents	Total
RNs	42,251	2,244	44,495
LPNs	14,185	207	14,392
Advanced Practice Registered Nurses (APRNs):			
CNPs	3,731	849	4,580
CRNAs	687	167	854
CNSs	142	12	154
CNMs	28	2	30

During the data collection period of July 1, 2019 to June 30, 2021, a total of 4,586 newly licensed nurses were added to the workforce through endorsement of their license from another state or initial licensure as a new graduate. However, even when one accounts for the addition of the newly licensed nurses, there was a net loss of 3,546 actively licensed nurses during the reporting period. Each practitioner's individual reasons for not maintaining an active nursing license are unknown, but this choice is often due to factors such as relocation, retirement, or emotional, personal, and physical issues.

### Advanced Practice Registered Nurses (APRNs)

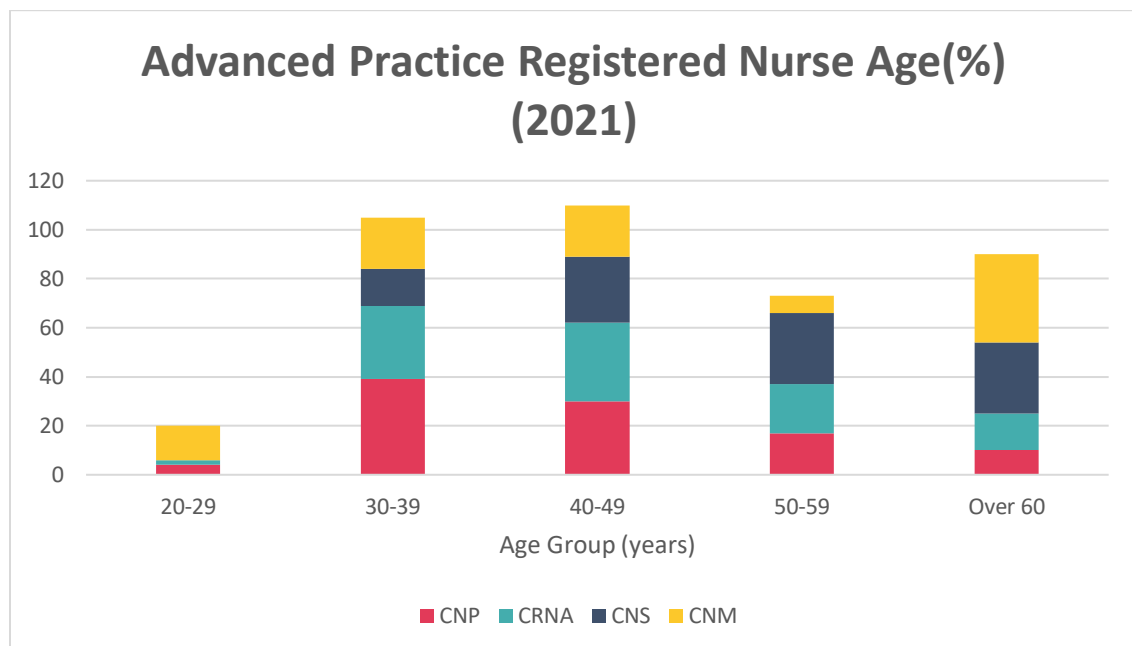
Over the past decade, there has been a greater need for APRNs, and the need is projected to continue to grow by 45% from 2020 to 2030 (United States Department of Labor, Occupational Employment and Wage Statistics, 2021). The number of APRNs licensed in Arkansas reflects this trend for Certified Nurse Practitioners (CNPs). Over the past ten (10) years, there has been a large increase (223.3%) in the number of CNPs and relatively small changes in the number of Clinical Nurse Specialists (CNS), Certified Registered Nurse Anesthetists (CRNA), and Certified Nurse Midwives (CNM).

**Figure 14**



The age of APRNs in Arkansas is highly variable by advanced practice specialty. In 2021, CNPs were the youngest of all APRNs, with 43% under the age of 40, an increase from 35% in 2011. The percent of CRNAs under the age of 40 has remained unchanged over the past ten years. However, the percent of CRNAs over the age of 60 years has decreased from 18% in 2011 to 15% in 2021. CNSs and CNMs are the oldest of the APRNs with 58% and 43%, respectively, over the age of 50 in 2021.

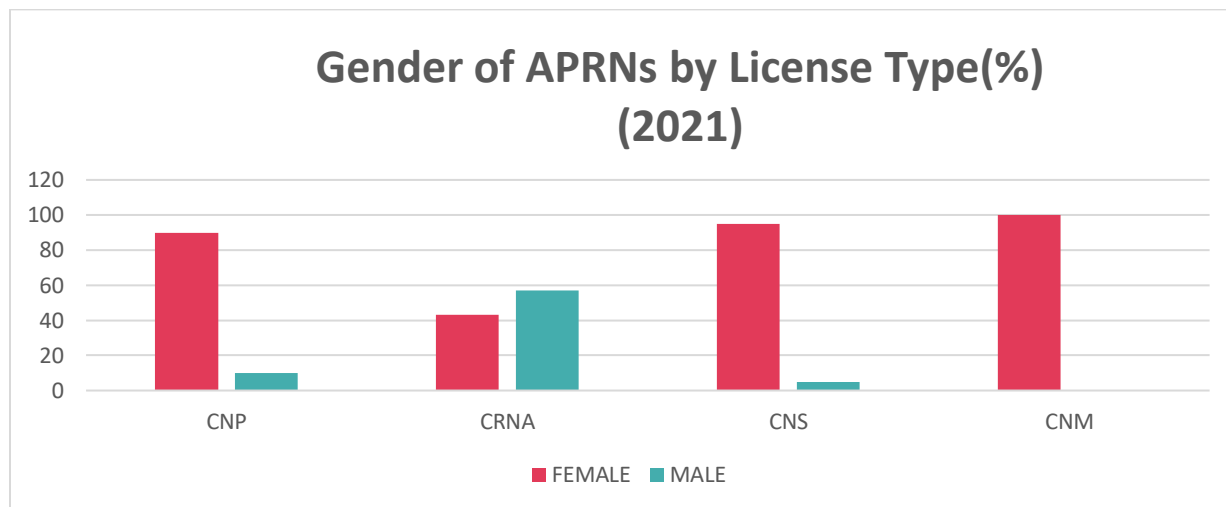
**Figure 15**



## GENDER

The gender distribution for the U.S. population is 49.2% male and 50.8% female (US Census Bureau, 2020), which is comparable to the Arkansas gender distribution of 49.1% male and 50.9% female. Women continue to constitute the majority of the Arkansas nursing workforce. The majority of APRNs are women, except for CRNAs, of whom 57% of licensees are male (Figure 16).

**Figure 16**

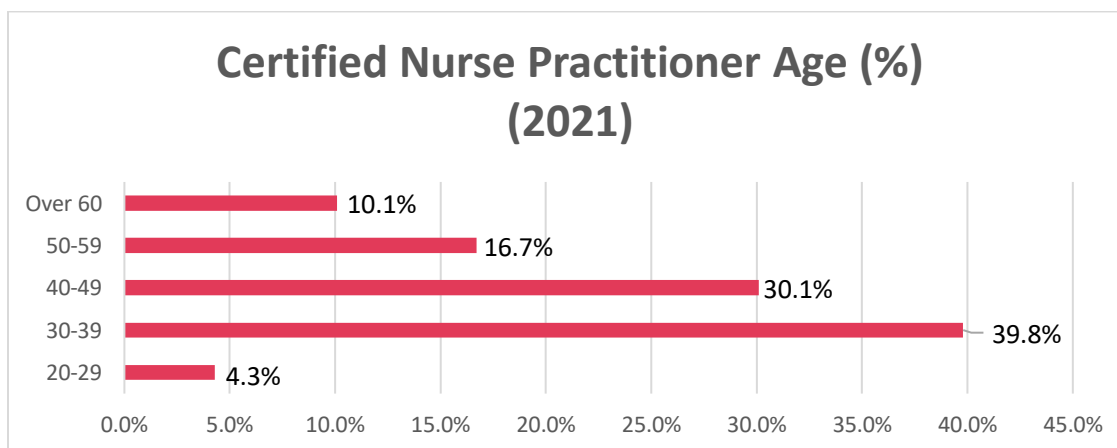


## Certified Nurse Practitioner (CNP)

### Age

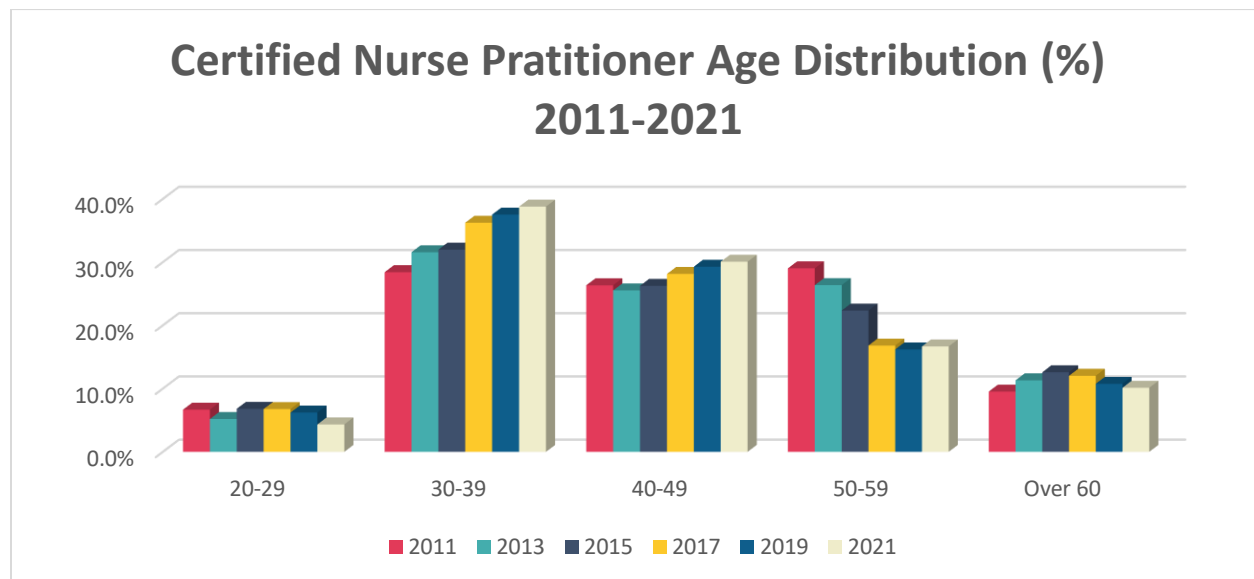
The majority of CNPs in the Arkansas workforce are between the age of 30–49 years (Figure 17). The age group of 20–29 years will likely remain a small percentage of the number of licensees, due to the time required to obtain the educational preparation required for advanced practice licensure.

**Figure 17**



Over the past ten years, Arkansas has seen a rapid growth in the number of licensed CNPs (233.3%). Figure 18 shows that the growth has occurred in the population under 40 years old. During the past ten years, the number of CNPs who are 60 years or older has remained relatively unchanged (0.6% increase).

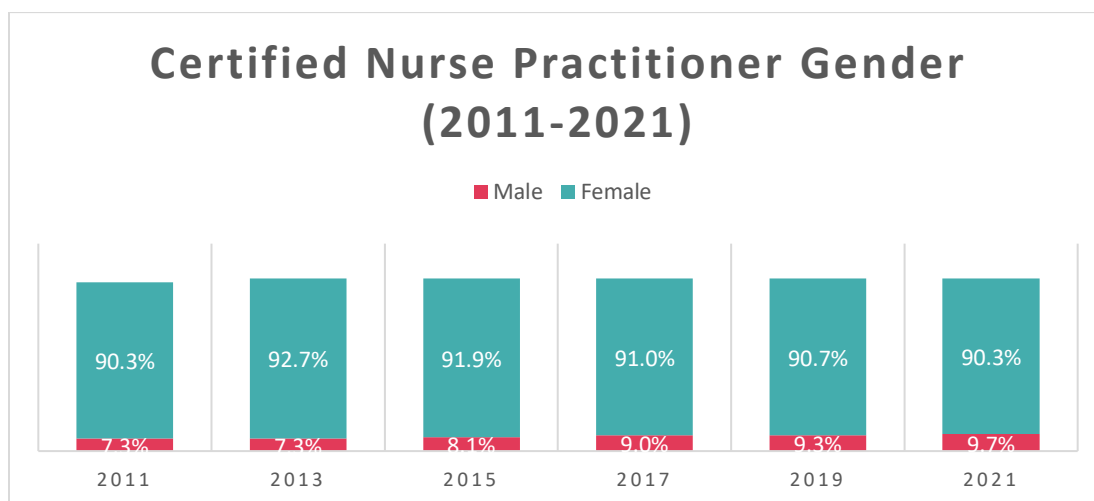
**Figure 18**



## Gender

Women continue to constitute the majority of the Arkansas nursing workforce. According to Zippia.com, the national composition of the CNP workforce in 2021 was 82.9% female and 13.8% male. In Arkansas, the CNP workforce is 90.3% female and 9.7% male (ASBN, 2021). Since 2011, there has been a 2.4% increase in the number of male CNPs in the Arkansas workforce.

**Figure 19**



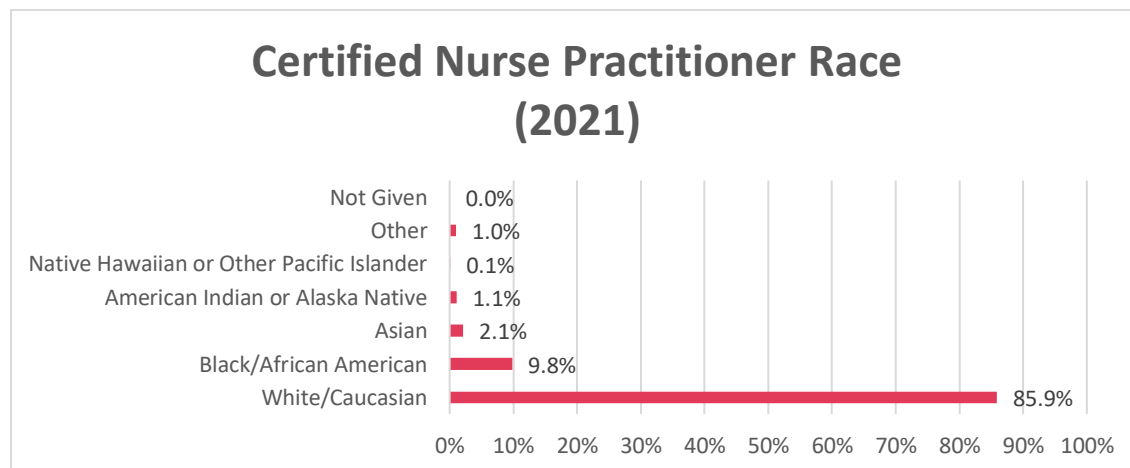
## Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 4 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed CNPs in Arkansas.

<b>Table 4</b>	<b>American Indian/ Alaska Native</b>	<b>Asian</b>	<b>Black/ African American</b>	<b>Native Hawaiian or other Pacific Islander</b>	<b>Other</b>	<b>White/ Caucasian</b>
<b>U.S. Population</b>	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
<b>AR Population</b>	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
<b>AR CNPs</b>	1.1%	2.1%	9.8%	0.1%	1%	85.9%

The majority (86%) of CNPs in the Arkansas workforce has declared White/Caucasian as their primary race; Black/African American is the second largest racial group. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

**Figure 20**

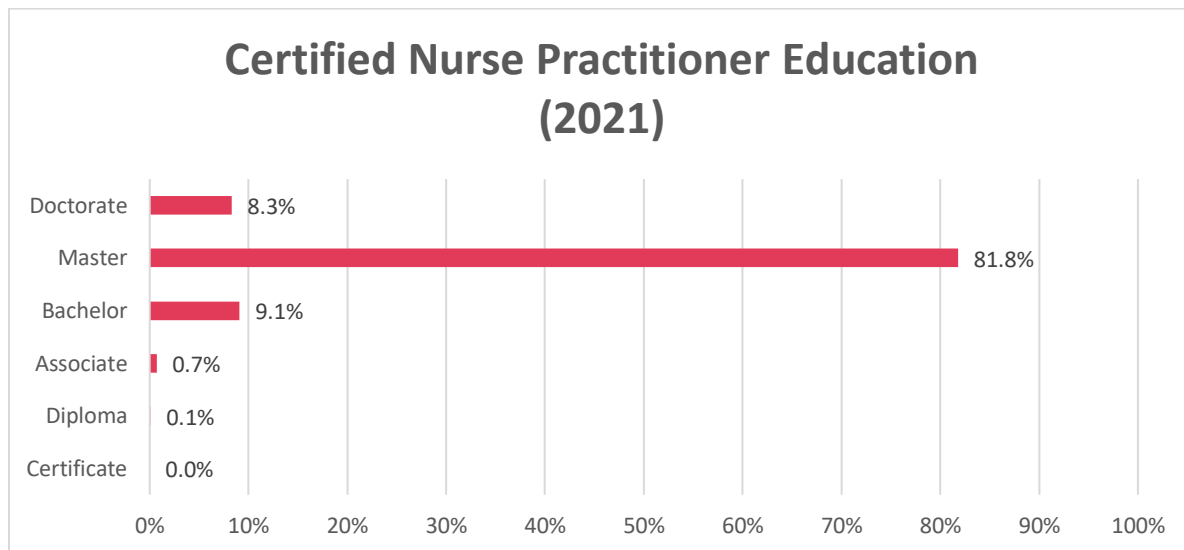


## Education

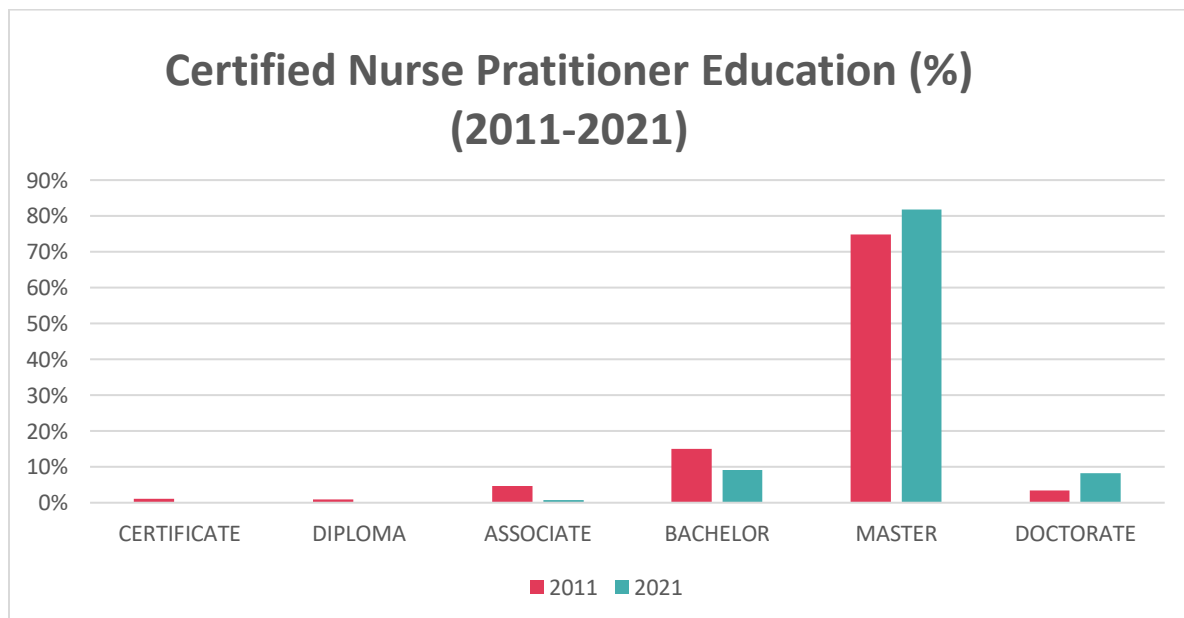
In 2021, 90.1% of all CNPs reported their highest level of education was a Master's degree or higher (Figure 21). The percentage of CNPs reporting their highest level of education as a Master's degree increased from 78.2% in 2011 to 81.8% in 2021. During this same period, the percentage of CNPs reporting a doctorate degree as their highest level of education increased from 3.5% in 2011 to 4.8% in 2021 (Figure 22).



**Figure 21**



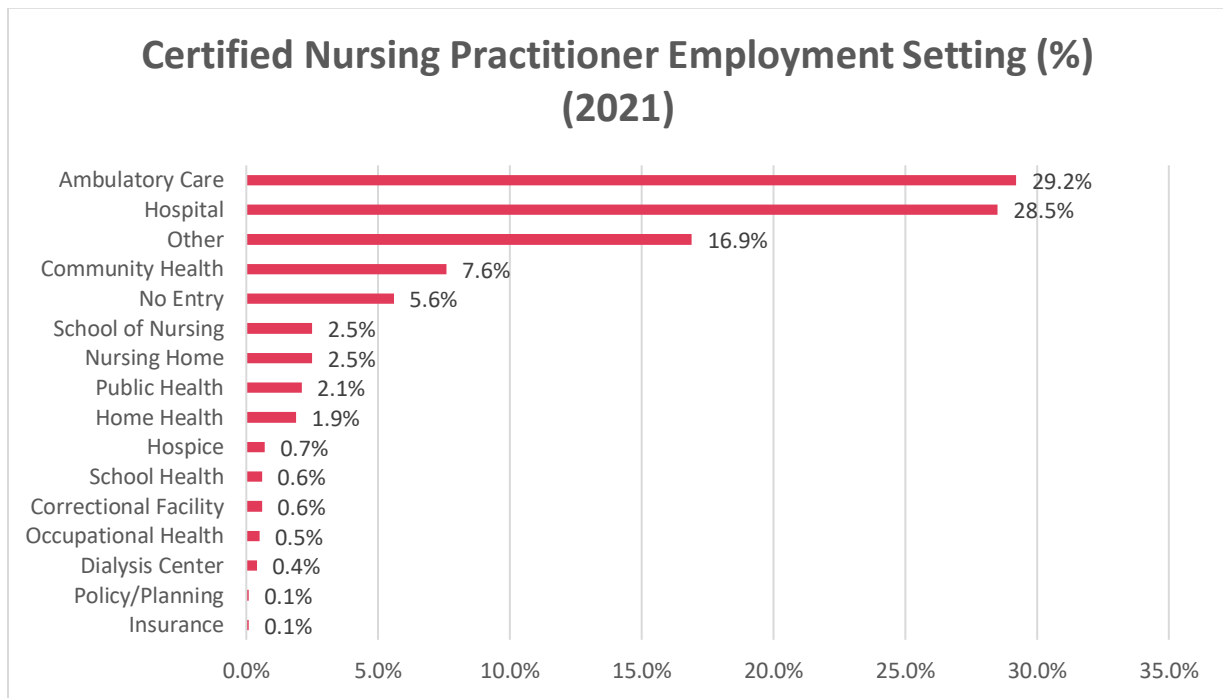
**Figure 22**



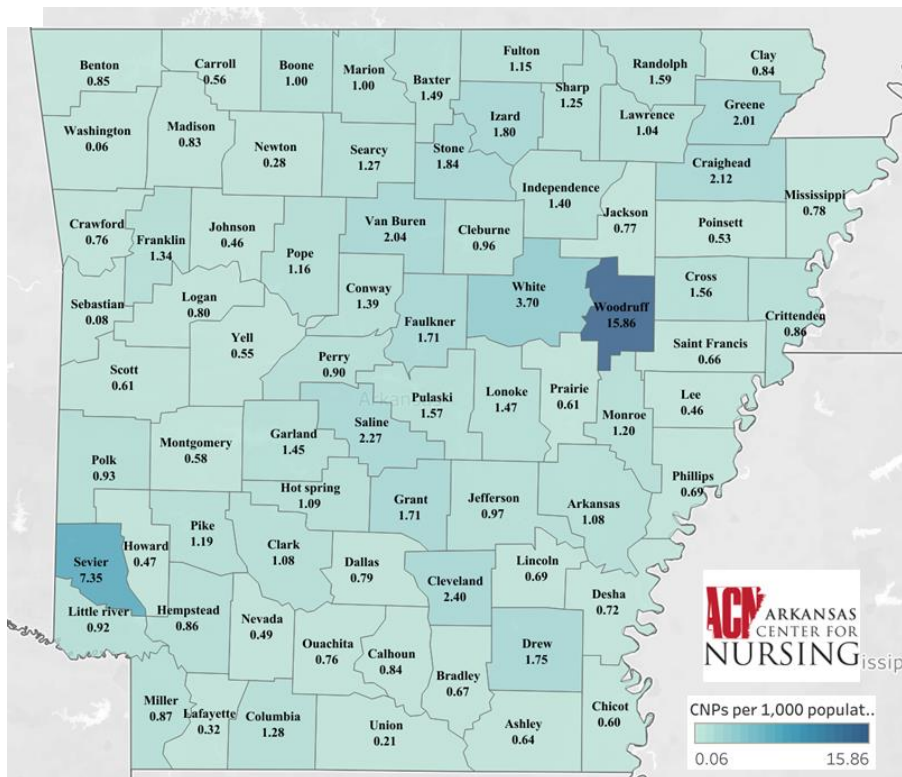
## Employment

The practice settings used for data collection were grouped into broad categories. As shown in Figure 23, the majority of CNPs were primarily employed in ambulatory care (29.2%) and hospitals (28.5%).

**Figure 23**



**Figure 24**



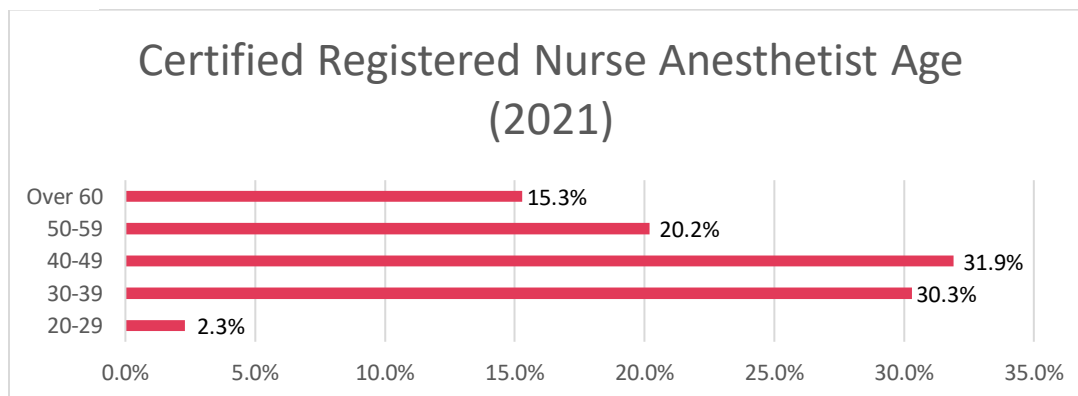
Nationally there are 0.64 CNP per 1,000 people, and in Arkansas there are 1.2 CNPs per 1,000 people (US Census Bureau, 2020).

## Certified Registered Nurse Anesthetist (CRNA)

### Age

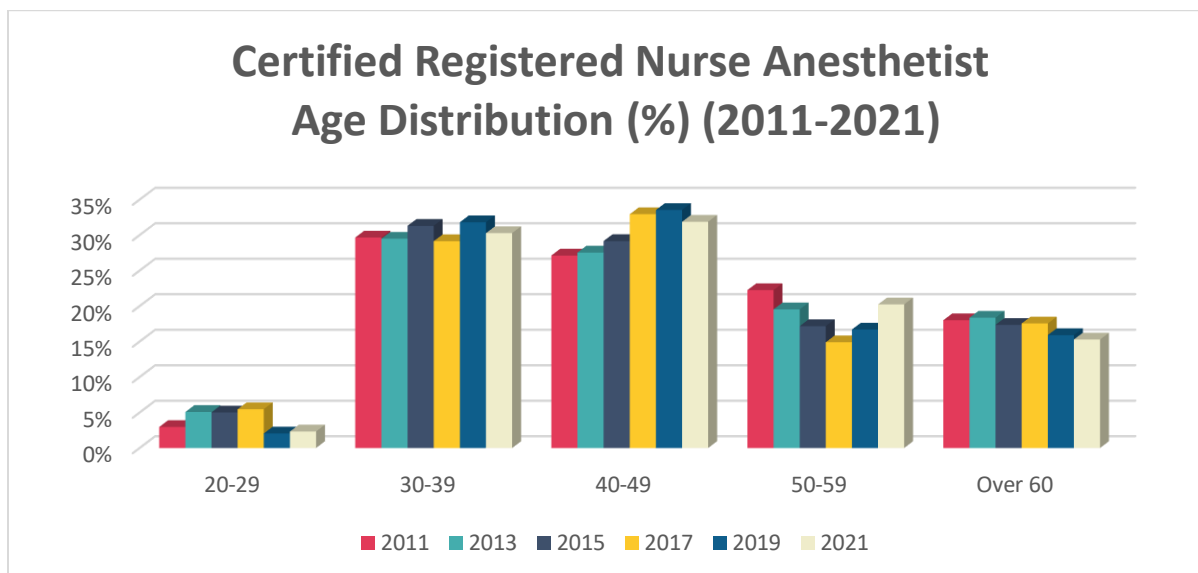
The majority of CRNAs in the Arkansas workforce are between the ages of 30–49 years (Figure 25). The age group of 20–29 years will likely remain a small percentage of the number of licensees, due to the time required to obtain the educational preparation required for advanced practice licensure.

**Figure 25**



As noted in Figure 26, the percentage of CRNAs under the age of 40 has remained unchanged over the past ten years, while the percentage of CRNAs over the age of 60 has decreased 2.7% since 2011.

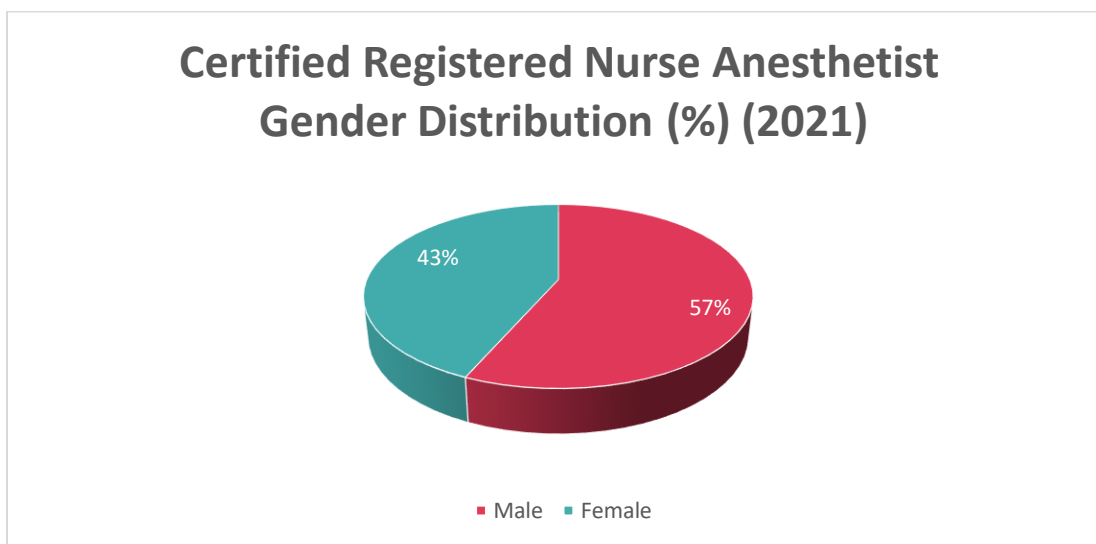
**Figure 26**



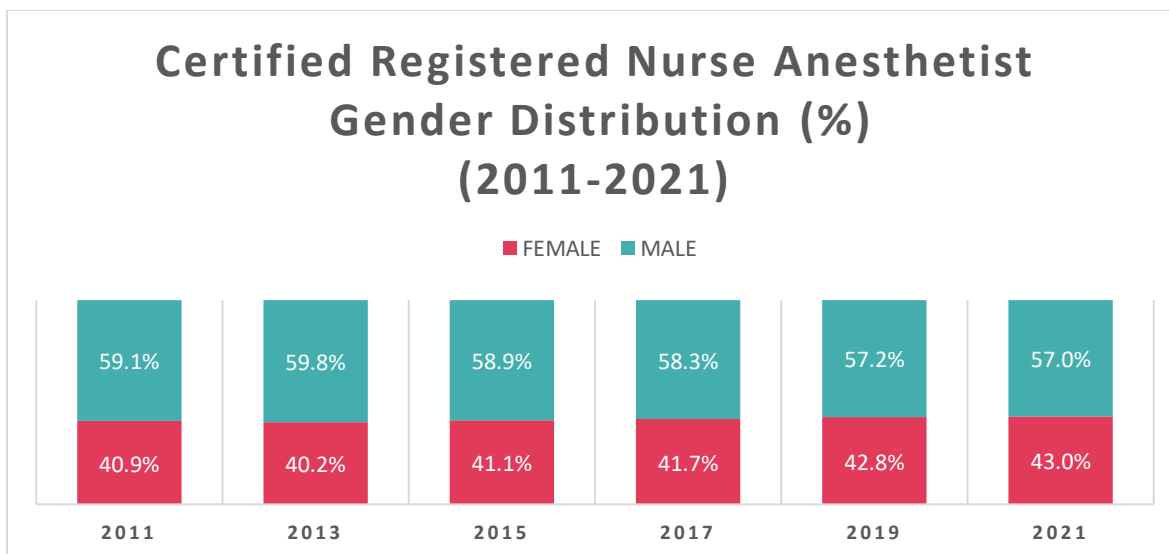
## Gender

While collectively women constitute the majority of the Arkansas nursing workforce, CRNA licenses are held by more men than women in Arkansas. As shown in Figure 27, men make up 57% of the CRNA workforce in Arkansas, while women make up 43% of the CRNA workforce. According to Zippia.com (2021), this does not reflect the national CRNA workforce, which is 60% female and 36% male. In Arkansas, there has been little change in the gender distribution of CRNAs over the past ten years (Figure 28).

**Figure 27**



**Figure 28**



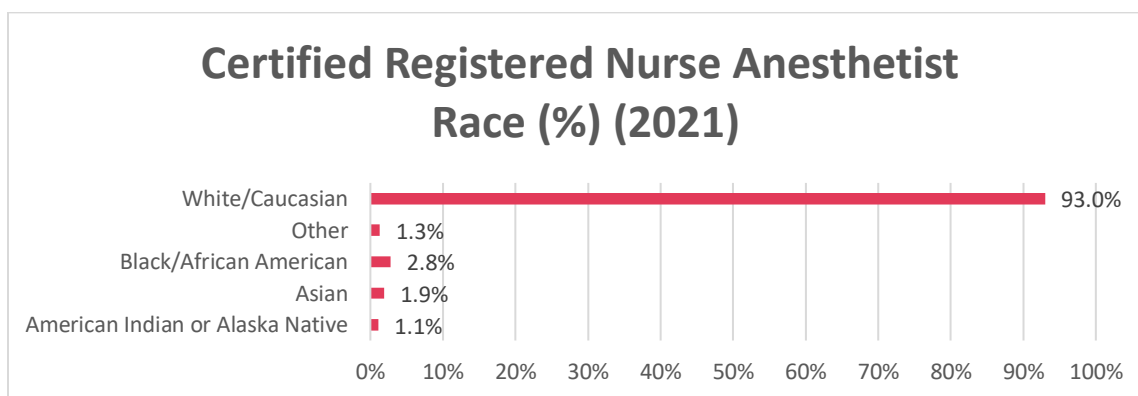
## Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 5 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed CRNAs.

<b>Table 5</b>	<b>American Indian/ Alaska Native</b>	<b>Asian</b>	<b>Black/ African American</b>	<b>Native Hawaiian or other Pacific Islander</b>	<b>Other</b>	<b>White/ Caucasian</b>
<b>U.S. Population</b>	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
<b>AR Population</b>	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
<b>AR CRNAs</b>	1.1%	1.9%	2.8%	0%	1.3%	93%

The majority (93%) of CRNAs in the Arkansas workforce have declared White/Caucasian as their primary race, whereas minorities comprise 7% of the CRNA workforce. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

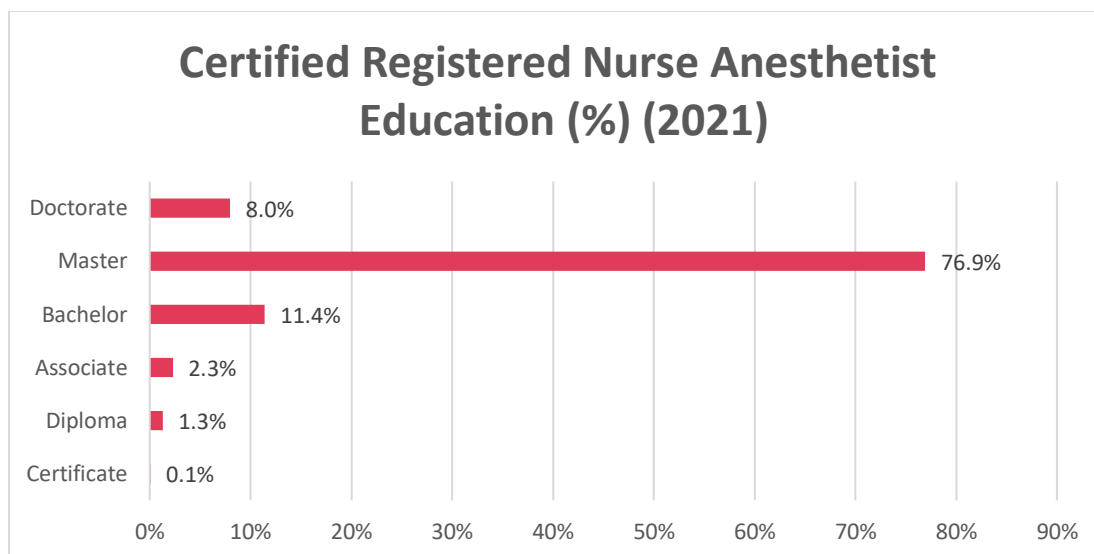
**Figure 29**



## Education

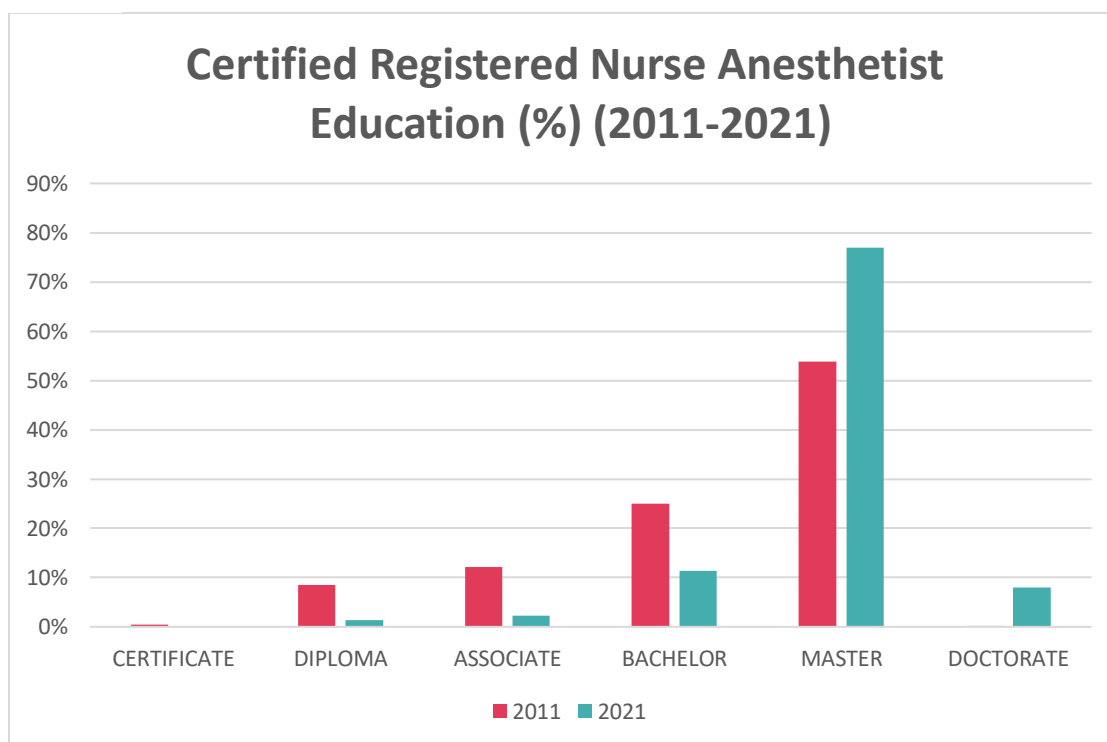
In 2021, 84.9% of all CRNAs reported their highest level of education was a Master's degree or higher.

**Figure 30**



As noted in Figure 31, the percentage of CRNAs with a Master's degree or higher has increased over the past ten years, from 54% in 2011 to 84.9%. In 2021, 7.8% of CRNAs reported the doctorate degree as their highest degree.

**Figure 31**



## Employment

In 2021, the majority (76.5%) of CRNAs reported their primary employer was a hospital.

Figure 32

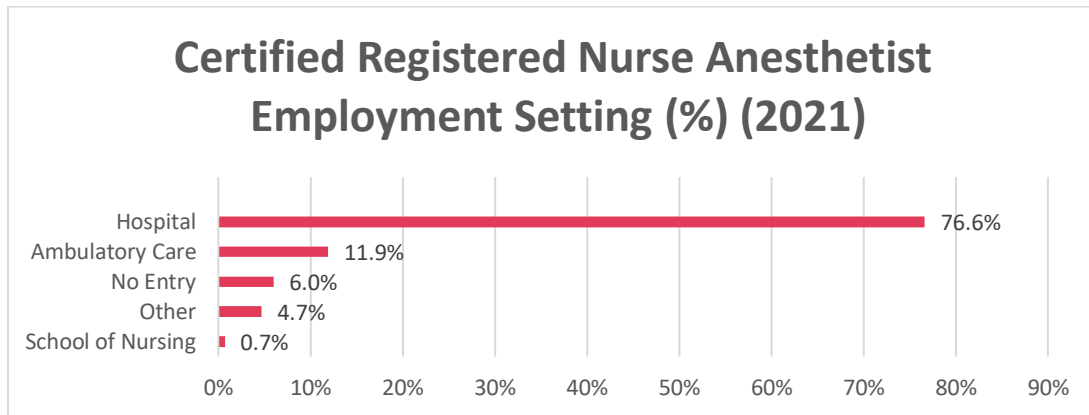
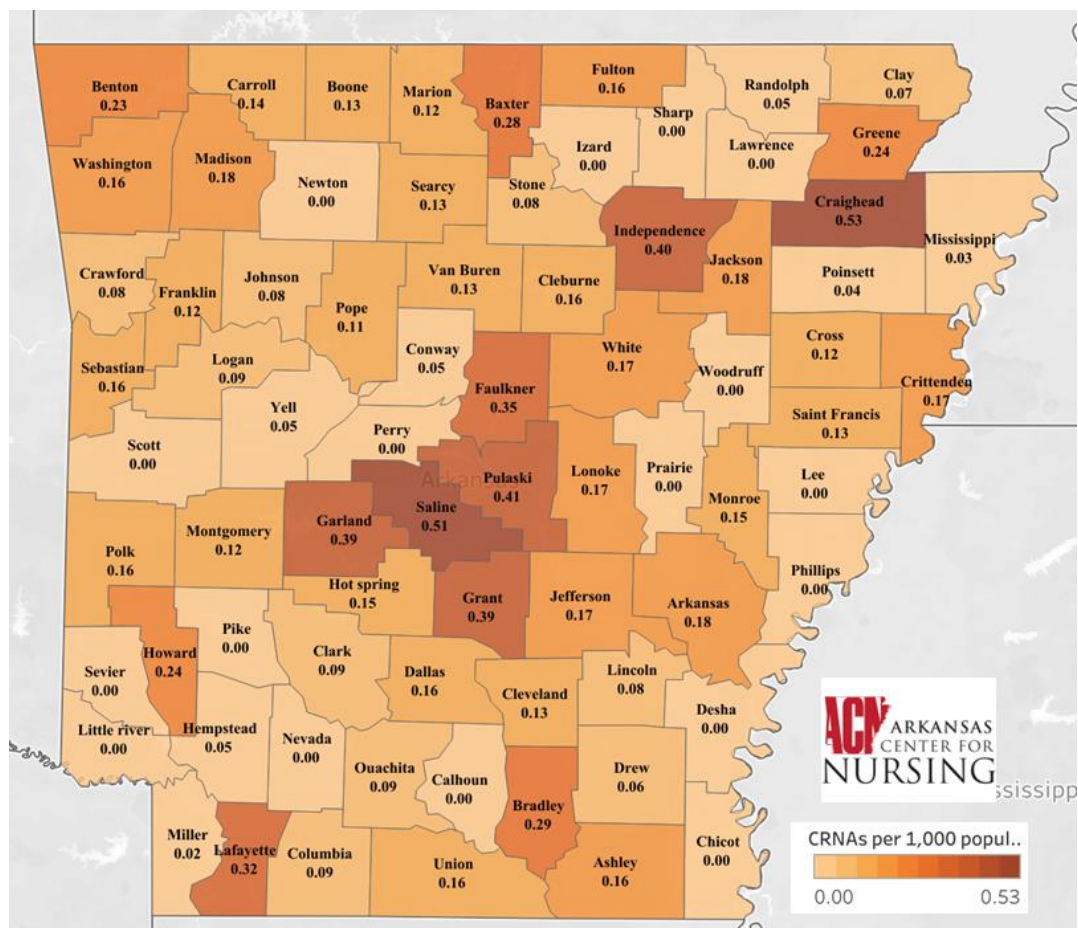


Figure 33



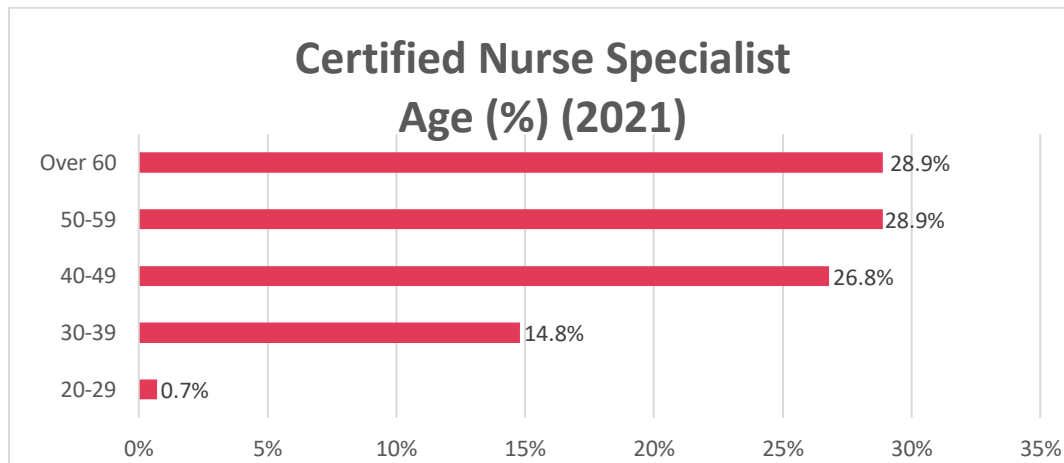
Nationally, there are 0.13 CRNAs per 1,000 people; in Arkansas there are 1.7 CRNAs per 1,000 people. (US Census Bureau, 2020)

## Clinical Nurse Specialist

### AGE

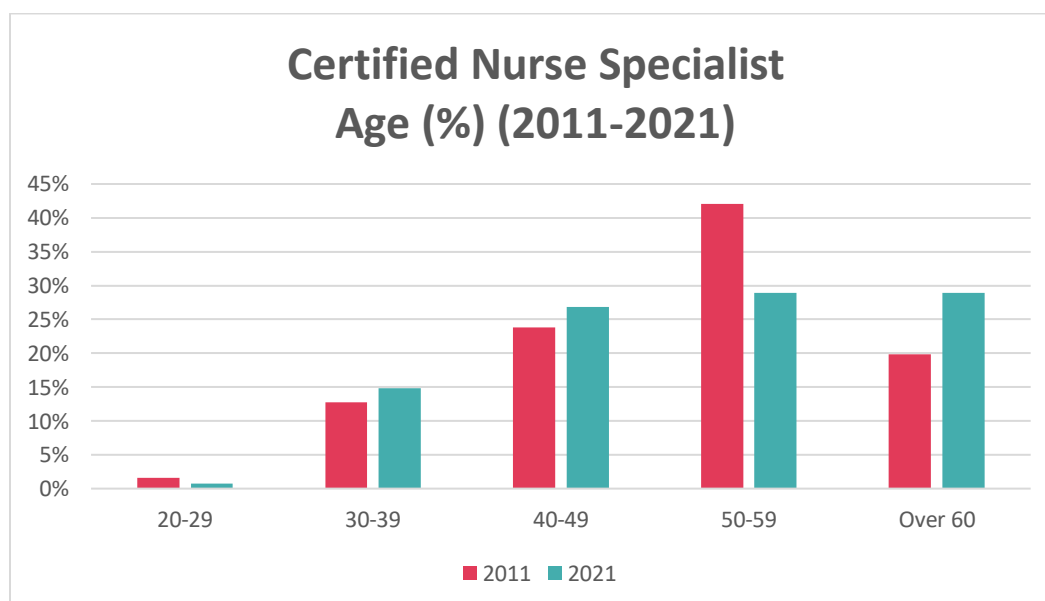
The majority, 58%, of CNSs in the Arkansas workforce are 50 years or older (Figure 34). The age group of 20–29 years will likely remain a small percentage of the number of licensees, due to the time required to obtain the educational level required for advanced practice licensure.

**Figure 34**



As noted in Figure 35, the percentage of CNSs over the age of 60 has increased from 19.9% in 2011 to 28.9% in 2021, and the number of CNSs under the age of 40 has increased only slightly, from 14.3% in 2011 to 15.5% in 2021.

**Figure 35**

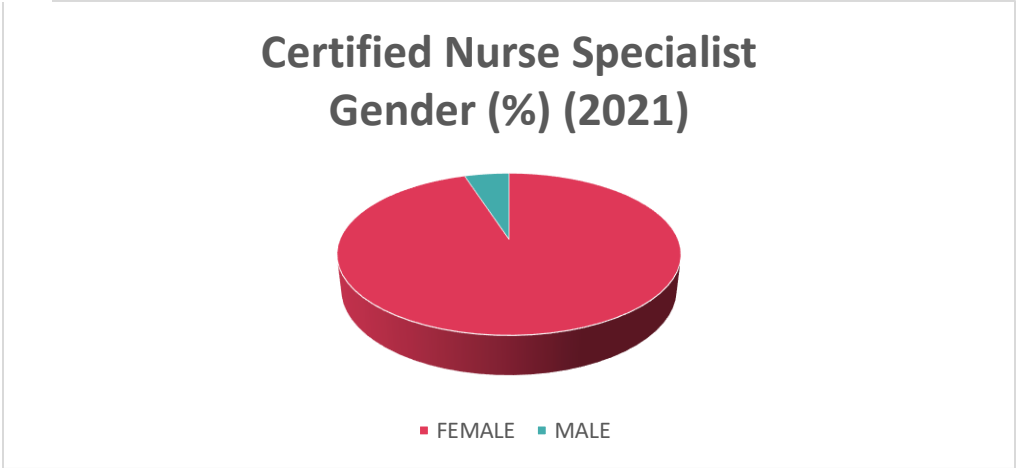




Gender

The majority of the CNS workforce in Arkansas (95%) is female. This is considerably higher than the national CNS workforce, which is 81.6% female and 13% male (Zippia, 2021).

Figure 36



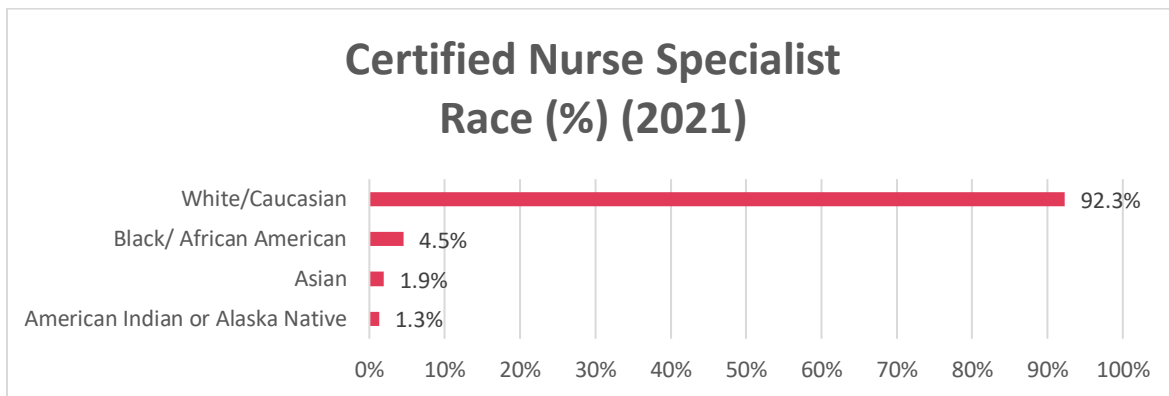
Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 6 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed CNSs.

Table 6	American Indian/ Alaska Native	Asian	Black/ African American	Native Hawaiian or other Pacific Islander	Other	White/ Caucasian
U.S. Population	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
AR Population	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
AR CNSs	1.3%	1.9%	4.5%	0%	0%	92.3%

In 2021, the majority of CNSs reported their primary race as White/Caucasian, with Black/African American as the second most reported race. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

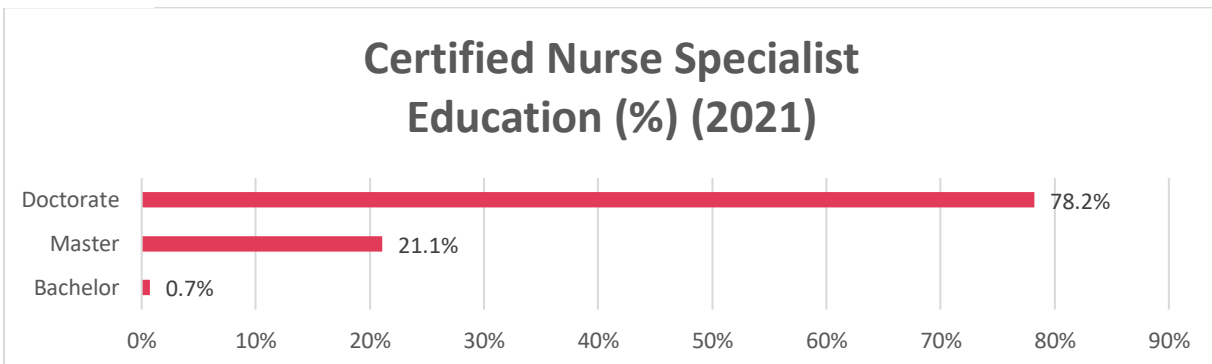
**Figure 37**



### Education

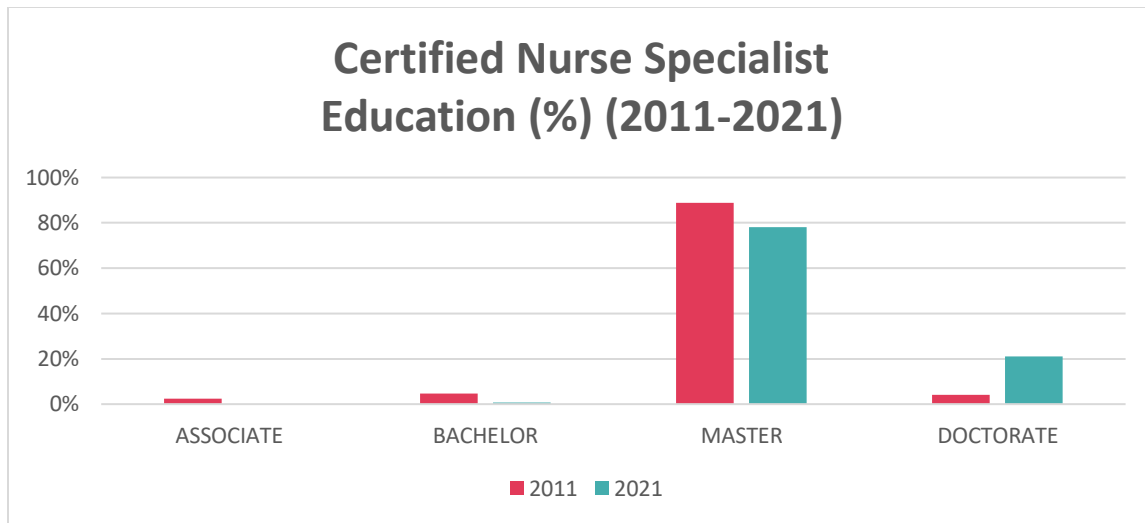
The majority of CNSs reported the highest level of education as a master's degree or higher.

**Figure 38**



There has been an increase in the percentage of CNSs reporting their highest level of education as a Master's degree or higher, from 92.1% in 2011 to 99.3% in 2021. The percentage of CNSs who reported the doctorate degree as their highest level of education has increased from 4% in 2011 to 21.1% in 2021 (Figure 39).

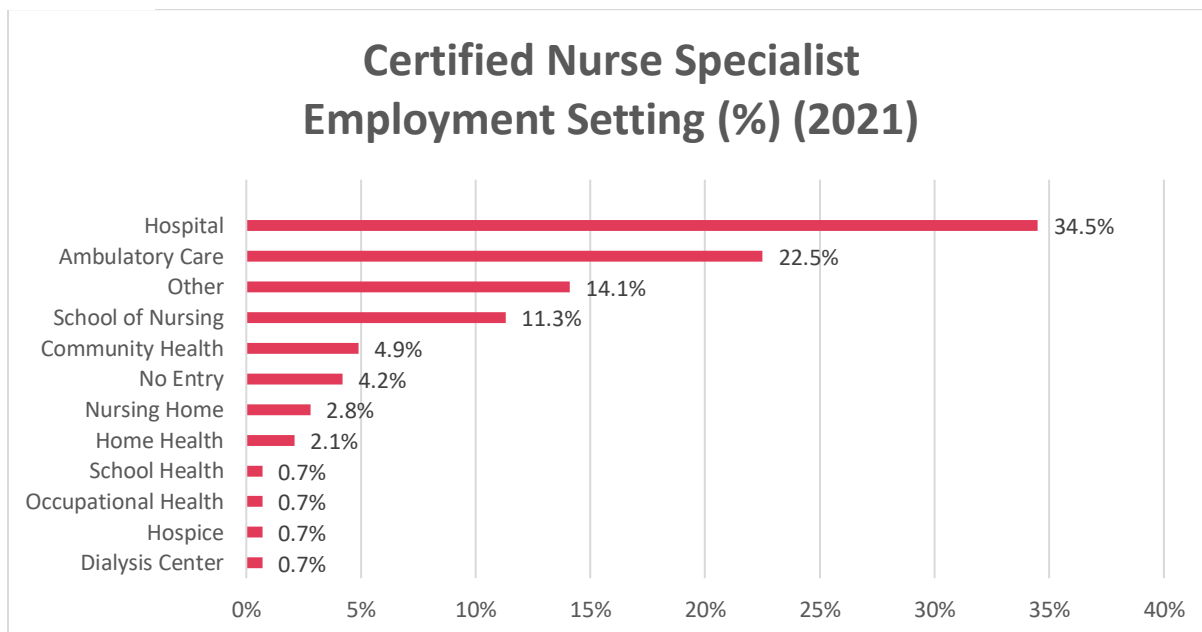
**Figure 39**



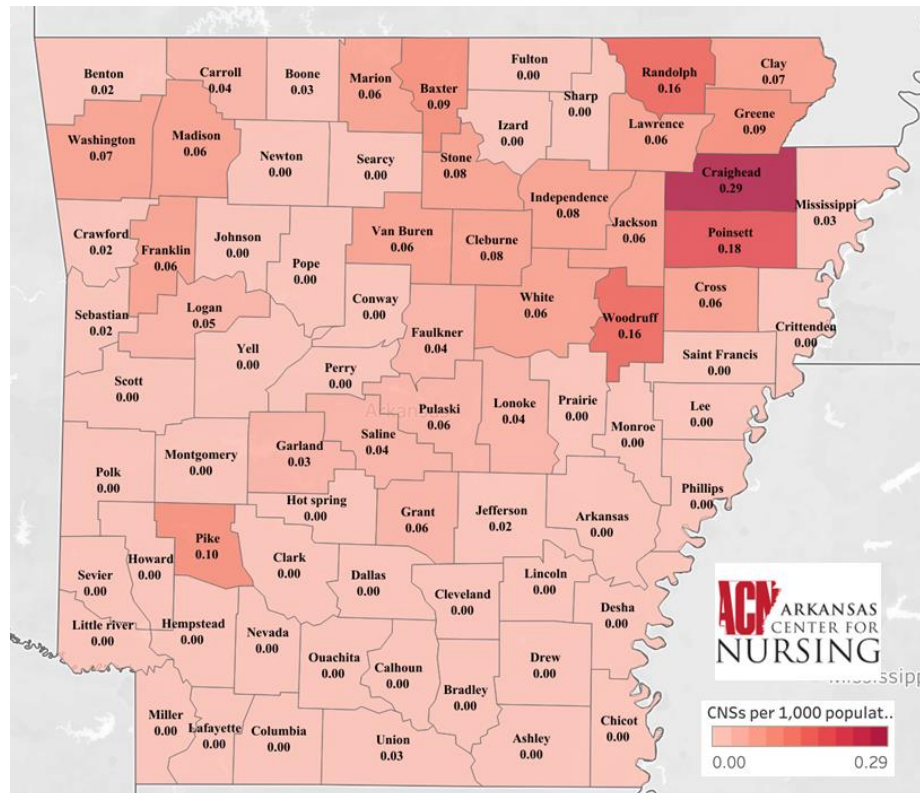
## Employment

In 2021, the majority of CNSs reported their primary employer as a hospital setting (34.5%), closely followed by ambulatory care at 22.5% (Figure 40).

**Figure 40**



**Figure 41**



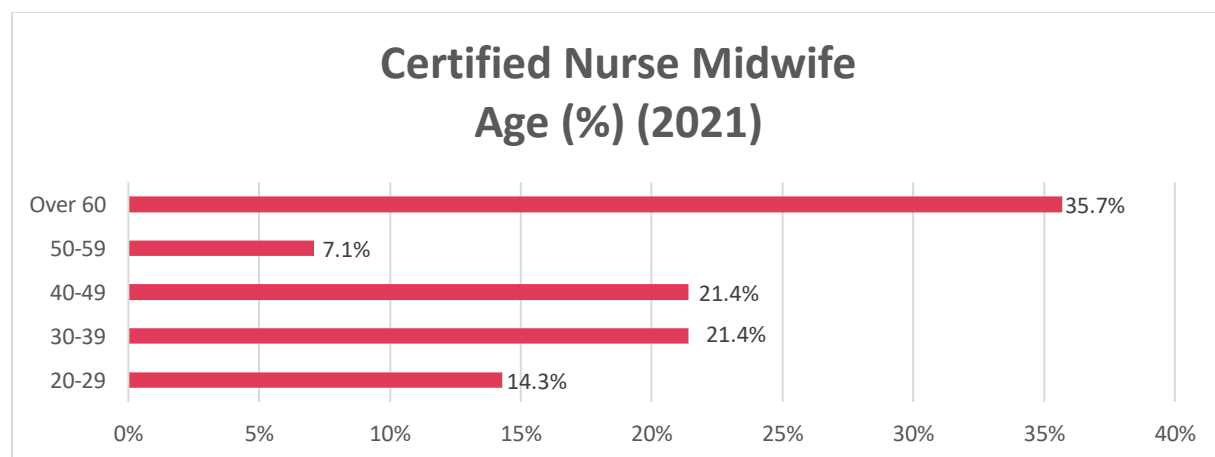
Nationally there are 0.22 CNSs per 1,000 people, and in Arkansas there are 0.35 CNSs per 1,000 people (US Census Bureau, 2020).

## Certified Nurse Midwife (CNM)

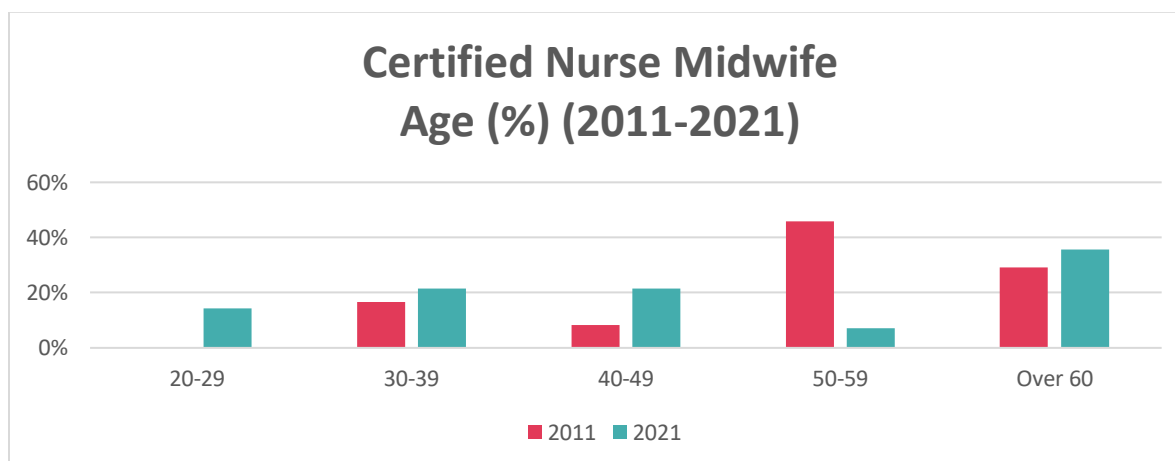
### Age

Approximately 36% of CNMs are 60 years and older, while 36% are under the age of 40. Since 2011 there has been a 6.5% increase in the age group of 60 or older and a 19% increase in CNMs under the age of 40.

**Figure 42**



**Figure 43**



### Gender

Nationally, only 7.1% of CNMs are male compared to 92.9% female (Zippia, 2021). However, in Arkansas, the CNM workforce is 100% female.

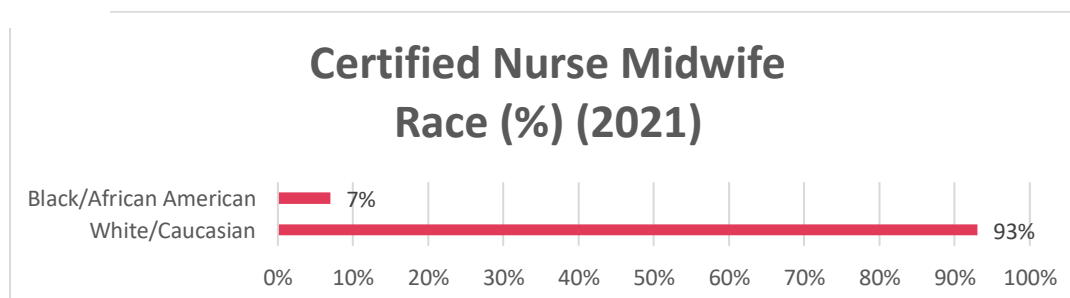
### Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 7 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed CNMs.

<b>Table 7</b>	<b>American Indian/ Alaska Native</b>	<b>Asian</b>	<b>Black/ African American</b>	<b>Native Hawaiian or other Pacific Islander</b>	<b>Other</b>	<b>White/ Caucasian</b>
<b>U.S. Population</b>	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
<b>AR Population</b>	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
<b>AR CNMs</b>	0%	0%	6.7%	0%	0%	93.3%

There is very little racial diversity among Arkansas licensed CNMs, as White/Caucasian makes up the majority. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

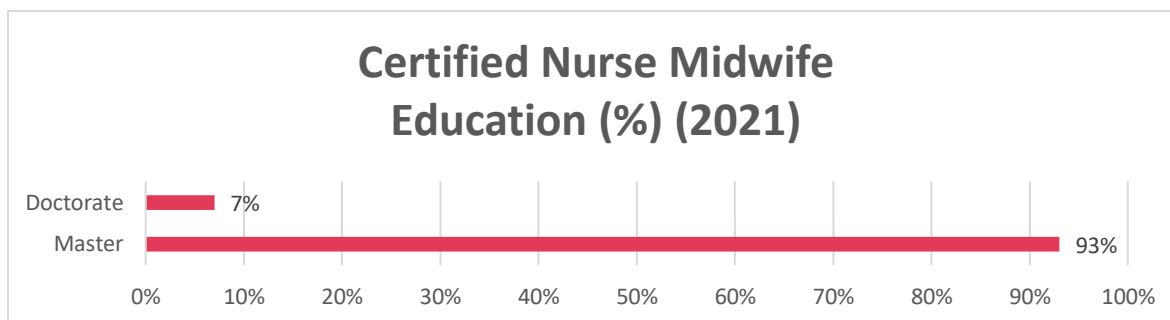
**Figure 44**



## Education

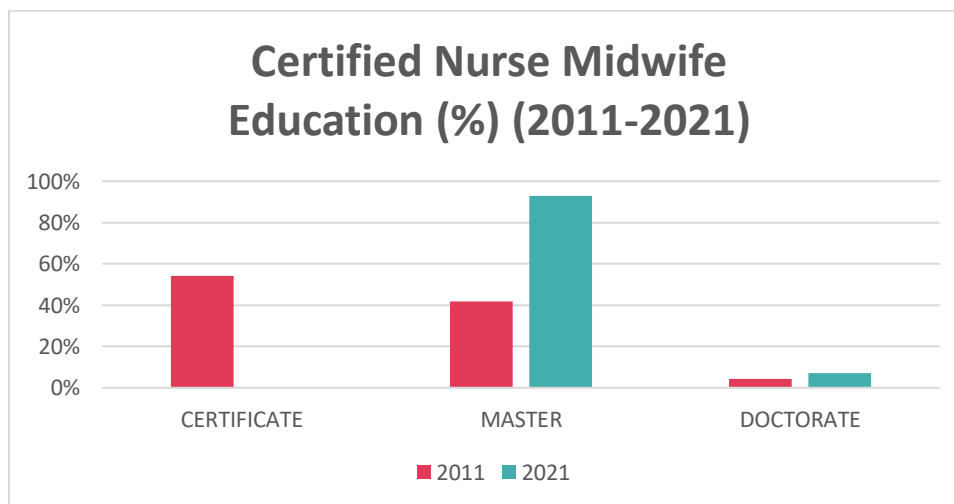
In 2021, all Arkansas licensed CNMs had a Master's or Doctorate degree. In comparison, in 2011 only 46% of CNMs reported their highest degree to be a Master's or Doctorate degree.

**Figure 45**



In 2011, 54.2% of CNMs reported their highest level of education as a certificate, while in 2021 none of the CNMs reported their highest level of education as a certificate (Figure 46). Between 2011 and 2021, there was a 51.2% increase in the number of CNMs reporting their highest level of education to be a Master's degree. Note that this group does not include lay midwives practicing in the state.

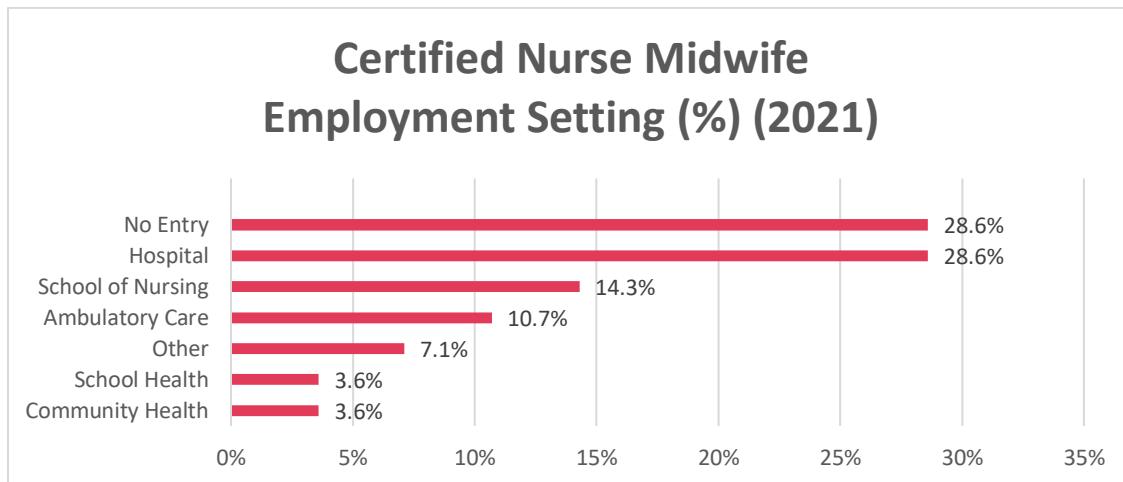
**Figure 46**



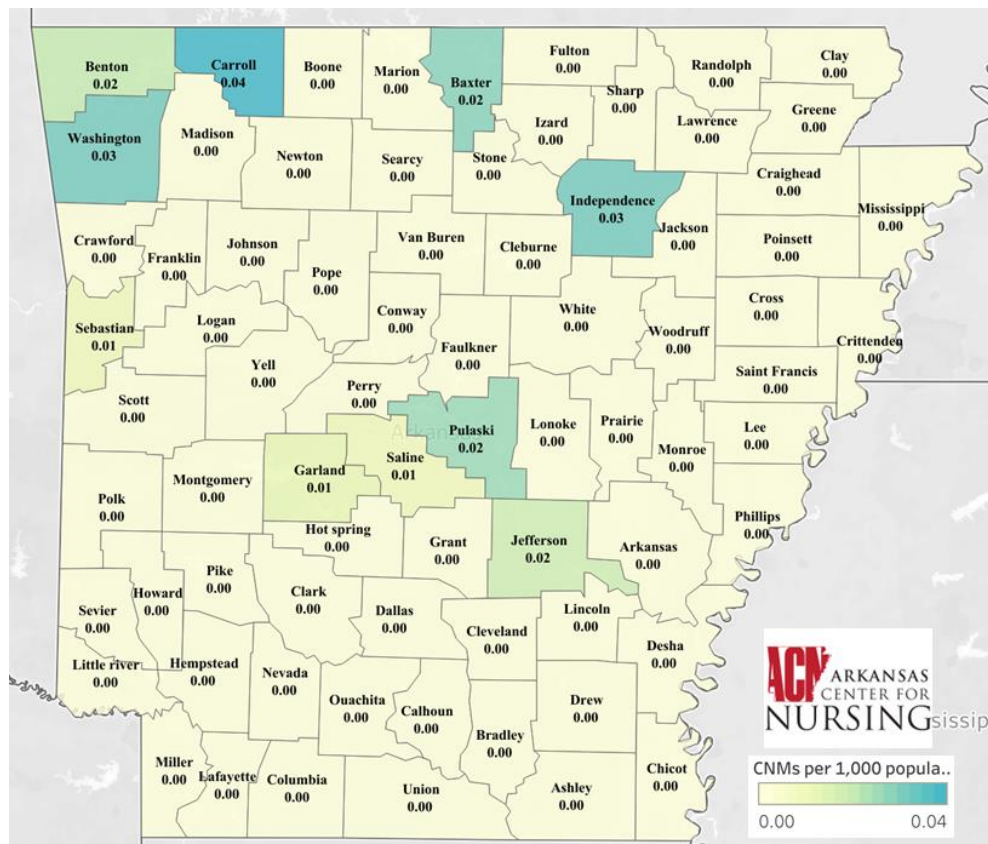
## Employment

The majority of CNM who reported an employment setting (Figure 47) were employed in hospital settings.

**Figure 47**



**Figure 48**

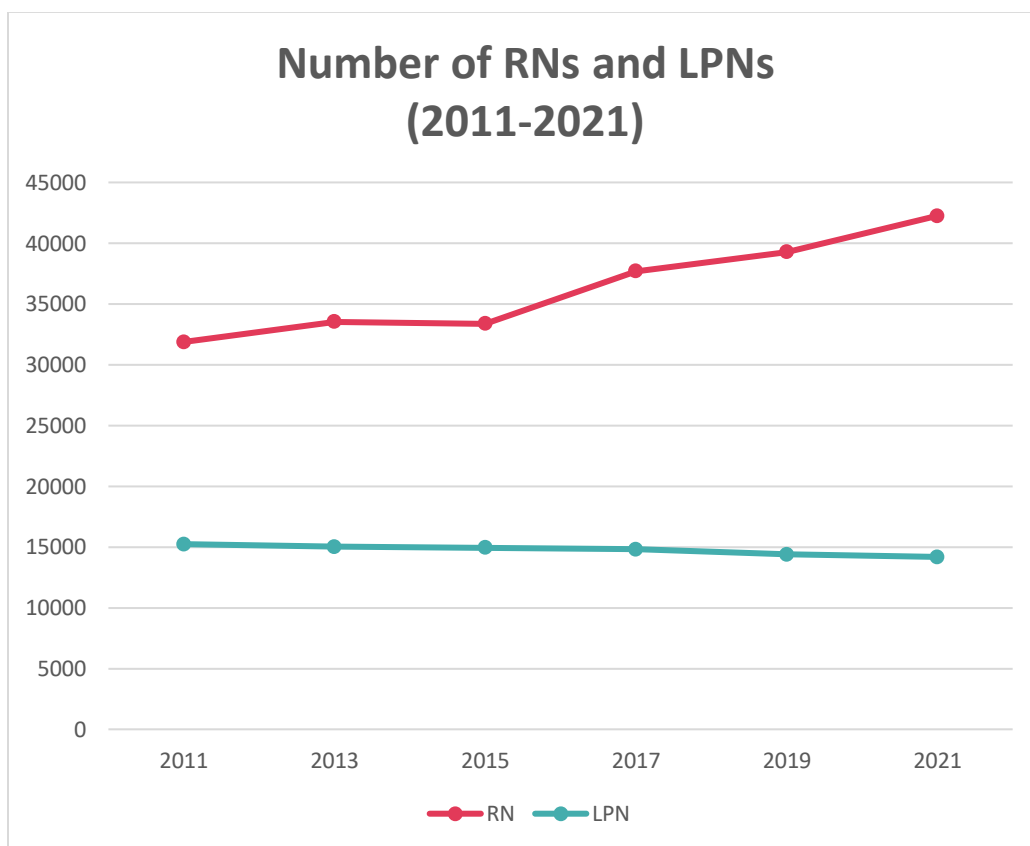


Nationally there are 0.02 CNMs per 1,000 people, while in Arkansas there are 0.07 CNMs per 1,000 people (US Census Bureau, 2020).

## Registered Nurse and Licensed Practical Nurse Overview

Over the past ten years, there has been a 6.9% decline in the number of Licensed Practical Nurses (LPNs) and a 32.6% increase in the number of Registered Nurses (RNs). This may be attributed to several factors, including the job market and the increased availability of LPN-to-RN educational programs in the state and online.

**Figure 49**



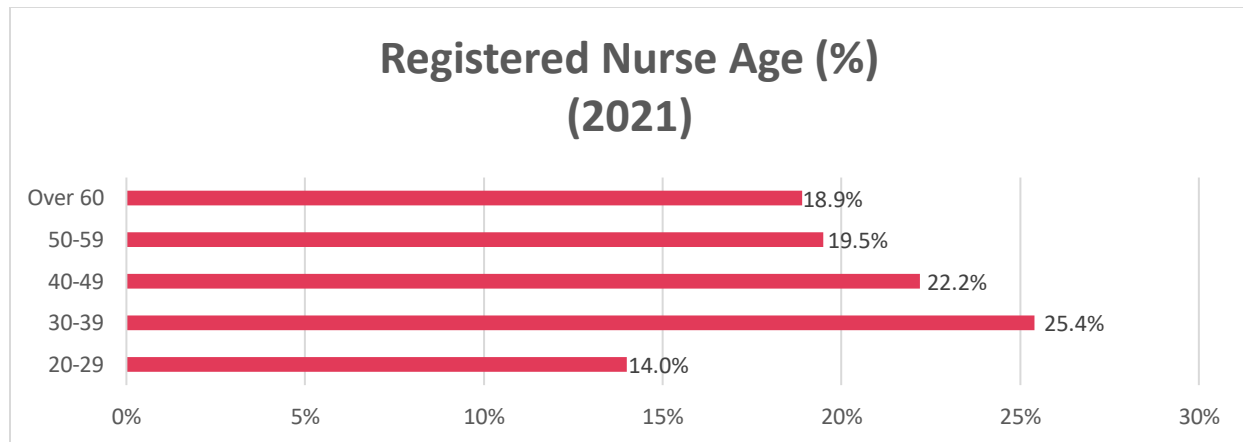
## Registered Nurse (RN)

### Age

National trends indicate that median age of the workforce has remained approximately the same since 2013. However, the age distribution of the workforce has changed substantially. Between 2013 and 2020, the number of RNs under the age of 40 increased by almost four percentage points (NCSBN, 2020). According to Auerbach, Buerhaus, and Staiger (2017), millennials (born after 1980) are almost twice as likely to become RNs as were baby boomers. This is encouraging, considering the aging and retirement of baby-boomer nurses. Like the national trend, Arkansas is seeing a younger workforce as the percentage of RNs under the age of 40 increased from 35.9% in 2013 to 39.4% in 2021.

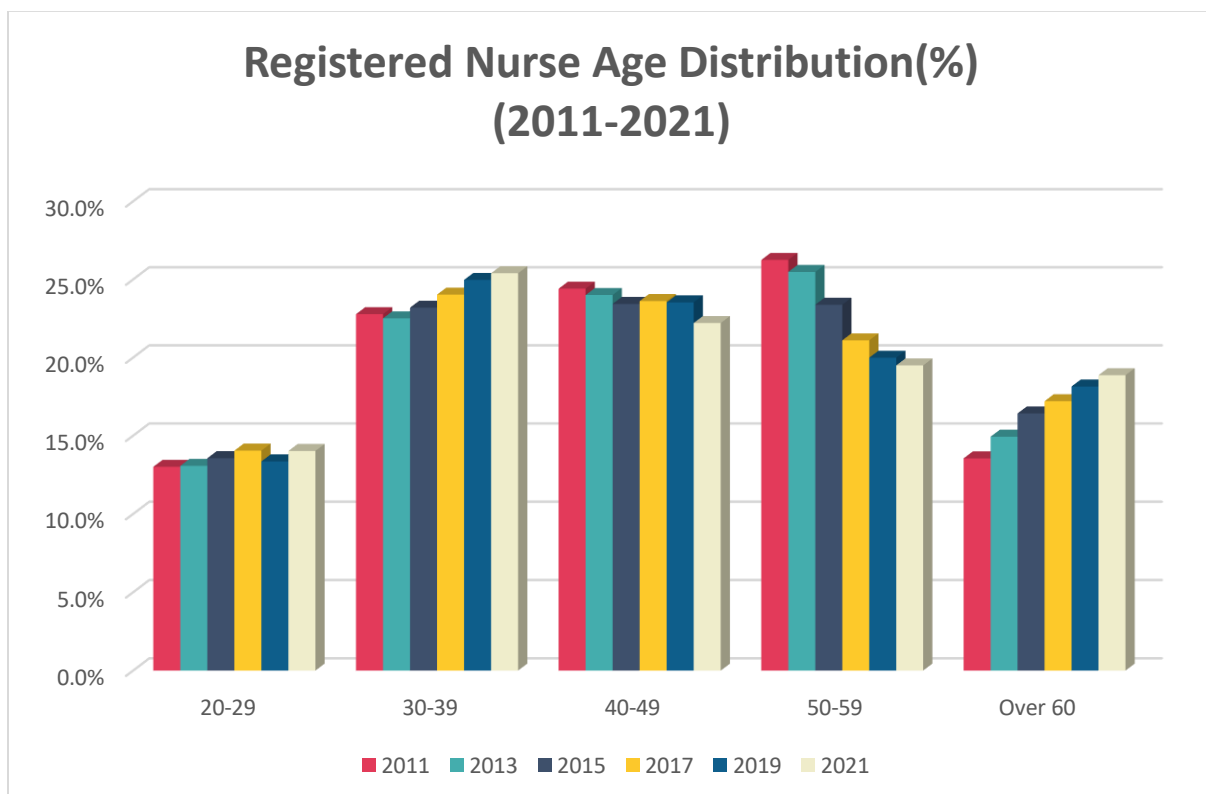


**Figure 50**



Nationally, RNs who are aged 65 years or older account for 19% of the RN workforce. The proportion of nurses aged 65 years or older has increased by 14.6% since 2013 (NCSBN, 2020). In Arkansas, nurses who are aged 60 years or older account for 18.9% of the current RN workforce. Sixty-one percent (61%) of RNs in Arkansas are age 40 or older, which is down almost 4% from 2013.

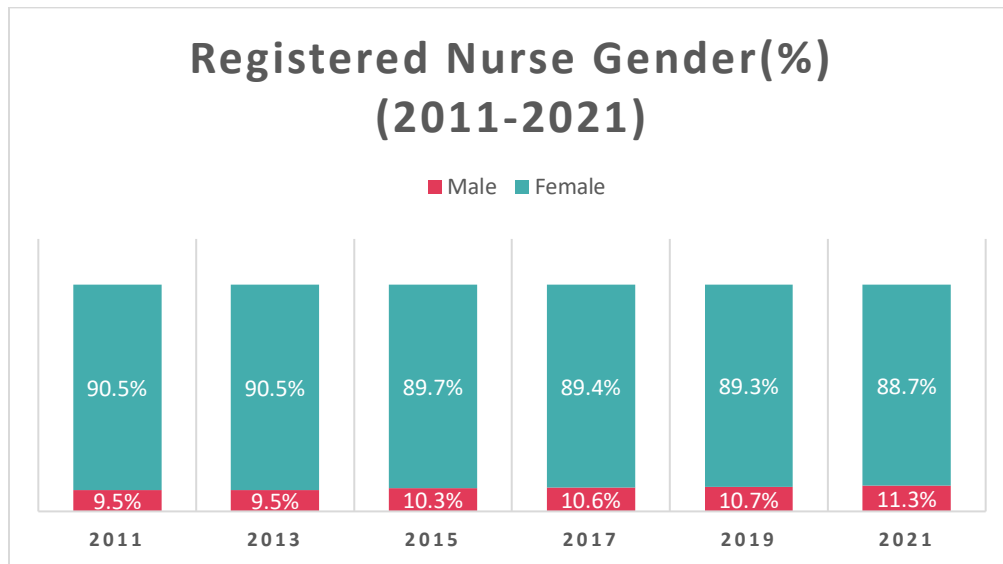
**Figure 51**



## Gender

The Arkansas RN workforce remains primarily female. The RN workforce in 2021 was 88.7% female, which is slightly lower than the national average of female RNs (90.6%) (NCSBN, 2020). The percent of male RNs has seen a slow increase, from 9.5% in 2011 to 11.3% in 2021 (ASBN, 2021). Nationally, males account for 9.4% of the RN workforce, an increase of 0.3% since 2017 and 2.8% since 2013 (NCSBN, 2020).

**Figure 52**



## Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 8 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed RNs.

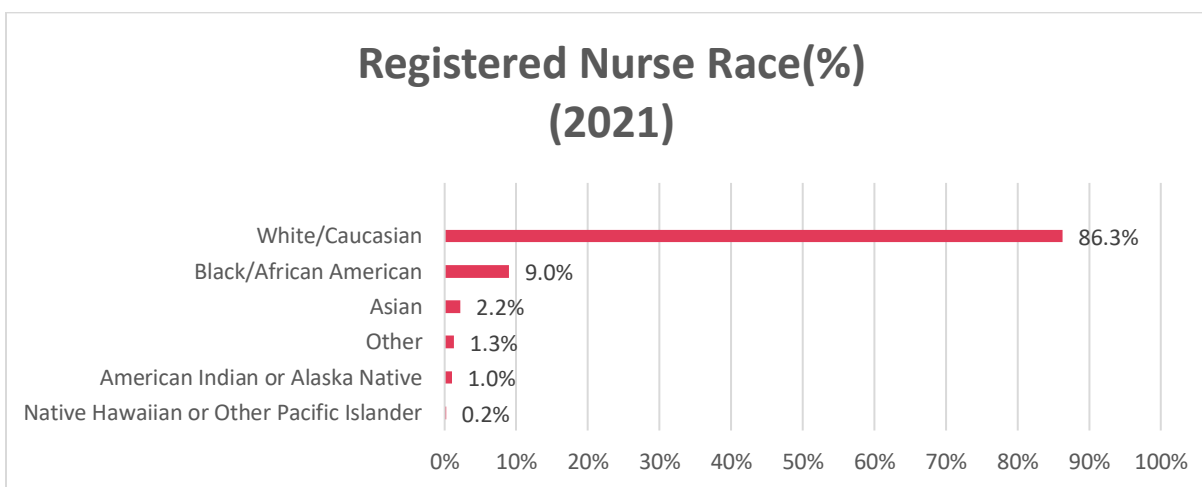
**Table 8**

	American Indian/Alaska Native	Asian	Black/African American	Native Hawaiian or other Pacific Islander	Other	White/ Caucasian
<b>U.S. Population</b>	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
<b>AR Population</b>	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
<b>AR RNs</b>	1.0%	2.2%	9.0%	0.2%	1.3%	86.3%

Nationally, nearly 81% of RNs reported being White/Caucasian. RNs who reported being Asian accounted for 7.2% of the workforce, representing the largest non-Caucasian racial group in the RN workforce. Black/African American RNs increased from 6.0% in 2013 to 6.7% in 2020 (NCSBN, 2020).

In Arkansas, 86% of RNs reported their racial group as White/Caucasian, while Black/African American accounted for the second-largest racial group. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

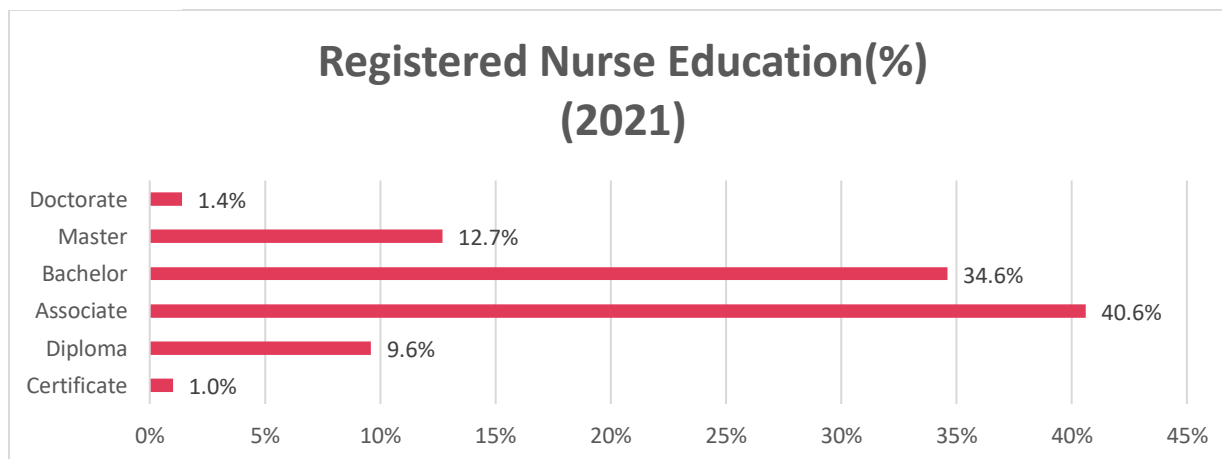
**Figure 53**



## Education

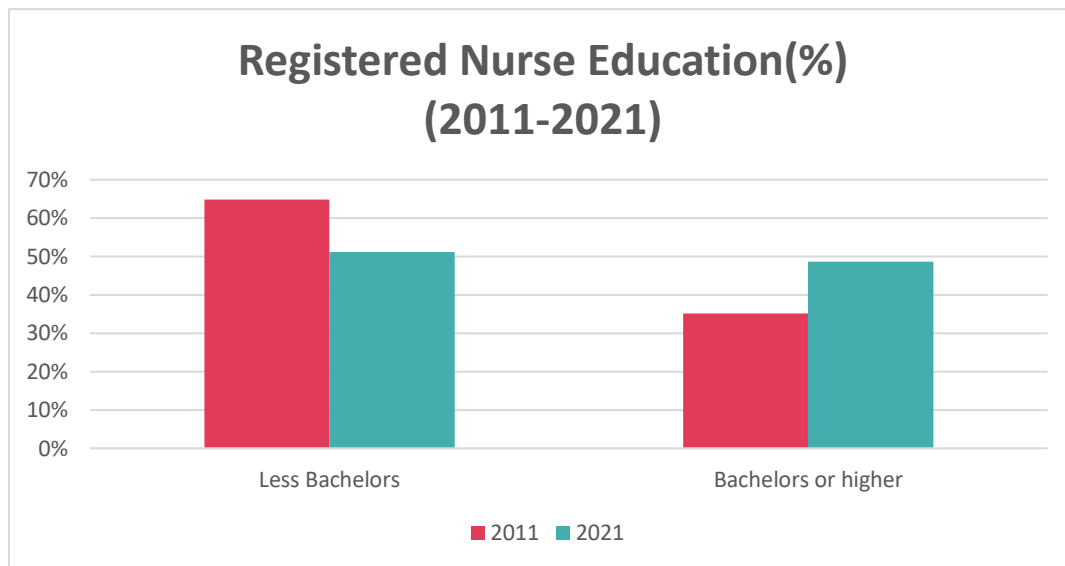
According to NCSBN 2020, 65.2% of RNs report their highest level of nursing education as a baccalaureate degree or higher. In Arkansas, 48.7% of Arkansas RNs reported their highest level of education as a baccalaureate degree or higher.

**Figure 54**



In the past ten years, there has been a 13.5% increase in the number of RNs reporting their highest level of education as a baccalaureate degree or higher.

**Figure 55**

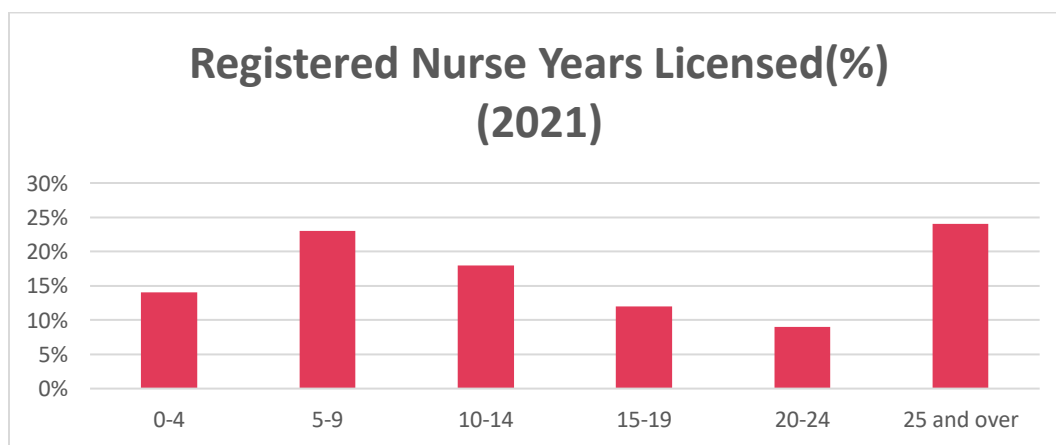


### NUMBER OF YEARS LICENSED

Nationally RNs have been licensed for a median of 20 years. Nearly one-third (30.5%) were licensed for 10 years or less. An additional 22.1% were licensed between 11 and 20 years. These figures are similar to those reported in 2017 (32.9% and 19.7%, respectively) (NSCBN, 2020).

According to the Nursys Workforce Report, which reflects RN renewal data, RNs were licensed for a median of 14 years while the mean length of licensure was 17 years.

**Figure 56**

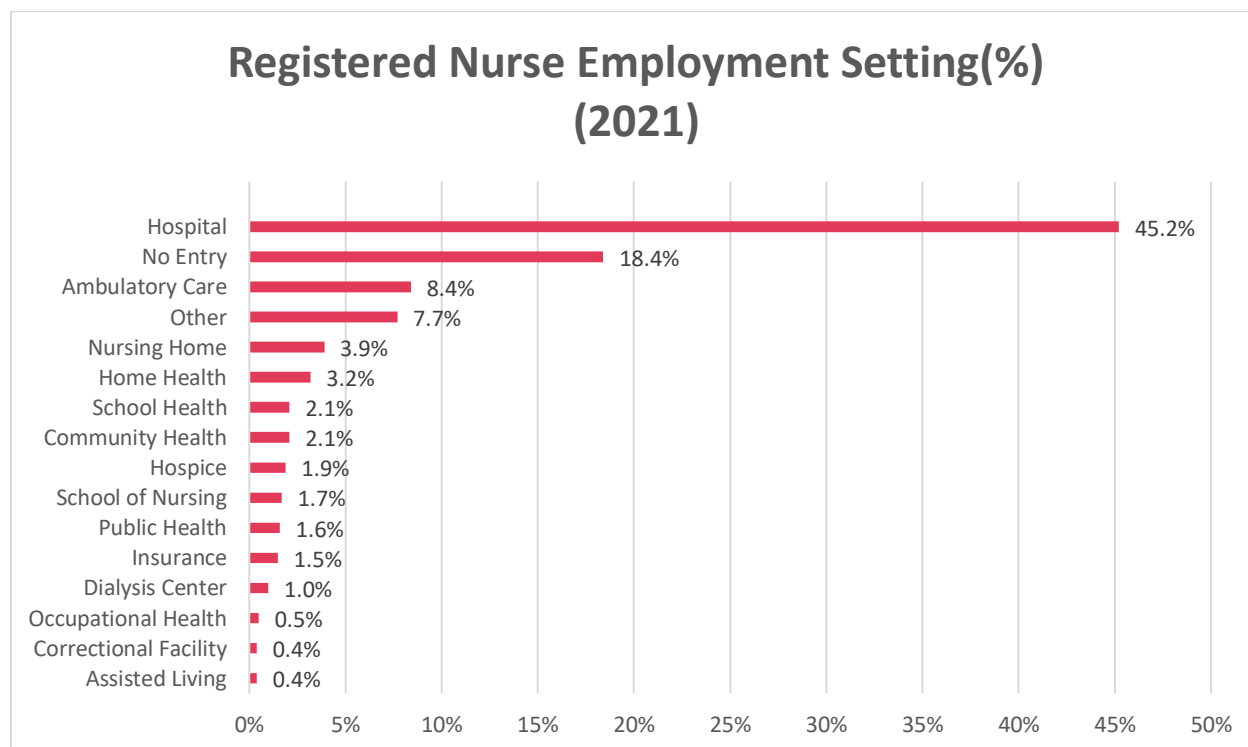


## Employment

Nationally, hospitals were the primary nursing practice setting selected by RNs (54.8%), representing a decrease of 0.9% from 2017. Ambulatory care setting was the second most common employment setting selected by RNs (9.7%), followed by home health (4%) and the nursing home/extended care setting (4.4%) (NCSBN, 2020).

Arkansas followed the national trend with 45.2% of RNs reporting the hospital as their primary nursing practice setting (Figure 57), followed by ambulatory care setting (8%) as the second most common employment setting.

**Figure 57**

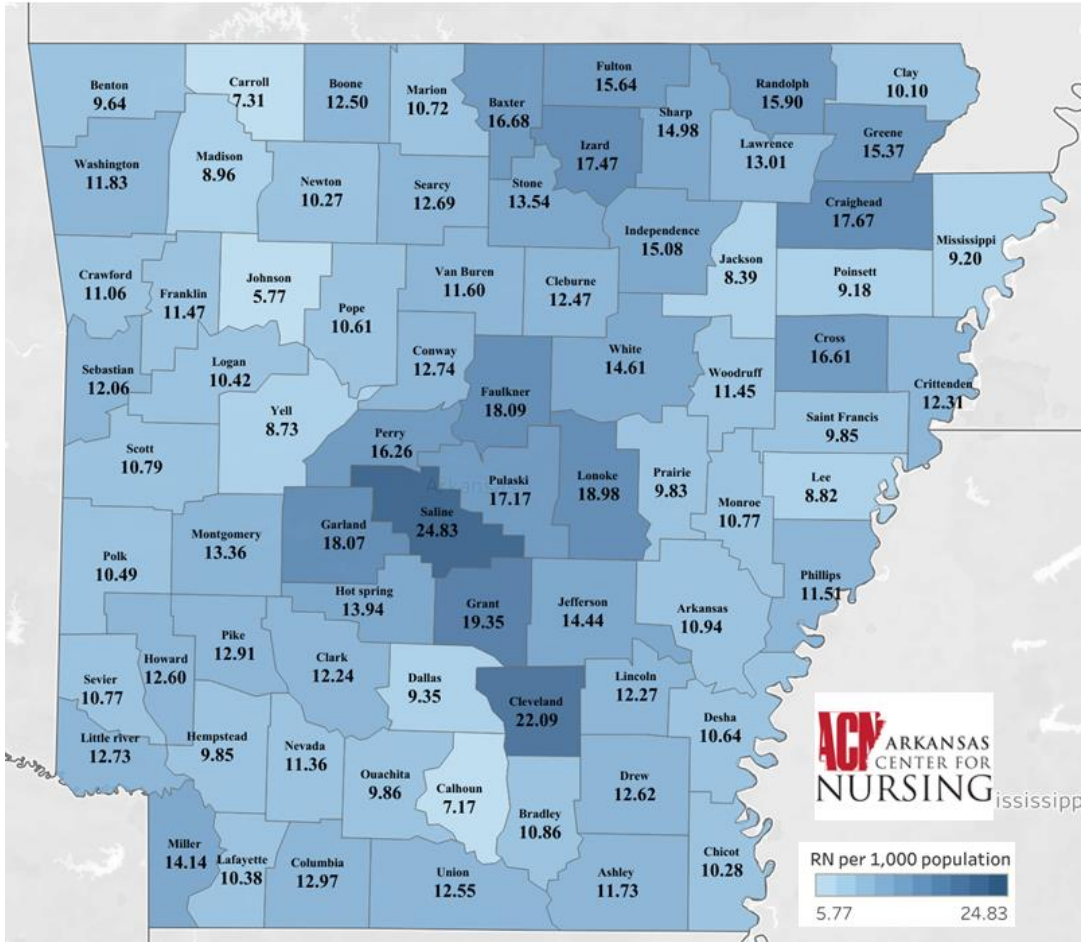


For RNs who reported their primary site of employment upon renewal of their nursing license, the majority are employed in the counties with the highest populations.

The Arkansas map below shows the concentration of RNs based on the employer zip code.

Nationally there are 9.29 RNs per 1,000 population (U.S. Census Bureau, 2020). In 2021, Arkansas has 14 RNs per 1,000 people. Pulaski and Washington Counties had the highest number of working RNs. Pulaski County had approximately 25 RNs per 1,000 people and Washington County has 11 RNs per 1,000 people. Benton and Washington counties have become the fastest-growing counties in Arkansas. Benton County had 1.3 RNs per 1,000 people. The least populated county in Arkansas is Calhoun, with 2 RNs per 1,000 people.

Figure 58



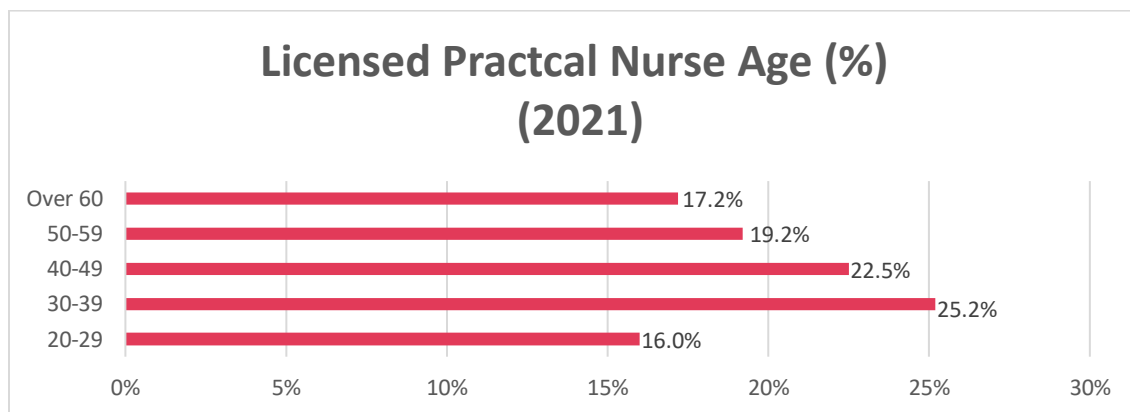
## Licensed Practical Nurse (LPN)

### Age

Nationally, the median age of LPNs/LVNs is 53 years. LPNs/LVNs who are aged 65 years or older accounted for 18.2% of the workforce. The older cohort of LPNs/LVNs has grown by 5% since 2017 and 8.3% since 2015 (NCSNB, 2020).

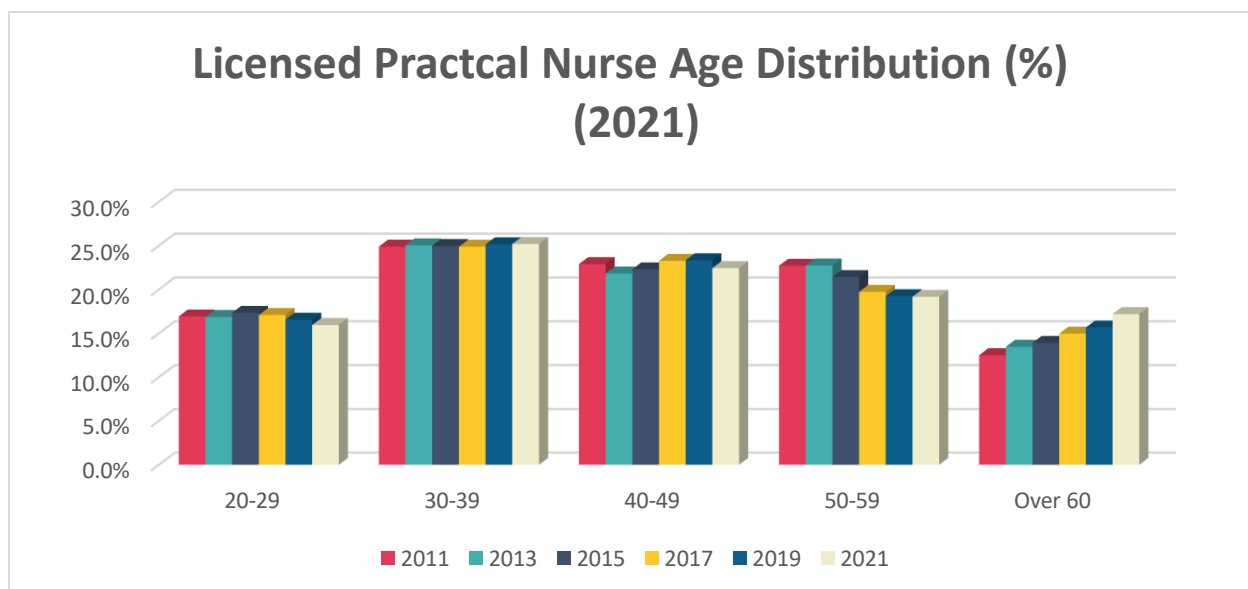
In 2021, over half (58.9%) of LPNs in Arkansas were age 40 or older, and 36.4% were over the age of 50, which is slightly younger than LPNs/LVNs in other states (Figure 59).

**Figure 59**



The greatest percent of change in age distribution is with the older population. Nationally the number of LPNs/LVNs 65 years and older has increased 8.3% since 2015 (NCSBN, 2020). Similarly, in Arkansas the number of LPNs 60 years and older has increased 3.3% since 2015.

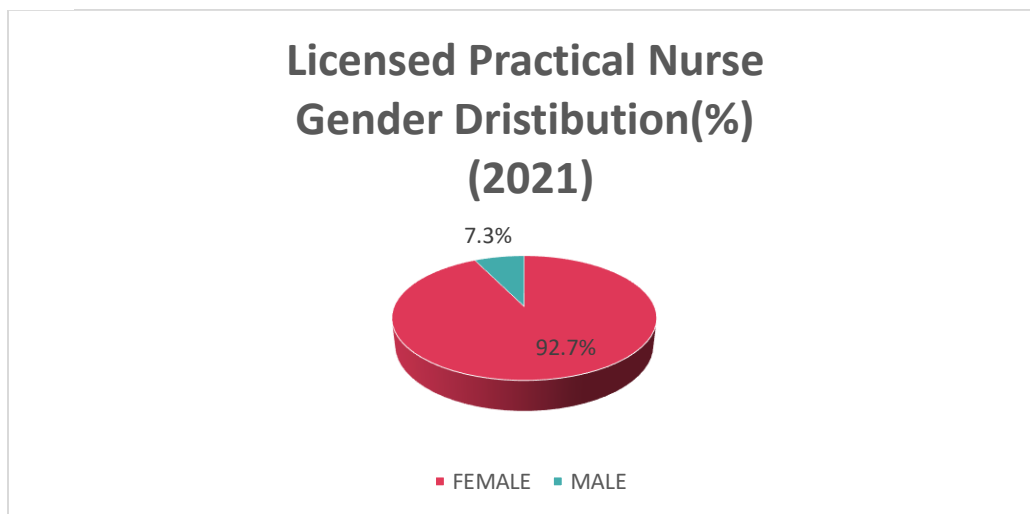
**Figure 60**



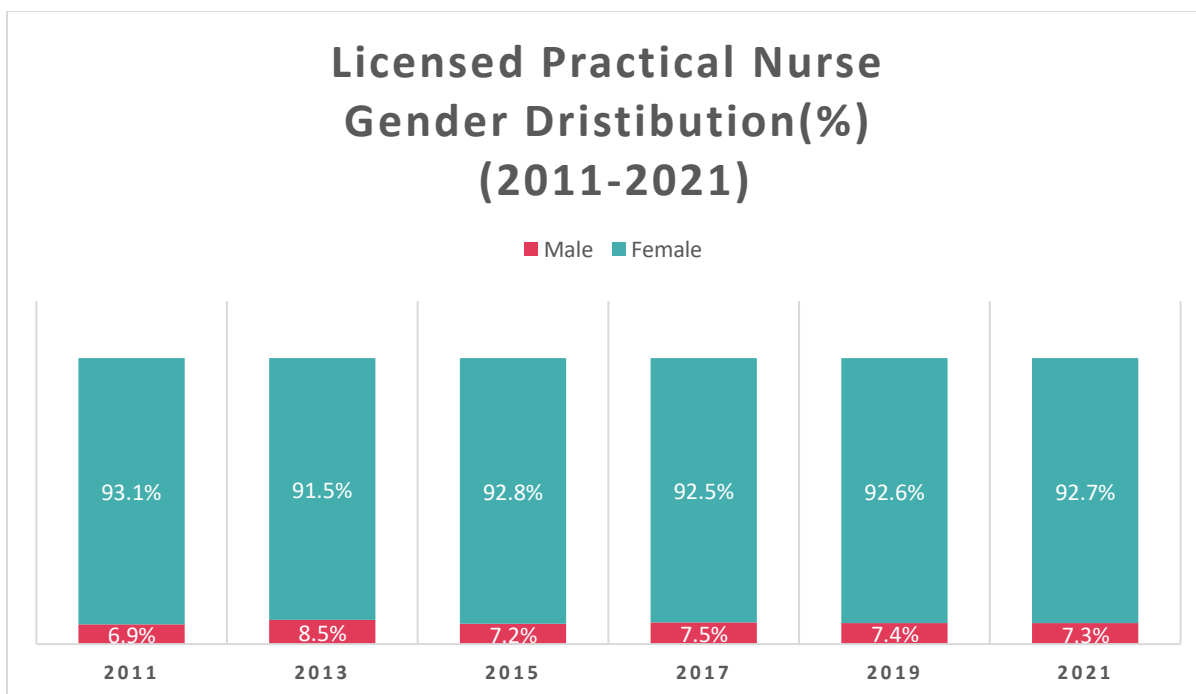
## Gender

The gender distribution for the U.S. population is 49% male and 51% female, which aligns with the gender distribution in Arkansas (U.S. Census Bureau, 2020). Nationally as well as in Arkansas, the LPN/LVN workforce is primarily female. Nationally, the number of male LPNs in the workforce is 8.1%, an increase of 0.4% since 2017 (NCSBN, 2020). In Arkansas, there was a slight increase in male LPNs over the past ten years, from 6.9% to 7.3% (Figure 61).

**Figure 61**



**Figure 62**





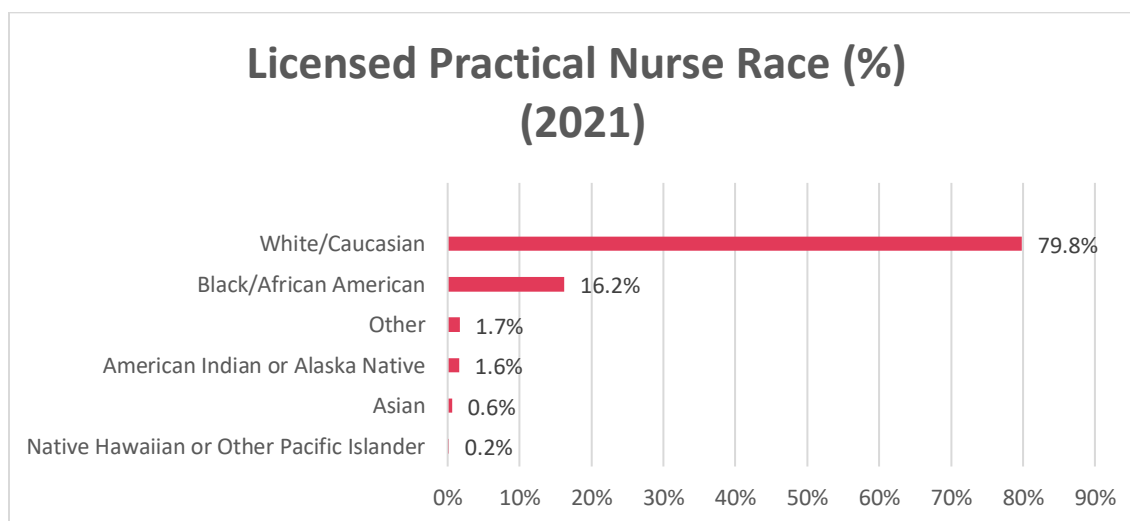
## Race

Racial data are based on self-identification; the nurse is allowed to report more than one racial group. Table 9 presents the comparison of racial distribution of the United States, Arkansas, and actively licensed LPNs.

<b>Table 9</b>	<b>American Indian/ Alaska Native</b>	<b>Asian</b>	<b>Black/ African American</b>	<b>Native Hawaiian or other Pacific Islander</b>	<b>Other</b>	<b>White/ Caucasian</b>
<b>U.S. Population</b>	1.3%	5.9%	13.4%	0.2%	2.8%	76.3%
<b>AR Population</b>	1.0%	1.7%	15.7%	0.4%	2.2%	79.0%
<b>AR LPNs</b>	1.6%	0.6%	16.2%	0.2%	1.7%	79.8%

Nationally, LPNs/LVNs who reported being Black/African American represent the second largest racial group in the workforce (17.2%) after White/Caucasian (69.5%) (NCSBN, 2020). In Arkansas, LPNs who reported Black/African American as their racial group represent 16.2% of the workforce, while 79.8% percent of LPNs reported White/Caucasian as their race. Minority populations continue to be under-represented in the racial makeup of the nursing workforce.

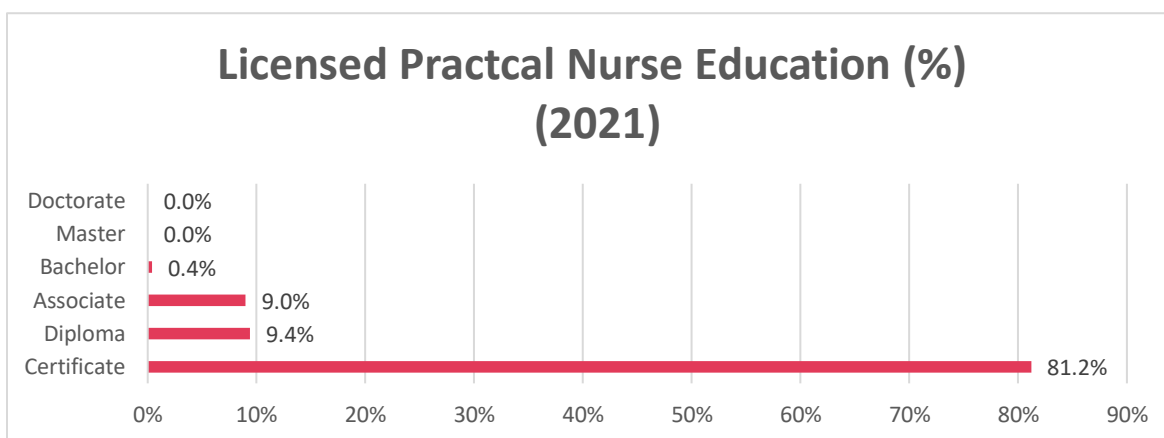
**Figure 63**



## Education

Nationally, 81.5% of LPNs reported a vocational/practical certificate as their first nursing license. The highest levels of nursing education reported by LPNs were vocational/practical certificate (72%), diploma (12.2%), associate degree (12.7%), and baccalaureate degree (3.1%) (NCSBN, 2020). In 2021, 97% of LPNs in Arkansas reported a practical certificate in nursing as their highest level of education.

**Figure 64**

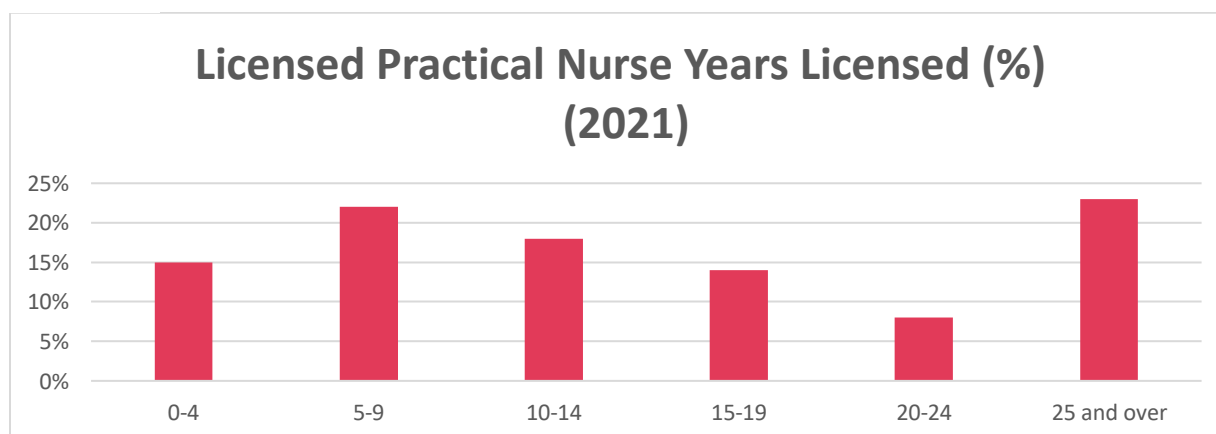


## Number Of Years Licensed

Nationally, LPNs/LVNs reported they were licensed for a median of 17 years. A little more than a third of respondents (36.9%) were licensed for 0–10 years, as compared to 43.7% in 2015 and 40.7% in 2017. An additional 23.4% have been licensed between 11 and 20 years, which represents an increase from previous years (NCSBN, 2020).

According to the Nursys Workforce Report, which reflects LPN renewal data, LPNs in Arkansas have been licensed for a median of 12 years with an average of 15 years.

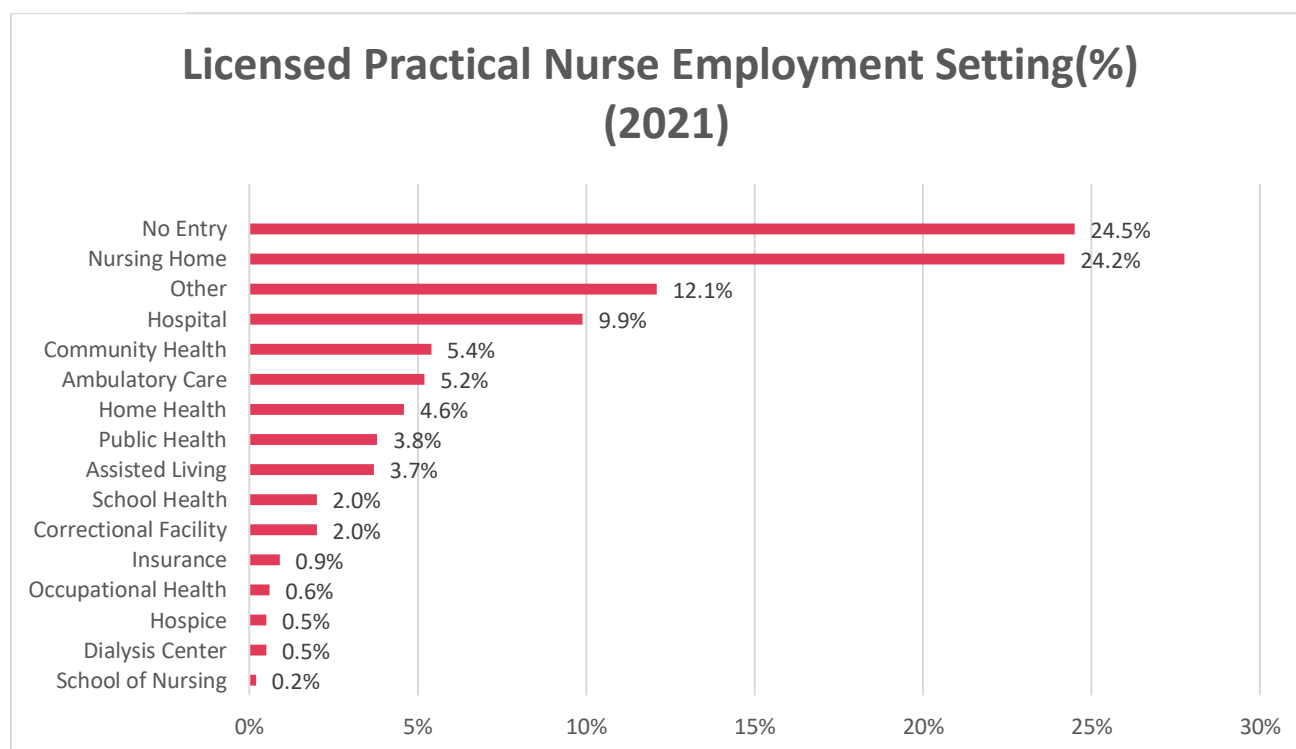
**Figure 65**



## Employment

In 2021, the majority (24%) of LPNs in Arkansas reported the nursing home as their primary site of employment, with the hospital being the second most reported employment site (9.9%). Nationally, 27.5% of LPNs/LVNs reported that their primary nursing practice position was in a nursing home/extended care setting, followed by the hospital setting (12.8%) (NCSBN, 2020).

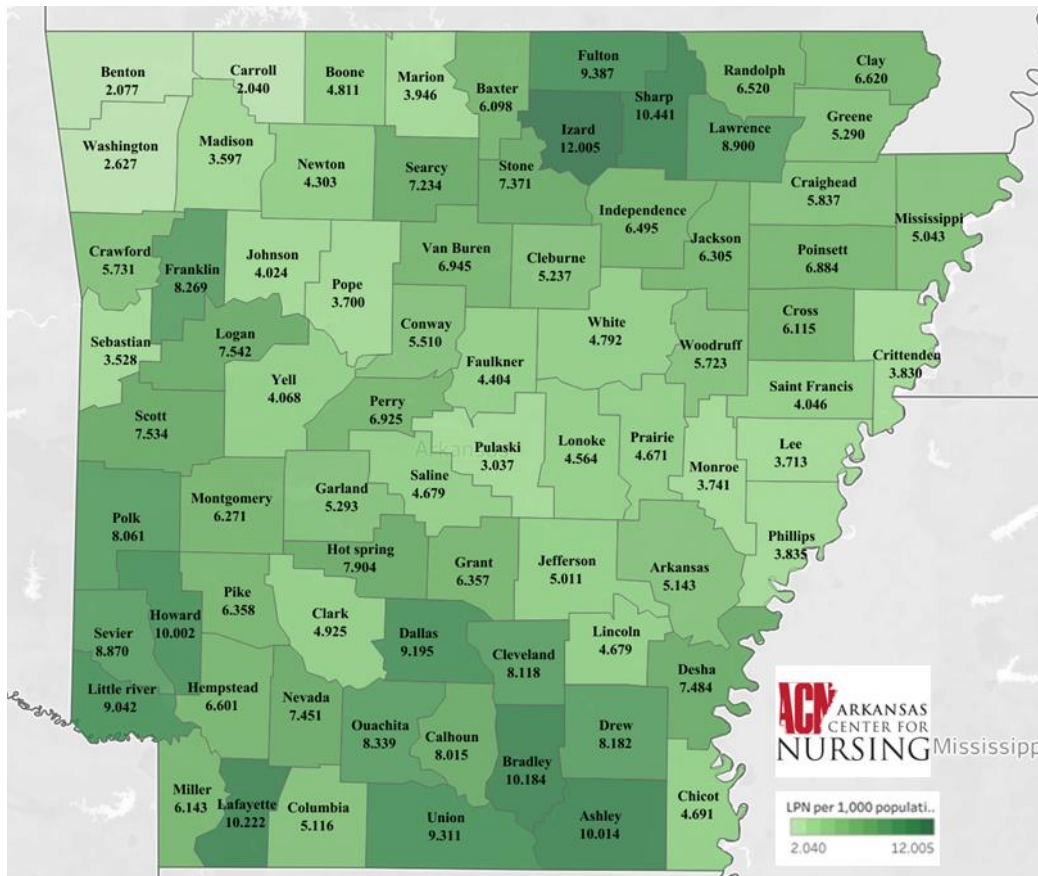
**Figure 66**



For LPNs who reported their primary site of employment upon renewal of their nursing license, the majority are employed in the counties with the highest populations.

The Arkansas map below shows the concentration of LPNs based on the employer zip code. This data was compared to the U.S. Census Bureau's 2020 report for Arkansas counties. Nationally there are 2.07 LPNs per 1,000 people (U.S. Census Bureau), while Arkansas has 4.7 LPNs per 1,000 people. Pulaski and Craighead Counties have the highest number of LPNs working. Pulaski County has 3.6 LPNs per 1,000 people and Craighead County has 5 LPNs per 1,000 people. Benton and Washington counties have become the fastest-growing counties in Arkansas and have respectively 1.5 and 4.3 LPNs per 1,000 people. The least populated county in Arkansas is Calhoun, with 2.2 LPNs per 1,000 people.

Figure 67



## NURSING DEMAND

### Projected Employment

Registered Nurses ranks ninth in the top ten fastest-growing Arkansas (AR) occupations for numeric change through 2030. Nursing Assistants rank 18th, with an anticipated growth of 1,623 new jobs, and Nurse Practitioners rank 20th with an anticipated growth of 1,513 jobs. Numeric change is the total net number of jobs expected to be gained or lost over a 10-year period (Arkansas Division of Workforce Services, 2020–2030).

**Table 10. Top Ten Rankings by Numeric Change**

<b>Occupation</b>	<b>2030 Projected Numeric Change</b>
1. Fast Food and Counter Workers	6,590
2. Home Health and Personal Care Aides	6,445
3. Cooks, Restaurant	4,803
4. Waiters and Waitresses	3,626
5. Heavy and Tractor-Trailer Truck Drivers	3,056
6. Stockers and Order Fillers	2,699
7. General and Operations Managers	2,699
8. First-Line Supervisors of Food Preparation and Serving Workers	2,384
9. Registered Nurses	2,344
10. Insurance Sales Agents	2,002

(Source: Division of Workforce Services. AR Long-Term Projections 2020-2030)

Nurse Practitioners are projected to be the fastest growing occupation in Arkansas. Nurse Practitioner jobs are anticipated to increase by 54% and currently place third on the Top 20 Growing Industries list (Arkansas Division of Workforce Services, 2020–2030).

**Table 11. Top Ten Rankings by Percent Change**

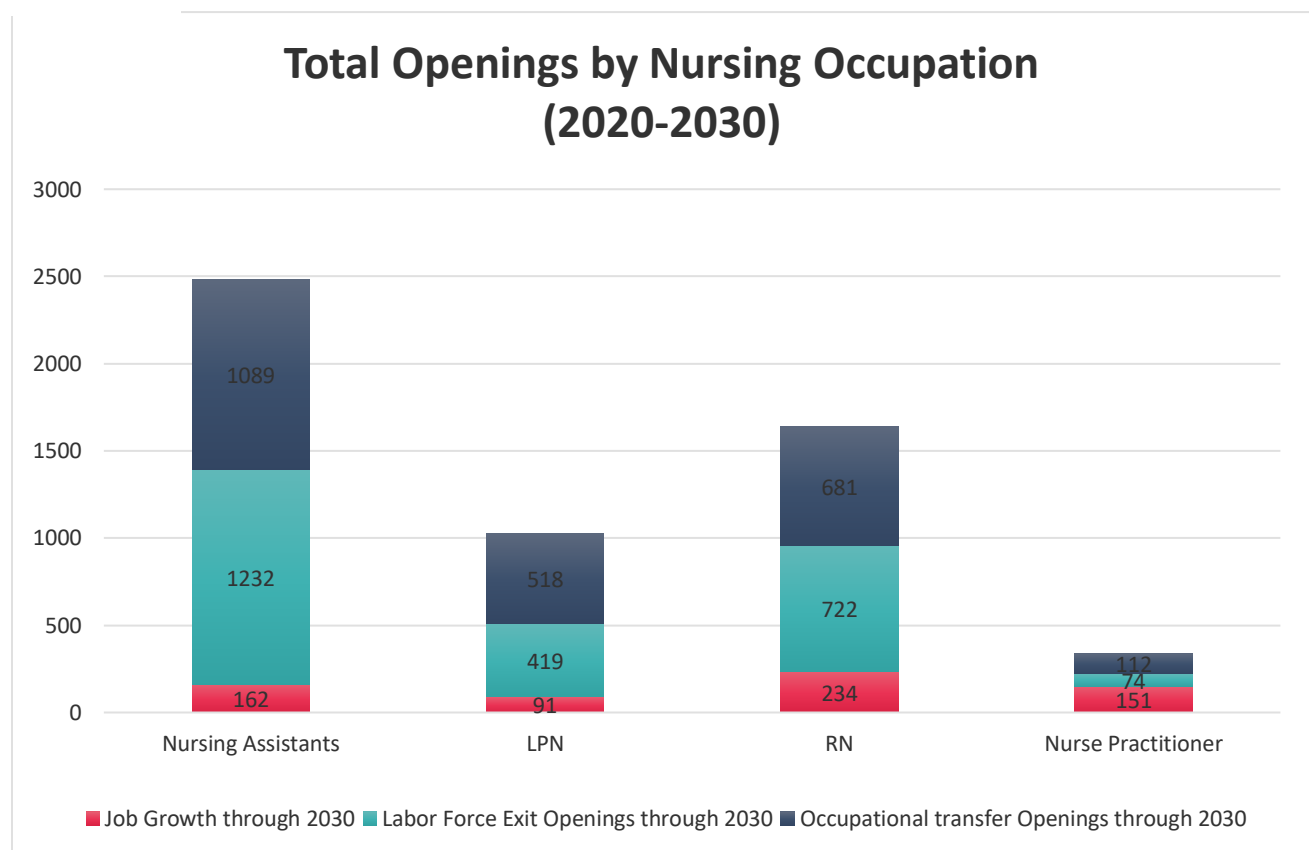
<b>Occupation</b>	<b>2030 Projected Percent Change</b>
1. Nurse Practitioners	54.04%
2. Cooks, Restaurant	51.77%
3. Fundraisers	47.60%
4. Occupational Therapy Assistants	43.70%
5. Ushers, Lobby Attendants, and Ticket Takers	43.31%
6. Operations Research Analysts	38.74%
7. Speech-Language Pathologists	38.69%
8. Physical Therapy Assistants	37.26%
9. Tour and Travel Guides	36.76%
10. Preschool Teachers, Except Special Education	36.44%

(Source: Division of Workforce Services. AR Long-Term Projections 2020–2030)

## Job Growth and Openings

Labor market exits and occupational transfers account for the majority of total occupational openings for Nursing Assistants, Licensed Practical Nurses, and Registered Nurses. Job growth reflects new jobs over the 10-year period. Labor market exits are the projected number of openings created by those leaving the workforce for four months or more. Occupational transfers are the projected number of openings created by those transferring to an occupation in a different occupational classification (Arkansas Division of Workforce Services, 2020–2030).

**Figure 68**

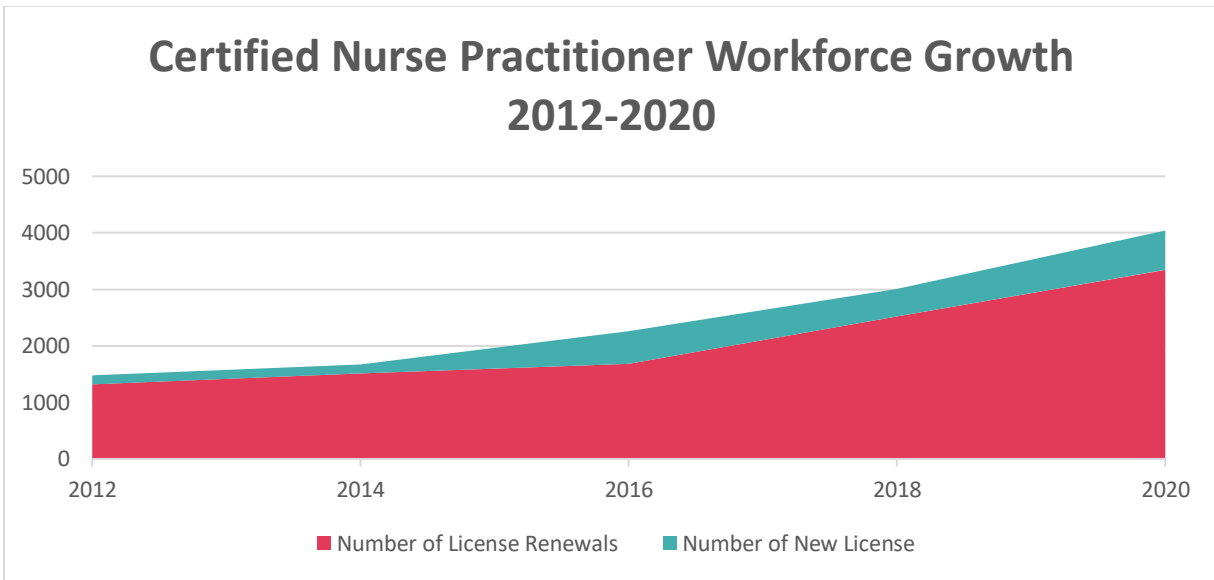


(Source: Division of Workforce Services. AR Long-Term Projections 2020–2030)

## Nurses Added to Workforce

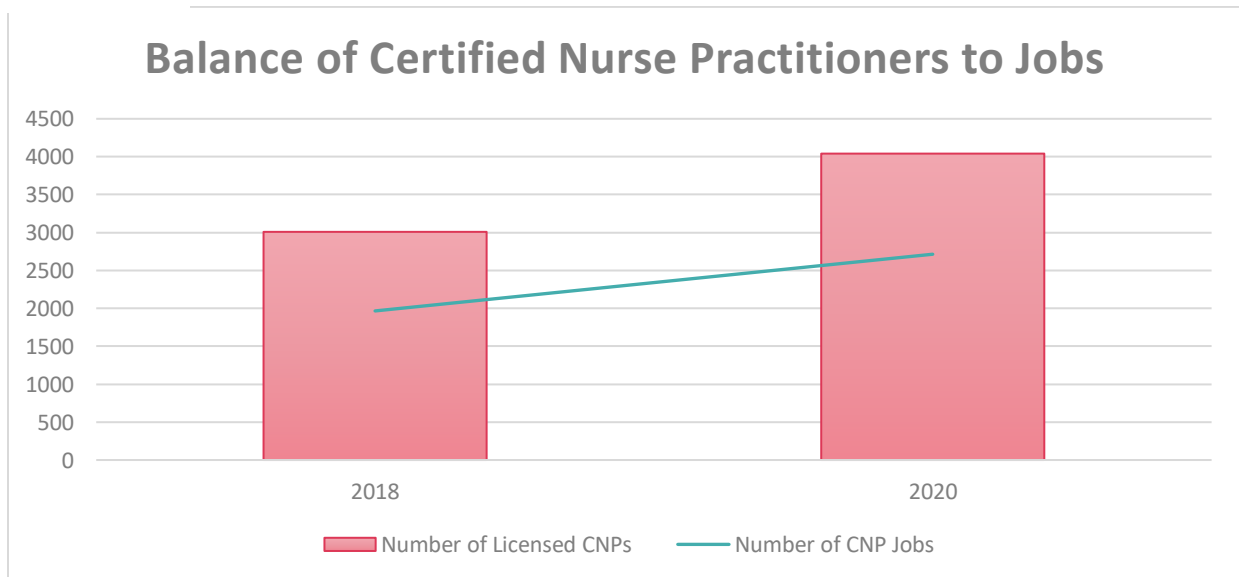
Figure 69 depicts the growth of Certified Nurse Practitioners (CNP) in Arkansas between the years 2012–2020. The number of license renewals and newly licensed CNP has seen a steady, steep increase during this time period. Figure 70 shows the relationship between the number of licensed CNPs between 2018–2020 along with the number of Nurse Practitioner jobs in Arkansas. The analysis of these data indicates that although Nurse Practitioner jobs are the fastest-growing occupation in Arkansas, the demand for CNPs has not yet caught up with the number of CNPs licensed in the State (Arkansas Division of Workforce Services, 2020–2030).

**Figure 69**



(Source: ASBN Annual Reports, 2012–2020)

**Figure 70**



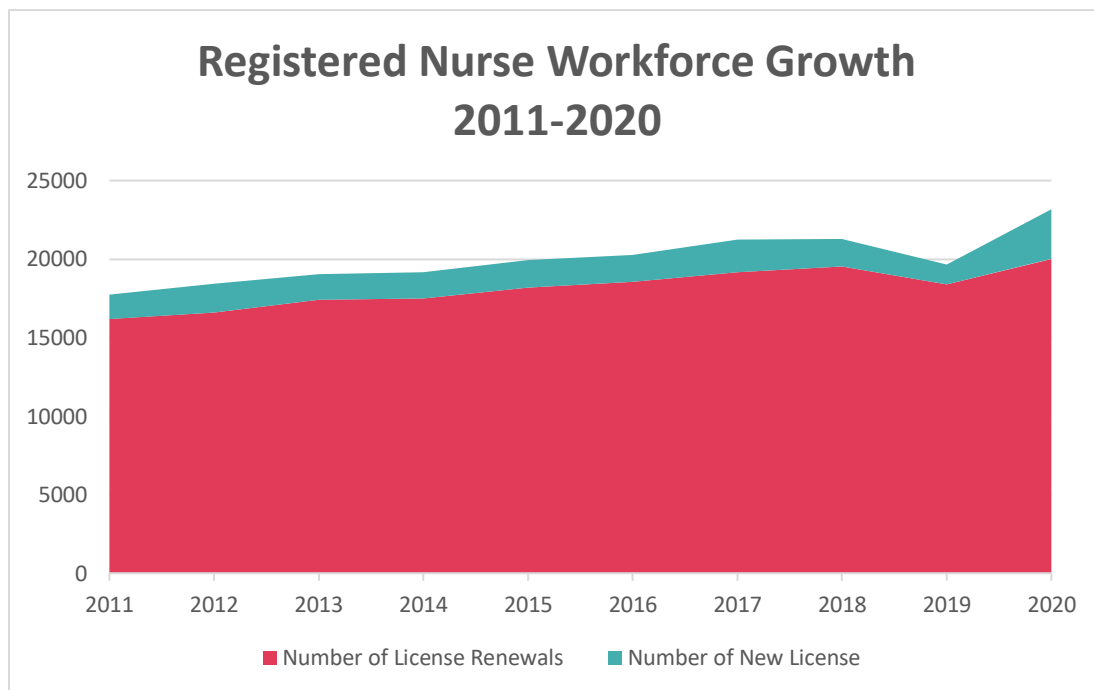
(Source: US Bureau of Labor Statistics, 2022; Arkansas State Board of Nursing Annual Report, 2018 & 2020)

## Registered Nurses

Figure 71 depicts the growth of Registered Nurses in Arkansas between 2011–2020. Overall, the number of licensed RNs has slowly but steadily increased over the past 10

years. Although Figure 72 depicts the supply of RNs in Arkansas as exceeding the number of jobs available, most nurse employers do not agree with the implied surplus. Some factors that may be contributing to the imbalance include nurses holding active licenses but not employed in nursing, nurses with AR licenses working out of state, and APRNs holding both RN and APRN licenses. This imbalance demonstrates the need for improved data collection and real-time reporting of licensed nurses actively participating in the clinical workforce (ASBN, 2010-2021).

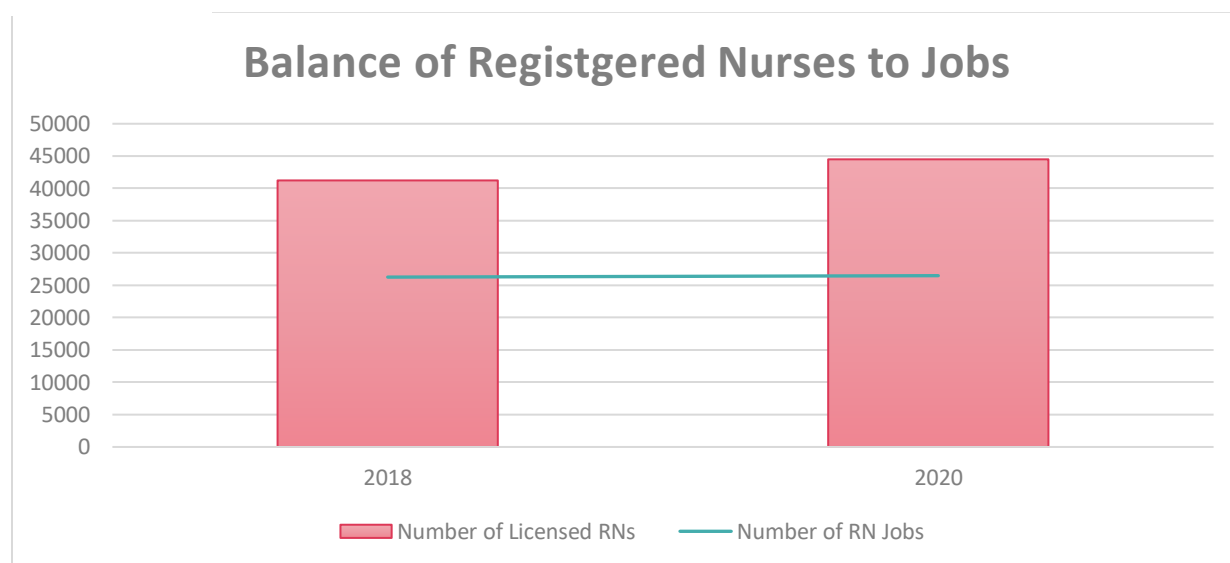
**Figure 71**



(Source: Arkansas State Board of Nursing Annual Reports, 2011–2020)



**Figure 72**

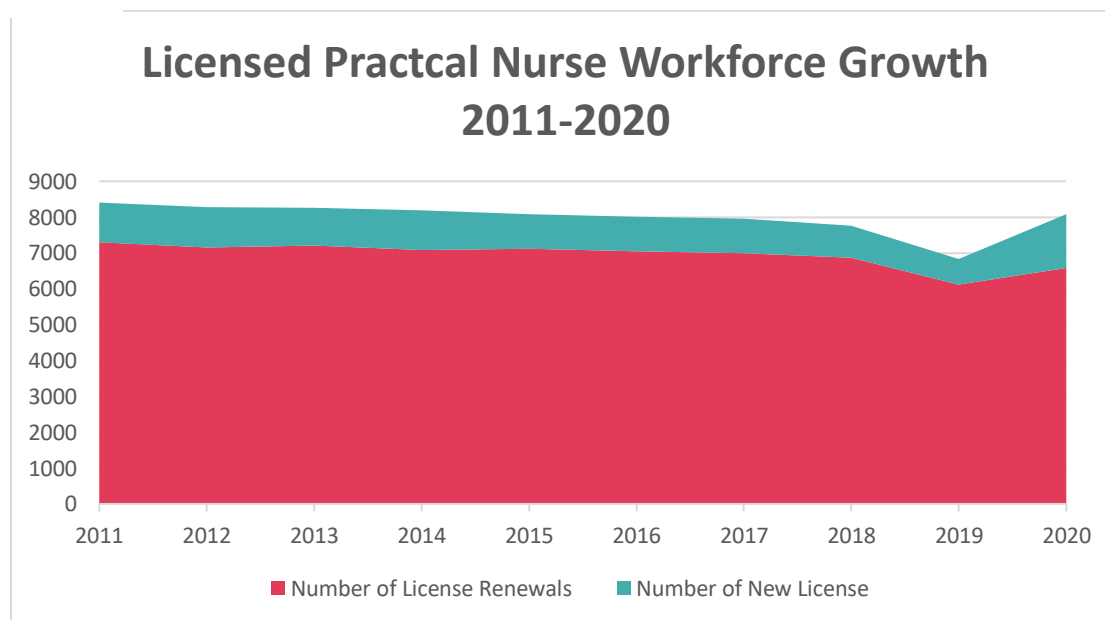


(Source: US Bureau of Labor Statistics, 2022; ASBN Annual Report, 2018 & 2020)

### Licensed Practical Nurses

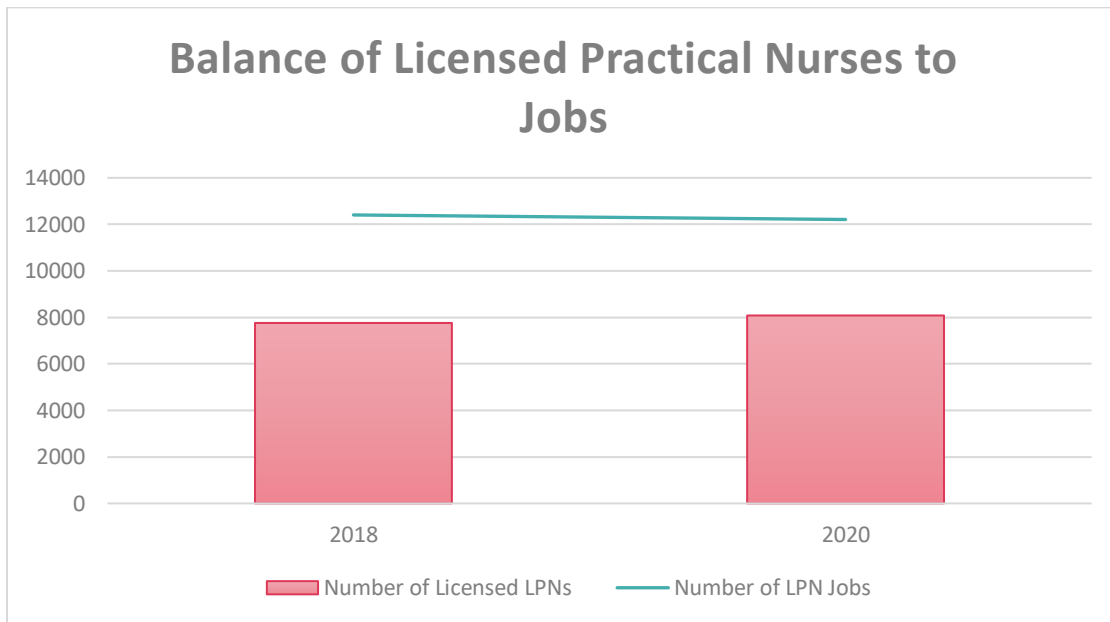
Figure 73 depicts the growth of Licensed Practical Nurses in Arkansas between 2011–2020. The number of LPNs has gradually decreased over the past 10 years, with a sharp drop between 2018 and 2019. Figure 74 highlights the gap between the number of LPN jobs available and the deficient supply of LPNs in Arkansas (ASBN, 2010-2021).

**Figure 73**



(Source: Arkansas State Board of Nursing Annual Reports, 2011–2020)

**Figure 74**



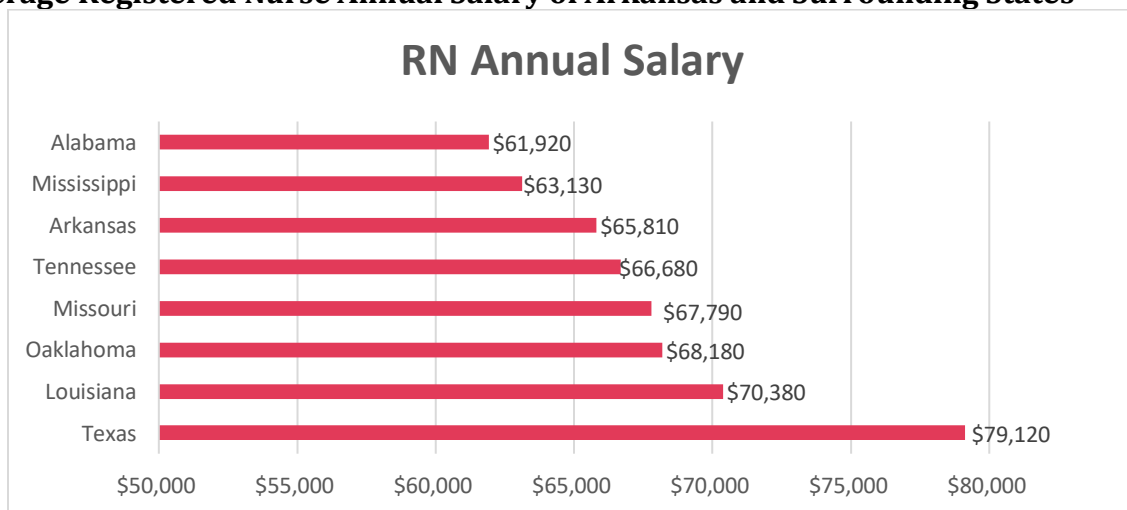
(Source: US Bureau of Labor Statistics, 2022; ASBN Annual Report, 2018 & 2020)

## Salary

The average annual salary of a Registered Nurse in Arkansas is \$65,810. This ranks as the third lowest annual salary of the neighboring states. The national average annual salary of a RN is \$82,750 (United States Department of Labor, 2021).

**Figure 75**

### Average Registered Nurse Annual Salary of Arkansas and Surrounding States



(Source: US Bureau of Labor Statistics, 2022)

The average annual salary of a Nurse Practitioner in Arkansas is \$107,080. This ranks in the middle of the neighboring states. The national average annual salary of a Nurse Practitioner is \$118,040 (United States Department of Labor, 2021).

**Figure 76**

**Average Nurse Practitioner Annual Salary of Arkansas and Surrounding States**

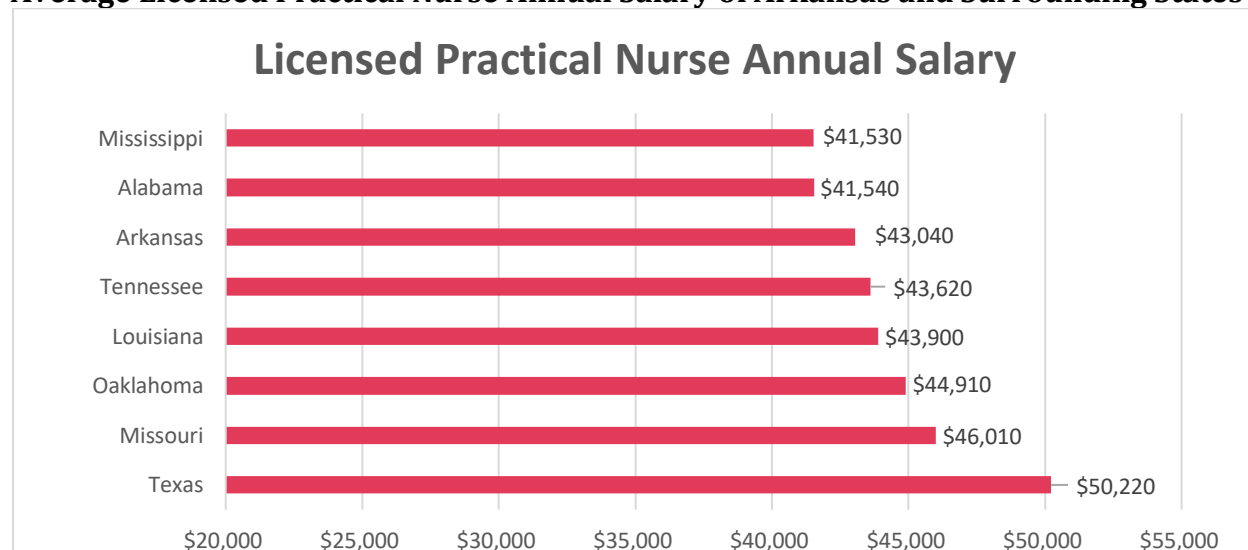


(Source: US Bureau of Labor Statistics, 2022)

The average annual salary of a Licensed Practical Nurse in Arkansas is \$43,040. This ranks as the third lowest annual salary of the neighboring states. The national average annual salary of an LPN is \$48,070 (United States Department of Labor, 2021).

**Figure 77**

**Average Licensed Practical Nurse Annual Salary of Arkansas and Surrounding States**



(Source: US Bureau of Labor Statistics, 2022)

## Nurse Employer Perception Survey Results

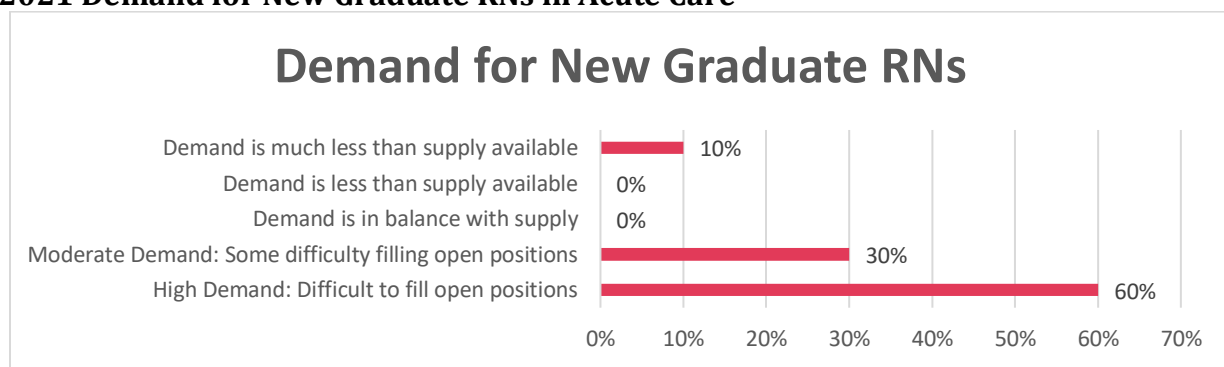
The ACN, Inc. conducted a Nurse Employer Perception Survey to determine the perceptions of nurse employers regarding the licensed nurse workforce supply. In total, nine acute care facilities and 89 long-term care/home health and hospice facilities responded to the survey.

### Acute Care

Among the Acute Care Facilities, 90% reported that demand exceeded supply for new graduate Registered Nurses. Positions hardest to fill with new graduate RNs included Medical Surgical positions and positions on nights and weekends (ACN, 2020).

**Figure 78**

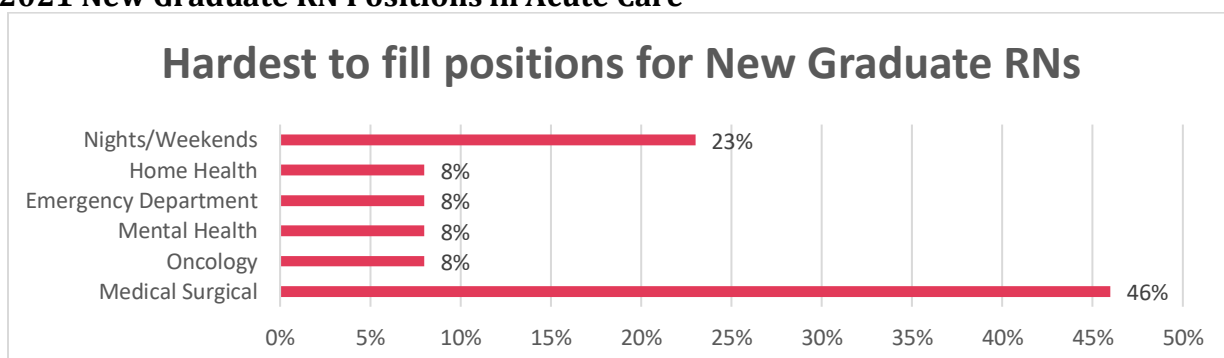
#### 2021 Demand for New Graduate RNs in Acute Care



(Source: Arkansas Center for Nursing's Nurse Employer Perception Survey, 2021)

**Figure 79**

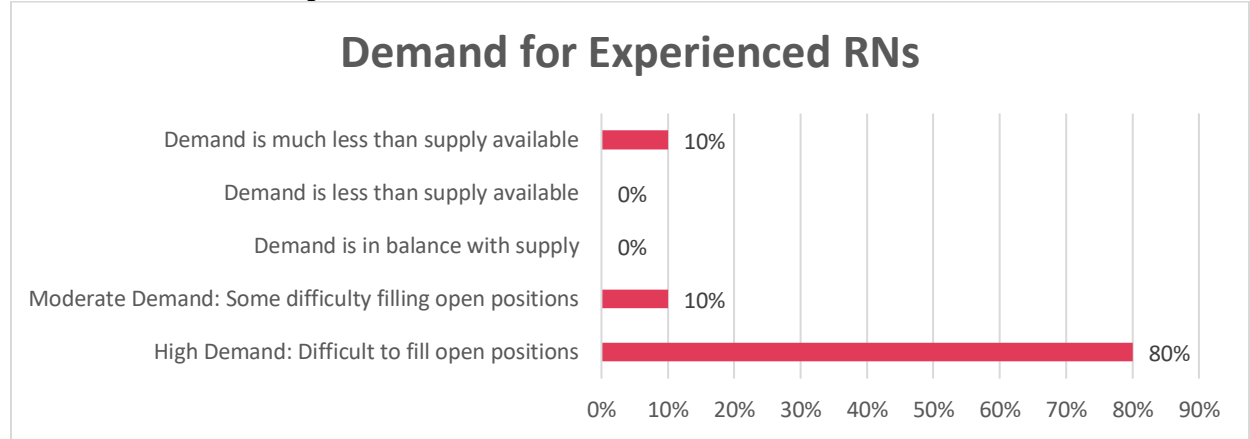
#### 2021 New Graduate RN Positions in Acute Care



(Source: ACN's Nurse Employer Perception Survey, 2021)

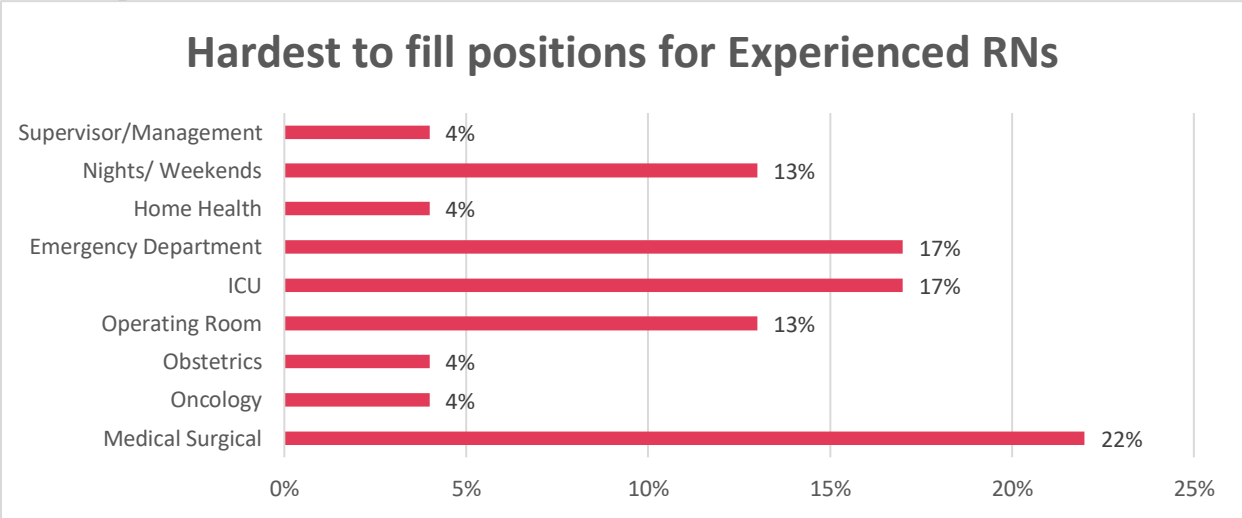
Among the Acute Care Facilities, 90% reported that demand exceeded supply for experienced Registered Nurses. Positions hardest to fill with experienced RNs included positions in Medical Surgical, Intensive Care, Emergency Department, and Operating Room, and positions on nights and weekends (ACN, 2020).

**Figure 80**  
**2021 Demand for Experienced RNs in Acute Care**



(Source: Arkansas Center for Nursing’s Nurse Employer Perception Survey, 2021)

**Figure 81**  
**2021 Experienced RN Positions in Acute Care**



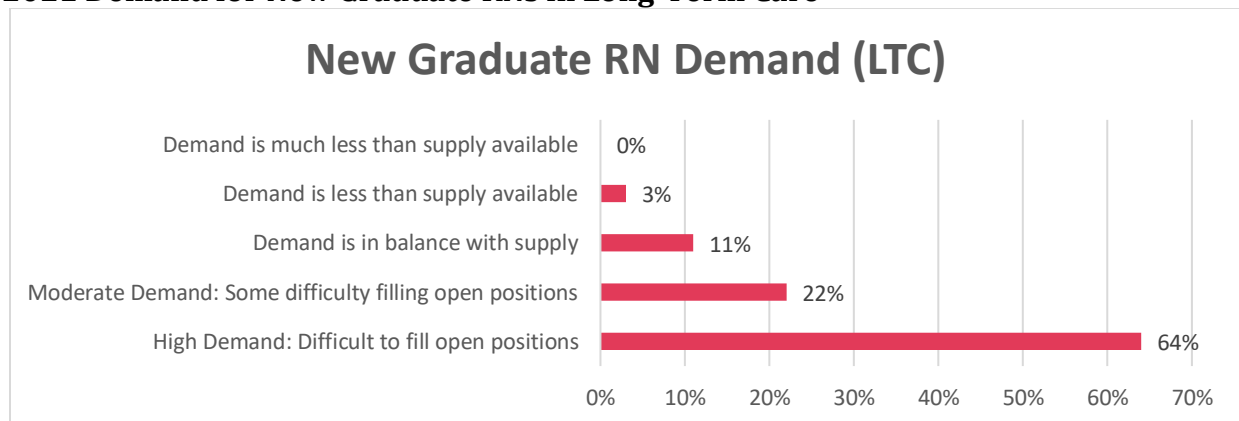
(Source: ACN’s Nurse Employer Perception Survey, 2021)

## Long-Term Care

Among the Long-Term Care (LTC) Facilities, 86% reported that demand exceeded supply for new graduate Registered Nurses. Positions hardest to fill with new graduate RNs included Floor/Staff Nurse, Supervisor/Management, and Charge Nurse positions, and positions on nights and weekends (ACN, 2020).

**Figure 82**

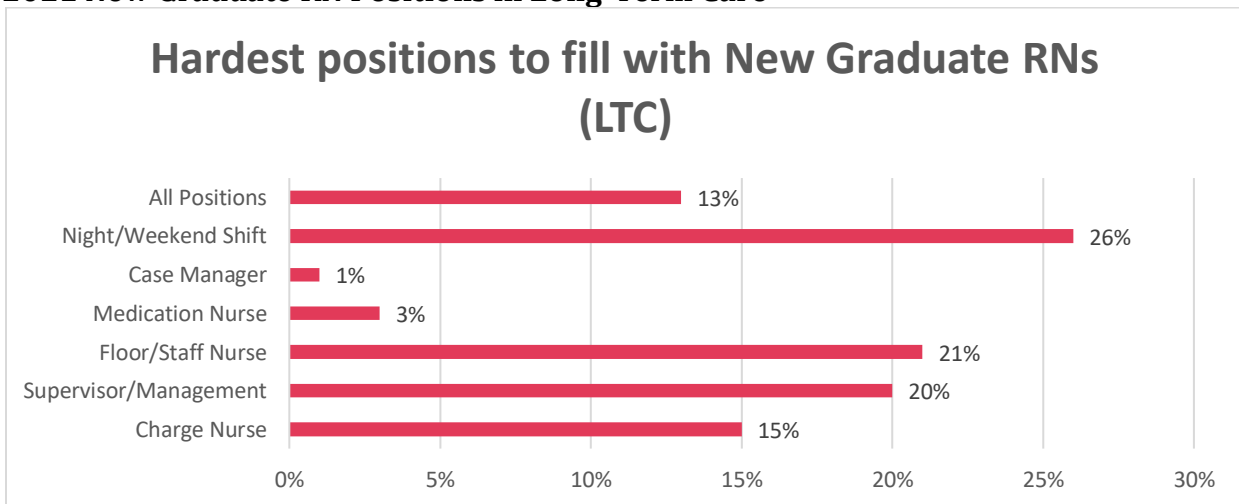
### 2021 Demand for New Graduate RNs in Long-Term Care



(Source: ACN's Nurse Employer Perception Survey, 2021)

**Figure 83**

### 2021 New Graduate RN Positions in Long-Term Care

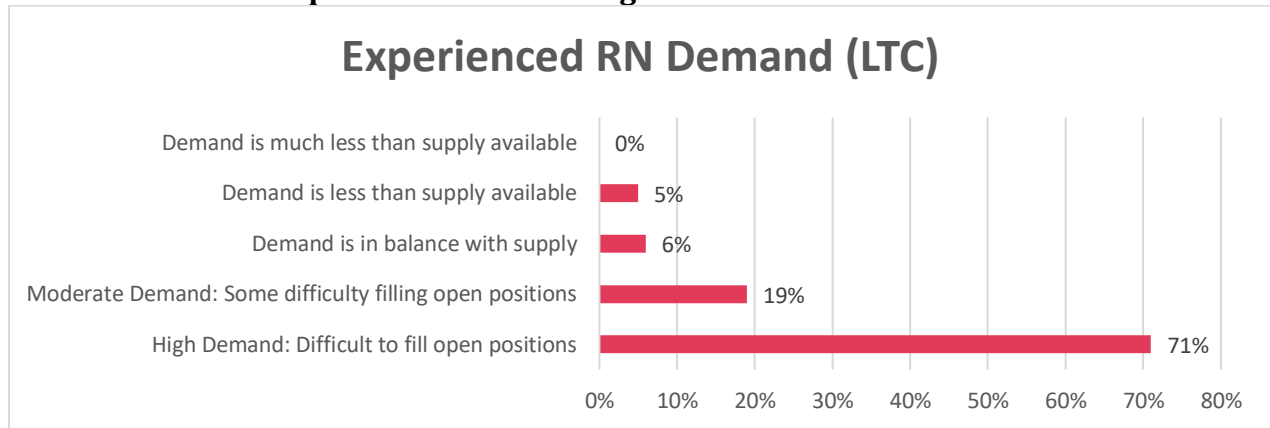


(Source: ACN's Nurse Employer Perception Survey, 2021)

Among the Long-Term Care Facilities, 90% reported that demand exceeded supply for experienced Registered Nurses. Positions hardest to fill with experienced RNs included Supervisor, Floor/Staff Nurse, and Charge Nurse positions, and positions on nights and weekends (ACN, 2020).

**Figure 84**

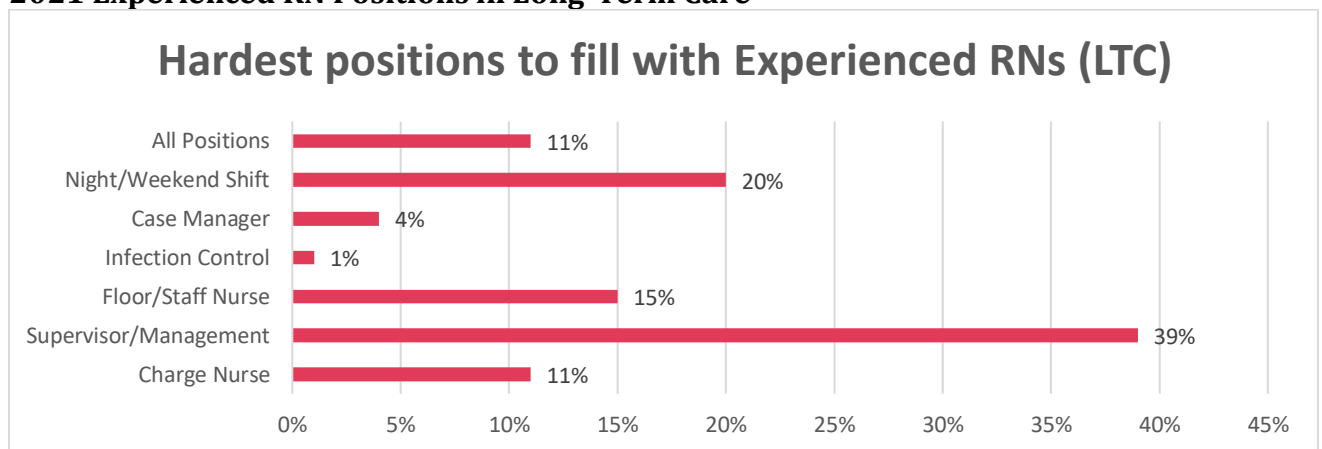
**2021 Demand for Experienced RNs in Long-Term Care**



(Source: ACN's Nurse Employer Perception Survey, 2021)

**Figure 85**

**2021 Experienced RN Positions in Long-Term Care**



(Source: ACN's Nurse Employer Perception Survey, 2021)

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## Appendix A: Glossary

### NURSING EDUCATION

**Admitted Applicants:** A count of the individuals who received official notice from the program that they were invited to begin the nursing program during the Reporting Period (National Forum of State Nursing Workforce Centers [NFSNWC], 2020).

**AD Program:** A program of instruction that requires at least two years of fulltime equivalent college academic work generally within a junior or community college, the completion of which results in an associate degree with a major in nursing and eligibility to apply for licensure as an RN (NFSNWC, 2020).

**BSN Program:** A program of instruction to prepare registered nurses that admits students with no previous nursing education, the completion of which results in a baccalaureate degree (e.g., BA, BS, BSN, etc.) with a major in nursing and eligibility to apply for licensure as an RN. The program requires at least four years but not more than five years of full-time equivalent college academic work within in a senior college or university (NFSNWC, 2020).

**Diploma Program:** A program of instruction that requires two to three years of full-time equivalent coursework, usually within a hospital-based structural unit, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an RN (NFSNWC, 2020).

**DNP Program:** A program of instruction that prepares graduates for the highest level of nursing practice beyond the initial preparation in the discipline. The doctor of nursing practice degree is the terminal practice degree (NFSNWC, 2020).

**Full-time Faculty:** Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed full-time as defined by the institution, hold academic rank, carry the full scope of faculty responsibility (e.g., teaching, advisement, committee work), and receive the rights and privileges associated with full-time employment. These faculty may be tenured, tenure-track, or non-tenure track (if there is a tenure system in the institution) (NFSNWC, 2020).

**Graduates:** A count of the number of students who successfully completed the program requirements and were formally awarded the degree during the Reporting Period (NFSNWC, 2020).

**PN Program:** A program of instruction that requires at least one year of full-time equivalent coursework generally within a high school, vocational/technical school or community/junior college setting, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an LPN/VN (NFSNWC, 2020).

**MSN Program—Clinical Track:** A post-licensure master’s program with emphasis on advanced clinical practice, including Nurse Practitioner, Nurse Anesthetist, Nurse Midwifery, and Clinical Nurse Specialist tracks (NFSNWC, 2020).

**MSN Program—Non-clinical Track:** A post-licensure master’s program with non-clinical emphasis, such as Nurse Educator and Management/Leadership tracks (NFSNWC, 2020).

**New Enrollees:** A count of the Admitted Applicants who subsequently enrolled for the first time in the nursing program during the Reporting Period (NFSNWC, 2020).

**NCLEX Pass Rate:** The percentage of first-time candidates for the National Council Licensure Examination (PN or RN) who pass the exam. This percentage can be computed in any time period that accommodates quarters, such as a fiscal year or calendar year. The National Council of State Boards of Nursing (NCSBN) produces quarterly reports of NCLEX results by program, including the number of first-time candidates and the number who pass. The NCLEX pass rate can be computed by summing the candidates and passers across the necessary quarters before dividing to produce the percentage. NCLEX pass rates for calendar years are computed by the NCSBN (NFSNWC, 2020).

**Other doctoral program:** Please combine information for any post-licensure doctoral programs conferring degrees other than the PhD or the DNP (NFSNWC, 2020).

**Part-Time Faculty:** Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed part-time as defined by the institution, may or may not hold academic rank, carry responsibility for a specific area (e.g., teaching a single course), and may carry any number of titles (e.g., adjunct, clinical instructor). These faculty members are typically not eligible for tenure (NFSNWC, 2020).

**PhD Program:** A post-licensure doctoral program that culminates in the Doctorate of Philosophy in Nursing (NFSNWC, 2020).

**Qualified Applicants:** A count of the individuals who submitted complete applications on time and who met all institutional requirements for formal admission to the nursing program during the Reporting Period (NFSNWC, 2020).

**Reporting Period:** The most recently completed state-defined twelve-month reporting period. Questions about the production cycle of a nursing program, such as the number of qualified applicants or graduates, will use this one-year time frame. States may use a reporting period that best suits their needs. Many currently use the Academic Year, defined as Fall, Spring, and Summer semesters (NFSNWC, 2020).

**Seats for New Students:** A count of the total number of seats available for newly admitted students during the Reporting Period (NFSNWC, 2020).

**Total student enrollment:** A count of the number of students enrolled on the fall semester census date (NFSNWC, 2020).

## NURSING SUPPLY

**Active License:** A license that is up to date on all licensure and/or renewal requirements (NFSNWC, 2017).

**Advanced Practice Registered Nurse:** A nurse who has obtained a license to practice as an APRN in one of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), clinical nurse specialist (CNS), or certified nurse practitioner (CNP) (NFSNWC, 2017).

**Certified Nurse Midwife (CNM):** Provides a full range of primary health care services to women throughout the lifespan, including gynecologic care, family planning services, preconception care, prenatal and postpartum care, childbirth, and care of the newborn. The practice includes treating the male partner of their female clients for sexually transmitted disease and reproductive health. This care is provided in diverse settings, which may include home, hospital, birth center, and a variety of ambulatory care settings including private offices and community and public health clinics.

**Certified Nurse Practitioner (CNP):** For the certified nurse practitioner (CNP), care along the wellness-illness continuum is a dynamic process in which direct primary and acute care is provided across settings. CNPs are members of the health delivery system, practicing autonomously in areas as diverse as family practice, pediatrics, internal medicine, geriatrics, and women's health care. CNPs are prepared to diagnose and treat patients with undifferentiated symptoms as well as those with established diagnoses. Both primary and acute care CNPs provide initial, ongoing, and comprehensive care, including taking comprehensive histories, providing physical examinations and other health assessment and screening activities, and diagnosing, treating, and managing patients with acute and chronic illnesses and diseases. This includes ordering, performing, supervising, and interpreting laboratory and imaging studies; prescribing medication and durable medical equipment; and making appropriate referrals for patients and families. Clinical CNP care includes health promotion, disease prevention, health education, and counseling as well as the diagnosis and management of acute and chronic diseases. Certified nurse practitioners are prepared to practice as primary care CNPs and acute care CNPs, which have separate national consensus-based competencies and separate certification processes.

**Certified Registered Nurse Anesthetist (CRNA):** Prepared to provide the full spectrum of patients' anesthesia care and anesthesia-related care for individuals across the lifespan, whose health status may range from healthy through all recognized levels of acuity, including persons with immediate, severe, or life-threatening illnesses or injury. This care is provided in diverse settings, including hospital surgical suites and obstetrical delivery rooms; critical access hospitals,

acute care; pain management centers, ambulatory surgical centers; and the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons.

**Clinical Nurse Specialist (CNS):** A unique APRN role to integrate care across the continuum and through three spheres of influence: patient, nurse, system. The three spheres are overlapping and interrelated, but each sphere possesses a distinctive focus. In each of the spheres of influence, the primary goal of the CNS is continuous improvement of patient outcomes and nursing care. Key elements of CNS practice are to create environments through mentoring and system changes that empower nurses to develop caring, evidence-based practices to alleviate patient distress, facilitate ethical decision making, and respond to diversity. The CNS is responsible and accountable for diagnosis and treatment of health/illness states, disease management, health promotion, and prevention of illness and risk behaviors among individuals, families, groups, and communities.

**Highest level of education in nursing:** The highest degree obtained in nursing (NFSNWC, 2017).

**Inactive (in regard to licensure):** A license that was not renewed or a license placed on inactive status at the request of the licensee (NFSNWC, 2017).

**Licensed Practical Nurse or Licensed Vocational Nurse (LPN/LVN):** An individual who holds a current license to practice as a practical or vocational nurse in at least one jurisdiction of the United States (NFSNWC, 2017).

**Part-time:** An individual employed less than full time or less than a full work week, as defined by the employer (NFSNWC, 2017).

**Per diem:** An arrangement wherein a nurse is employed directly on an as-needed basis and usually has no benefits (NFSNWC, 2017).

**Registered Nurse (RN):** An individual who holds a current license to practice within the scope of professional nursing in at least one jurisdiction of the United States (NFSNWC, 2017).

**Rural:** Rural consists of all territory, population, and housing units located outside UAs and UCs (census.gov).

**Urban areas (UA):** Represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses, containing a minimum population of 50,000 (census.gov).

**Urban Clusters (UC):** Areas that have a population of 2,500 to 50,000 (census.gov).

## NURSING DEMAND

**Acute Care Hospitals:** Short-term federal, state, or private hospitals, including inpatient and all outpatient (e.g., Emergency Department) units (NFSNWC, 2020).

**Contract nursing—**“Contract” nurses are not regular employees of a provider agency. These nurses work through a contractual employment agreement that exists between either [1] the provider agency and the nurse directly or [2] through the provider agency and an employment staffing agency in business to supply staffing needs to provider agencies. In turn, the employment staffing agency employs the nurse who works to fulfill the contractual obligation between the provider agency and the staffing agency. These contracted nurses have a contractual employment agreement for a defined time period. The contract defines the employment relationship and issues of license, malpractice insurance, hours of work, scope of work, payment methods and benefits for the defined time period (NFSNWC, 2020).

**Employed in nursing:** A nurse who receives compensation for work that requires licensure and/or educational preparation as a nurse (Interagency Collaborative on Nursing Statistics [ICONS], 2018).

**Employment Setting:** The setting in which nursing personnel provide nursing services. See examples below. The following definitions are retrieved from a variety of sources (ICONS, 2018).

**Ambulatory Care:** Health services or acute care services that are provided on an outpatient basis. For example, Solo practice, Group practice, Ambulatory surgical center (non-hospital-based), Dental practice, Health Maintenance Organization (HMO), or Urgent care clinic.

**Camp:** A sustained camp experience that provides creative, recreational, and educational opportunities in group living in the outdoors. It utilizes trained leadership and the resources of natural surroundings to contribute to each camper's mental, physical, social, and spiritual growth.

**Clinic or Office:** Medical facilities where on-staff or contracted physicians and other healthcare professionals treat patients who do not require admission to a hospital and whose medical issues are not severe enough to warrant a visit to the emergency department.

**Community Based Group Home:** A facility that offers children and adults with intellectual and developmental disabilities the opportunity to live as independently as possible in the communities of their choice; provide 24/7 staff support, expert clinical services, and opportunities for individual growth.

**Drug/Alcohol Treatment Facility:** Provides care 24 hours a day, generally in non-hospital settings; have lengths of stay of between 6 and 12 months; focus on the "resocialization" of the individual, and use the program's entire community—

including other residents, staff, and the social context—as active components of treatment.

**Home Health Setting:** Nurses in this specialty provide care for people in their homes, such as those recovering from illness, an accident, or childbirth.

**Hospital (Acute Inpatient Care):** Health care institutions that have an organized medical and other professional staff, and inpatient facilities, and deliver medical, nursing and related services 24 hours per day, 7 days per week.

**Managed Care Facility:** Facility where health care is provided in return for a predetermined monthly fee and coordinate care through a defined network of physicians and hospitals.

**Military or Federal:** The Military Health System (MHS) is a global, comprehensive, integrated system that includes combat medical services, peacetime health care delivery, public health services, medical education and training, and medical research and development. The MHS serves diverse populations in every imaginable health care setting.

**Nursing Education Program:** The nurse educator role requires specialized preparation to advance the nursing profession by instructing nursing students through academic training in preparation for nursing licensure.

**Nursing Home Extended Care Facility:** An institution devoted to providing medical, nursing, or custodial care for an individual over a prolonged period, such as during a chronic disease or the rehabilitation phase after an acute illness.

**Occupational Health:** Occupational health deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards.

**Public/Community Health Service:** Public health is defined as the science of protecting the safety and improving the health of communities through education, policy making and research for disease and injury prevention.

**Psychiatric/Mental Health/Substance Abuse:** Nurses in this specialty aid and support the mental health of patients with acute or chronic psychiatric needs; pain management nurses help regulate medications and provide care for those addicted to drugs or alcohol, or who are suffering from other types of substance abuse.

**Regulatory Agency:** Central or regional office of Federal agency, State Board of Nursing, Health planning agency, or Workforce Center.

**School/Student Health Service:** A comprehensive school health program is an integrated set of planned, sequential, school-affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students.

**Employment position/position title:** The position some individual holds at their place of employment (NFSNWC, 2020):

**Advanced Practice Registered Nurse:** A nurse who has obtained a license to practice as an APRN in one of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), clinical nurse specialist (CNS), or certified nurse practitioner (CNP).

**Nurse Consultant:** A professional who provides advice or expertise in the field of nursing regarding such issues as nursing education, nurse staffing, nurse policy, etc.

**Nurse Researcher:** An individual who conducts research in the field of nursing.

**Nurse Executive:** Involved with management and administration concerns. They provide leadership roles in the designing of care, the planning and developing of procedures and policies, and administration of budgets in hospitals, health clinics, nursing homes, and ambulatory care centers.

**Nurse Manager:** An individual who has a line management position with 24-hour accountability for designated patient care services which may include operational responsibility for patient care delivery, fiscal and quality outcomes.

**Nurse Faculty/Educator:** Nurse faculty are individuals employed by a school of nursing or other type of nursing education program and are generally involved in teaching, research and service. Nurse educators provide education to nurses and other healthcare professionals in nonacademic settings such as hospitals.

**Staff Nurse:** A nurse in direct patient care who is responsible for the treatment and well-being of patients.

**Case Manager:** Case management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective outcomes.

**Endorsement (Licensure by Endorsement):** A nurse licensed in one jurisdiction by meeting additional requirements for licensure in a second jurisdiction (ICONS, 2018).

**Full-time:** An individual employed for a full work week as defined by the employer.

**Full-time Equivalent Positions (FTEs):** A count of positions including both full-time and part-time employees which can be computed in two ways (NFSNWC, 2020):

1. Add total FTEs. For example, if there are five full-time RNs (1.0 FTE each), three half-time RNs (0.5 FTE each), and one quarter-time Staff RN (0.25 FTE), the total FTEs for RNs =  $5.0 + 1.5 + 0.25 = 6.75$ .



2. Divide the total hours worked in a week for that job type by the number of hours in a standard work week. For example, if there are 270 RN hours worked in your hospital in a week, and an FTE at your institution is 40 hours, RNs = 6.75 FTEs (270 hours / 40 hours).

**Nursing Aides (NAs/CNAs):** Individuals who assist nursing staff in the provision of basic care to clients and who work under the supervision of licensed nursing personnel. Included in, but not limited to, this category are nurse aides, nursing assistants, orderlies, attendants, personal care aides, medication technicians, unlicensed assistive personnel and home health aides (OLTC, 2018).

## **Appendix B: Links to Minimum Data Sets (MDSs)**

### **Nursing Education Minimum Data Set**

[https://nursingworkforcecenters.org/wp-content/uploads/2021/12/Nurse Education MDS Revised December2020.pdf](https://nursingworkforcecenters.org/wp-content/uploads/2021/12/Nurse_Education_MDS_Revised_December2020.pdf)

### **Nursing Supply Minimum Data Set**

[http://nursingworkforcecenters.org/wp-content/uploads/2016/11/National-Forum-Supply-Minimum-Dataset\\_September-2016.pdf](http://nursingworkforcecenters.org/wp-content/uploads/2016/11/National-Forum-Supply-Minimum-Dataset_September-2016.pdf)

### **Nursing Demand Minimum Data Set**

[https://nursingworkforcecenters.org/wp-content/uploads/2021/12/Nurse Demand MDS RevisedDecember2020.pdf](https://nursingworkforcecenters.org/wp-content/uploads/2021/12/Nurse_Demand_MDS_RevisedDecember2020.pdf)

Appendix C: Nurse Employer Perception Survey (Arkansas Center for Nursing, 2020)



**Demographics**

Facility Name

Facility Type

- ☐ Hospital
- ☐ Nursing Home/ Extended Care Facility
- ☐ Home Health/Hospice
- ☐ Physician Office/Urgent Care Clinic
- ☐ Other

Name and Title of the Person Completing the Survey

Email Address of Person Completing the Survey

Telephone Number of Person Completing the Survey

## Nurse Employer Perceptions

How would you rate the overall labor market in your area for new graduate RNs?

- ☐ High Demand: Difficult to fill open positions
- ☐ Moderate Demand: Some difficulty filling open positions
- ☐ Demand is in balance with supply
- ☐ Demand is less than supply available Demand is much less than supply available

Of the positions that you desire to fill with new graduate RNs, which positions are the hardest to fill with new graduate RNs?

How would you rate the overall labor market in your area for experienced RNs?

- ☐ High Demand: Difficult to fill open positions
- ☐ Moderate Demand: Some difficulty filling open positions
- ☐ Demand is in balance with supply
- ☐ Demand is less than supply available
- ☐ Demand is much less than supply available

Of the positions that you desire to fill with experienced RNs, which positions are the hardest to fill with experienced RNs?

How has the use of temporary/traveling RNs changed in the past year?

- ☐ Increased employment of temporary/traveling RNs
- ☐ No change
- ☐ Decreased employment of temporary/traveling RNs

In what areas do you see the most use of temporary/traveling RNs?

How many internationally educated RNs do you employ?

How has the use of internationally educated RNs changed in the past year?

- ☐ Increased employment of internationally educated RNs
- ☐ No change
- ☐ Decreased employment of internationally educated RNs

What are the hiring requirements or preferences for RNs in your facility?

- ☐ No specific requirements
- ☐ Baccalaureate degree preferred
- ☐ Baccalaureate degree required
- ☐ Minimum experience requirement

Over the next year, do you expect to see a change in your hiring of RNs?

- ☐ Hire fewer than last year
- ☐ No change
- ☐ Hire more than last year

Why do you anticipate hiring more RNs over the next year?

Why do you anticipate hiring fewer RNs over the next year?

Over the next year, do you expect to see a change in your hiring of new graduate RNs?

- ☐ Hire fewer than last year
- ☐ No change
- ☐ Hire more than last year

Why do you anticipate hiring more new graduate RNs over the next year?

Why do you anticipate hiring fewer new graduate RNs over the next year?

## Issues/Trends in Nursing

How would you describe the impact of the COVID pandemic on the overall labor market in your area for experienced RNs?

- ☐ High Demand: Difficult to fill open positions
- ☐ Moderate Demand: Some difficulty filling open positions
- ☐ Demand is in balance with supply
- ☐ Demand is less than supply available
- ☐ Demand is much less than supply available

What would you describe as the contributing factors to any changes in the labor market in your area?

Are there any nursing workforce issues that you would like for the Arkansas Center for Nursing to explore in the near future?

