The South Carolina Certified Registered Nurse Anesthetist Workforce | 2022

September 2025



www.scahec.net/scohw

Report Preparation

This document was produced by the South Carolina Office for Healthcare Workforce (SCOHW) – a part of the South Carolina Area Health Education Consortium (SC AHEC) in Charleston, South Carolina. It contains information about the certified registered nurse anesthetists actively employed as nurses in South Carolina as reported by the nurses themselves during their biennial license renewal process ending on April 30, 2022.

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

Corresponding Author: Cate Campbell, MPH | campcath@musc.edu

Suggested Citation

Campbell C, Gaul K. The Certified Registered Nurse Anesthetist Workforce in South Carolina, 2022. Charleston: South Carolina AHEC, South Carolina Office for Healthcare Workforce. September 2025. Retrieved from https://www.scahec.net/scohw/reports/147

Acknowledgments

The SCOHW team would like to thank the following offices and individuals for their role in making this report possible:

- South Carolina Department of Labor, Licensing and Regulation, Division of Professional and Occupational Licensing Boards and the South Carolina Board of Nursing for the organization and administration of the licensure data collection process
- South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Division, Health Resources section (Byron Kirby, Josephine Wilson-King, Tamara "Nikki" Peoples, and Ciara Andrews), for managing the licensure data files and ensuring the integrity and consistency of these files over time
- · Bo Fu, SC AHEC, for assistance with data cleaning

About the South Carolina Office for Healthcare Workforce

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





Table of Contents

Executive Summary	i
Introduction	1
Methods/Data	1
Trends in CRNA Supply and Distribution, 2012-2022	2
Demographic Characteristics of the CRNA Workforce	5
CRNA Education	6
CRNA Employment and Practice	7
CRNA Practice Hours	7
CRNA Practice Settings	7
CRNA Years Licensed	8
CRNA Wages	9
Demand for CRNAs	10
Conclusions	11
References	12

Executive Summary

Nurses are the largest group of healthcare workers in the United States and South Carolina (SC). This report, produced by the South Carolina Office for Healthcare Workforce (SCOHW) at the South Carolina Area Health Education Consortium (AHEC), describes the Certified Registered Nurse Anesthetist (CRNA) workforce in SC using data from the nursing licensure renewal process ending on April 30, 2022.

Data Highlights

- **Supply:** In 2022, there were 1,298 CRNAs practicing in SC. This is an increase of 94 CRNAs since 2020 and 341 since 2012.
- **Demographics:** The median age of SC CRNAs was 46 years, and 49% were 45 or younger. The majority of CRNAs (88%) identified as White and 67% identified as female.
- **Education:** In 2022, 74% of CRNAs in SC had a master's degree and 10% had a doctorate.
- Employment: Most SC CRNAs (77%) worked in an inpatient hospital setting in 2022. The median length of time that CRNAs had held their SC RN license was 9 years. Most CRNAs (60%) reported working between 33 and 40 hours per week.
- **Demand:** CRNAs are expected to experience 15% growth in employment between 2022 and 2032.

Key Takeaways

CRNAs are essential members of the healthcare workforce, specializing in the delivery of anesthesia and the management of patient care before, during, and after surgical, obstetrical, and diagnostic procedures. Their broad scope of practice enables them to work in a variety of clinical environments including hospitals, ambulatory surgical centers, dental offices, military settings, and pain management clinics. Their growth in supply and increasing educational preparation enhance the state's capacity to meet rising healthcare needs. However, geographic disparities in distribution and ongoing growth in demand highlight the need for continued workforce monitoring and strategic planning.

The data in this report represent the activity status and practice location of **CRNAs** in South Carolina in 2022, during the midst of the COVID-19 pandemic. Due to the disruptive influence of the pandemic on the healthcare services and employment patterns of health professionals, caution should be used in interpreting these data for current conditions.

Introduction

Certified registered nurse anesthetists (CRNAs) are advanced practice registered nurses (APRNs) who specialize in delivering anesthesia and managing patient care throughout the surgical process. They are involved before, during, and after a variety of procedures. Prior to a procedure, they review a patient's medical history, including current medications, allergies, and underlying conditions, to ensure anesthesia is administered safely. Depending on the type of procedure, they may deliver general anesthesia to induce unconsciousness or regional and local anesthesia to numb specific parts of the body. Throughout the procedure, CRNAs closely monitor the patient's vital signs and make real-time adjustments to the anesthesia to maintain stability and comfort. CRNAs also provide pain management services and, in some settings, emergency care.¹

CRNAs are one of four types of APRNs – also including nurse practitioners (NPs), clinical nurse specialists (CNSs), and certified nurse midwives (CNMs). CRNAs make up the second largest proportion of APRNs in SC (19.4%), behind NPs (79%).

CRNAs must hold a valid RN license, complete an accredited CRNA education program, and be certified by a board-approved national certifying organization.² CRNA education programs typically require applicants to have one or two years of experience in acute care or critical care nursing.³ In 2007, the American Association of Nurse Anesthesiology (AANA) published a position paper supporting the transition to a doctoral degree for entry into CRNA practice. The Council of Accreditation of Nurse Anesthesia Educational Programs (COA) formalized this position by establishing that no new master's degree CRNA programs would be accredited after 2015, all students entering CRNA programs must be enrolled in doctoral-level programs as of January 1, 2022, and all CRNA graduates entering practice must hold a doctoral degree by January 1, 2025.⁴ CRNAs who were licensed with a master's degree before January 1, 2025 are allowed to continue practicing, since they met the educational requirements in place at the time their license was granted.

CRNAs may bill for services under Medicare, Medicaid, and private insurers, similar to physicians, physician assistants, and other providers.⁵

Methods/Data

Licensure data were obtained from the South Carolina Revenue and Fiscal Affairs (RFA) Office, the official repository of data collected by the state's licensing boards under the South Carolina Department of Labor, Licensing and Regulation (LLR). All data were self-reported to the South Carolina Board of Nursing (SCBON) by CRNAs during the biennial nursing license renewal period ending on April 30, 2022.

The 2022 CRNA workforce described in this report includes only active licensees with an APRN license indicating a primary practice location in South Carolina and who were currently employed in nursing in 2022. Prior to 2020, CRNAs with a South Carolina license who were employed in a federal or military setting could be identified in the licensure file and excluded from analysis. Starting in 2020, federal and military CRNAs are no longer identifiable, so they are included in this report.

Trends in CRNA Supply and Distribution, 2012-2022

In 2022, there were 1,298 CRNAs practicing in South Carolina, a 35.6% increase since 2012 (Table 1). The number of CRNAs increased in metropolitan and micropolitan counties, but decreased in non-metropolitan counties. Figures 1 and 2 show the distribution of CRNAs across the state.

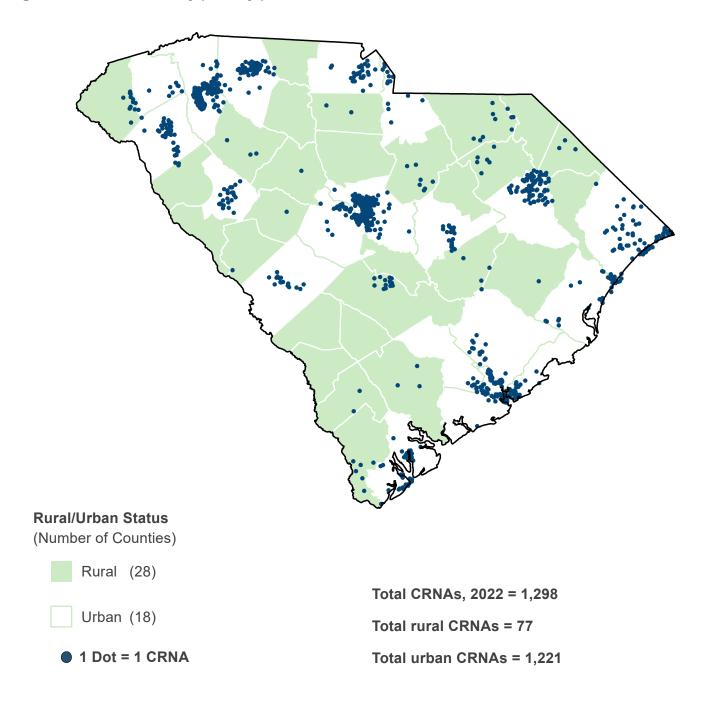
Table 1. Changes in the size of the South Carolina CRNA workforce, 2012-2022.

Metropolitan counties (n = 26 counties)	867	924	992	1,058	1,114	1,201	38.5%
Micropolitan counties (n = 7 counties)	65	70	80	79	75	76	16.9%
Non-metropolitan counties (n = 13 counties)	25	20	19	15	15	21	-16.0%
Total state (n = 46 counties)	957	1,014	1,091	1,152	1,204	1,298	35.6%
Metropolitan counties	2.2	2.2	2.3	2.4	2.5	2.7	24.2%
Micropolitan counties	1.4	1.5	1.8	1.7	1.6	1.8	28.8%
Non-metropolitan counties	1.0	0.8	0.7	0.6	0.6	0.7	-29.5%
Total state	2.0	2.1	2.2	2.3	2.3	2.5	23.4%
Metropolitan counties	4,006,331	4,119,187	4,252,203	4,377,070	4,515,013	4,467,738	11.5%
Micropolitan counties	455,626	455,028	454,776	457,114	457,548	413,499	-9.2%
Non-metropolitan counties	261,766	258,267	254,140	249,943	245,479	312,029	19.2%
Total state	4,723,723	4,832,482	4,961,119	5,084,127	5,218,040	5,193,266	9.9%

Note: Metropolitan and micropolitan statistical areas are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. A metropolitan area contains a core urban area of 50,000 or more population. A micropolitan area contains an urban core of at least 10,000 but less than 50,000 population. Each metropolitan or micropolitan area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration with the urban core (as measured by commuting to work). Any county that is not designated a metropolitan or micropolitan area is designated as a non-metropolitan area. These designations are based on 2020 delineations as updated in July 2023. See https://www.census.gov/programs-surveys/metro-micro/about/delineation-files.html for more information.

In previous reports in this series, only nonfederal nurses were included in the analyses. Prior to 2020, CRNAs employed in a federal or military setting could be identified in the licensure file and excluded from analysis.

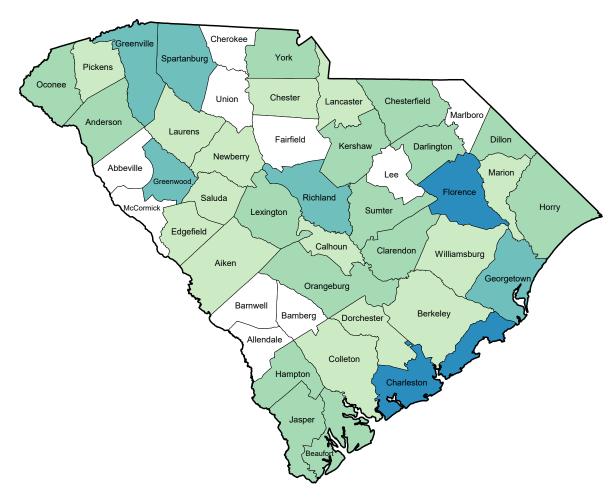




This information is based on all CRNAs with an active license to practice and a primary practice location in South Carolina as of 4/30/2022. Counts are based on best available self-reported practice location information. Dots are randomly scattered within the zip code area and may not represent the actual street address of the practice.

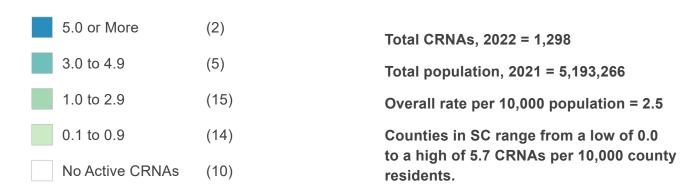
Source: SC Office for Healthcare Workforce, SC AHEC, with data collected by the SC Department of Labor, Licensing and Regulation (LLR) and obtained from the SC Revenue and Fiscal Affairs Office (RFA). Rural definition from the U.S. Census Bureau, Geography Division, https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html. Rural counties are those counties where 50% of more of the population lives outside an urbanized area based on the 2020 Census.

Figure 2. CRNAs per 10,000 population, South Carolina, 2022.



Number of CRNAs per 10,000 Population

(Number of Counties)



This information is based on all CRNAs with an active license to practice and a primary practice location in South Carolina as of 4/30/2022. Counts are based on best available self-reported practice location information.

Source: SC Office for Healthcare Workforce, SC AHEC, with data collected by the SC Department of Labor, Licensing and Regulation (LLR) and obtained from the SC Revenue and Fiscal Affairs Office (RFA). Population data (2021) provided by the Data Integration and Analysis Division of RFA, based on the Vintage 2022 Estimate Series from the U.S. Census Bureau.

Demographic Characteristics of the CRNA Workforce

Table 2 shows demographic characteristics of the CRNA workforce in 2012 and 2022. The workforce remained predominantly female, and the percentage of male CRNAs decreased from 36.1% in 2012 to 33.4% in 2022. The CRNA workforce in 2022 was slightly older than in 2012, with their median age increasing from 45 to 46. In 2012, 44.1% of CRNAs were 45 or younger, and in 2022 that percentage increased to 48.7%. The majority (88.4%) of CRNAs actively working in SC in 2022 identified as White.

Table 2. The CRNA workforce in South Carolina, 2012 and 2022.

	2012		2022	
	Count	Percent	Count	Percent
Total	957	100%	1,298	100%
Sex				
Female	612	63.9%	865	66.6%
Male	345	36.1%	433	33.4%
Missing	0	0.0%	0	0.0%
Race/Ethnicity				
African American	27	2.8%	41	3.2%
American Indian	3	0.3%	4	0.3%
Asian	11	1.1%	13	1.0%
Hispanic	4	0.4%	13	1.0%
Other	7	0.7%	9	0.7%
White	889	92.9%	1148	88.4%
Missing	16	1.7%	70	5.4%
Age				
25 or Younger	0	0.0%	0	0.0%
26-30	37	3.9%	37	2.9%
31-35	117	12.2%	172	13.3%
36-40	156	16.3%	230	17.7%
41-45	112	11.7%	193	14.9%
46-50	131	13.7%	205	15.8%
51-55	128	13.4%	150	11.6%
56-60	137	14.3%	128	9.9%
61-65	91	9.5%	97	7.5%
66-70	37	3.9%	66	5.1%
71-75	7	0.7%	16	1.2%
76 or Older	3	0.3%	4	0.3%
Missing	1	0.1%	0	0.0%
Median Age*	45 ye	ears	46 years	

^{*} Note: The median represents the midpoint of a set of data, where half of the datapoints fall below and half fall above the median.

CRNA Education

When nurses renew their license every two years, they are asked to indicate their original and highest nursing degrees. **Table 3** shows that most CRNAs in 2022 had an entry-level degree of a Baccalaureate Degree in Nursing (68.2%), followed by an Associate Degree in Nursing (24.7%). **Table 4** shows that 74.0% of CRNAs held a Master's Degree in Nursing and 9.5% held a Doctorate in Nursing (PhD, DNP, DNAP, or DNS) as their highest degree. The percentage holding a master's or doctorate degree has increased, while those with a nurse practitioner certificate has decreased.

Table 3. CRNA entry-level nursing degrees, SC, 2012 and 2022.

	Count	Percent	Count	Percent
Diploma		13.8%		4.6%
Baccalaureate Degree in Nursing		55.8%		
Other				

Table 4. CRNA highest nursing degree earned, SC, 2012 and 2022.

	2012		2022	
	Count	Percent	Count	Percent
NP Certificate Program	311	32.5%	110	8.5%
Master's Degree in Nursing	549	57.4%	961	74.0%
Doctorate	6	0.6%	123	9.5%
Missing	91	9.5%	104	8.0%

SCOHW / SC AHEC

CRNA Employment and Practice

CRNA Practice Hours

Table 5 shows the number of weekly hours worked by CRNAs. The median number of weekly hours worked was 40, with 60.3% of CRNAs reporting between 33 and 40 hours across primary and secondary practice locations.

Table 5. Total hours worked per week by CRNAs across primary and secondary practice locations, SC, 2022.

≤ 8	25	1.9%
17-24	61	4.7%
33-40	783	60.3%
49-56	72	5.5%
>72	12	0.9%

Table 6. CRNA practice settings, SC, 2022.

Hospital - Surgical Services (Inpatient and Outpatient)	487	37.5%
Ambulatory Surgery Center (Dedicated)	132	10.2%
Hospital - Inpatient (ICU, CCU, NICU, etc.)	49	3.8%
Hospital - Wide (Admin, Float, IT, etc.)	16	1.2%
Physician/Medical Office	11	0.8%
Community Health (Other Not Listed)	2	0.2%
Hospital – Subacute/LTAC/Rehab	2	0.2%
Rural Health Center	1	0.1%
Other	30	2.3%

CRNA Practice Settings

The majority of CRNAs (77.4%) reported their practice setting as inpatient hospital (all settings), 10.2% reported ambulatory surgery center, and 5.9% reported outpatient hospital (**Table 6**).

CRNA Years Licensed

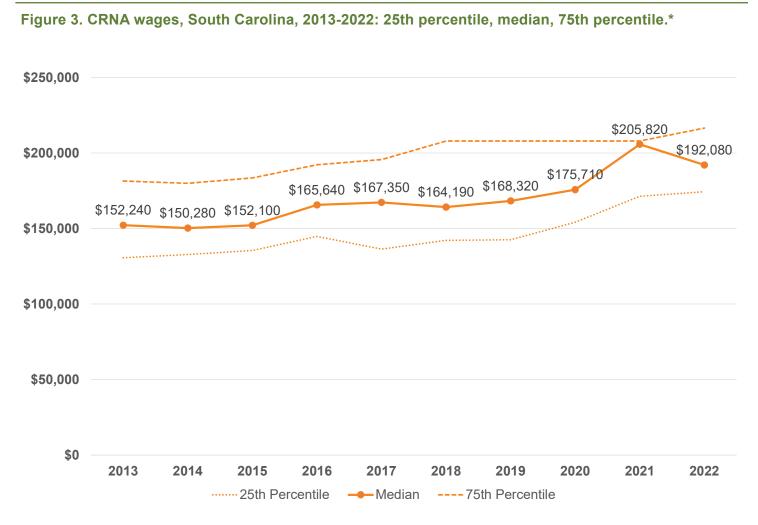
Nearly 30% of the CRNA workforce have held their SC RN license for five years or less, and 4.2% have held their SC RN license for more than 30 years (**Table 7**). At the completion of the 2022 renewal cycle, the median length of time that CRNAs had held their SC RN license was 9 years. The longest number of years a CRNA reported holding an active SC RN license was 34 years.

Table 7. Number of years since initial RN licensure was issued, 2022.

	In Any State		In SC	
Number of Years Licensed	Count	Percent	Count	Percent
≤ 5	1	0.1%	380	29.3%
6-10	85	6.5%	283	21.8%
11-15	142	10.9%	262	20.2%
16-20	227	17.5%	170	13.1%
21-25	202	15.6%	91	7.0%
26-30	132	10.2%	57	4.4%
≥ 31	257	19.8%	55	4.2%
Missing	252	19.4%	0	0.0%
Total	1,298	100.0%	1,298	100.0%

CRNA Wages

South Carolina nursing licensure data do not include wage information, but the U.S. Bureau of Labor Statistics tracks median annual salary. **Figure 3** shows the median annual salary of CRNAs in South Carolina from 2013-2022, as well as the 25th percentile and 75th percentile salaries. Wages grew relatively steadily from 2013 to 2019. From 2020-2021 they grew by 17.1% before falling back to \$192,080 in 2022.⁶



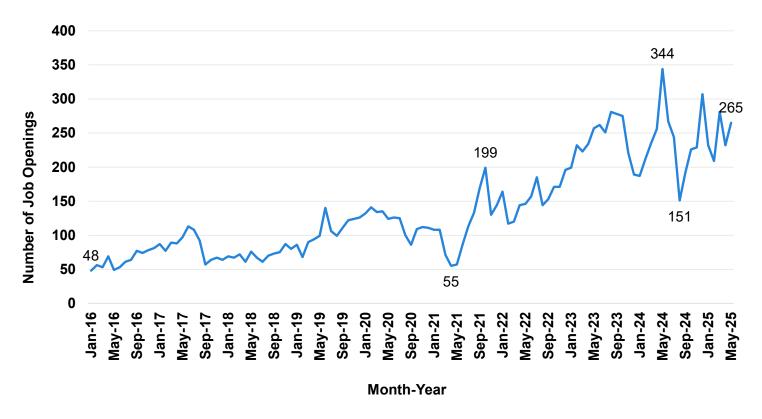
^{*} Note: The Bureau of Labor Statistics Occupational Employment Statistics (OES) program does not report wage estimates for occupations with an annual wage at or above a certain threshold. From 2018 to 2021, the annual wages for CRNAs at the 75th percentile met or exceeded this threshold (\$208,000), resulting in limited published wage data.

Source: Bureau of Labor Statistics, State Occupational Employment and Wage Estimates, https://www.bls.gov/oes/current/oes_sc.htm, retrieved 6/24/2025.

Demand for CRNAs

The South Carolina Department of Employment and Workforce (DEW) tracks employment data, including the number of job openings in the state. CRNAs are expected to experience 15% growth in employment between 2022 and 2032. Figure 4 shows the number of job openings for CRNAs in South Carolina by month from January 2016 to May 2025. From January 2016 to February 2020, the average number of job postings per month was 83. With the onset of the COVID-19 pandemic, that number fluctuated more, with a low of 55 in April 2021 and a high of 344 in May 2024, with an overall average of 181 job openings between March 2020 and May 2025. This increase in job postings could be due to the creation of new CRNA positions or higher job turnover.

Figure 4. Number of job openings for CRNAs in South Carolina, January 2016 - May 2025.



Source: South Carolina Department of Employment and Workforce, SC Works Online Services, https://jobs.scworks.org/vosnet/default. aspx, retrieved 6/24/2025.

Conclusions

The CRNA workforce in South Carolina has grown substantially over the past decade, with a 35.6% increase in the number of practicing CRNAs since 2012. This growth has occurred primarily in metropolitan and micropolitan areas, while the number of CRNAs practicing in non-metropolitan counties has declined. The workforce remains predominantly White and female, with a slight aging trend since 2012. Educational attainment has also increased, with a growing proportion of CRNAs holding doctoral degrees, in alignment with national accreditation standards.

Despite these positive trends in overall supply and educational advancement, geographic disparities persist. Non-metropolitan areas continue to experience low CRNA-to-population ratios, raising concerns about access to anesthesia care in rural communities. CRNAs are often the primary—or only—anesthesia providers in rural and underserved communities.^{8,9} Their presence increases surgical access and reduces delays in treatment, particularly in regions with physician shortages.^{10,11}

Labor market indicators, including job posting trends and wage data, suggest that demand for CRNAs has intensified in recent years, especially since the COVID-19 pandemic, highlighting the need for continued monitoring of workforce dynamics. With the 2025 deadline for doctoral preparation, it will be important to assess how these educational changes affect workforce supply and distribution in the years to come.

Understanding these trends is essential for informing workforce planning efforts, ensuring access to care, and supporting a resilient anesthesia workforce across South Carolina.

References

- 1. US Bureau of Labor Statistics. Nurse anesthetists, nurse midwives, and nurse practitioners. Accessed June 17, 2025. https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm
- 2. South Carolina Code of Laws, Section 40-33-34 (2023). https://www.scstatehouse.gov/code/t40c033.php
- 3. AANA American Association of Nurse Anesthesiology. How to become a CRNA. Accessed July 22, 2025. https://www.aana.com/about-us/about-crnas/become-a-crna/
- Council on Accreditation of Nurse Anesthesia Educational Programs. Standards for accreditation of nurse anesthesia programs. Accessed June 17, 2025. https://www.coacrna.org/wp-content/uploads/2020/01/ Standards-for-Accreditation-of-Nurse-Anesthesia-Programs-Practice-Doctorate-revised-October-2019. pdf
- Centers for Medicare and Medicaid Services. Advanced practice registered nurses (APRNs). Accessed
 October 23, 2024. https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-schedule/
 advanced-practice-nonphysician-practitioners/advanced-practice-registered-nurses-aprns
- 6. US Bureau of Labor Statistics. Occupational employment and wage statistics. Accessed June 24, 2025. https://www.bls.gov/oes/tables.htm
- 7. SC Works Online Services. Accessed June 24, 2025. https://jobs.scworks.org/vosnet/default.aspx
- 8. Menezes J, Zahalka C. Anesthesiologist shortage in the United States: A call for action. *J Med Surg Public Health*. 2024;2:100048. doi:10.1016/j.glmedi.2024.100048
- 9. Mills A, Sorensen A, Gillen E, et al. Quality, costs, and policy: Factors influencing choice of anesthesia staffing models. *J Healthc Manag.* 2020;65(1):45. doi:10.1097/JHM-D-18-00186
- 10. Chaudhary MA, Shah AA, Zogg CK, et al. Differences in rural and urban outcomes: A national inspection of emergency general surgery patients. *J Surg Res.* 2017;218:277-284. doi:10.1016/j.jss.2017.06.034
- 11. Cohen C, Baird M, Koirola N, Kandrack R, Martsolf G. The surgical and anesthesia workforce and provision of surgical services in rural communities: A mixed-methods examination. *J Rural Health*. 2021;37(1):45-54. doi:10.1111/jrh.12417

SCOHW is a division of South Carolina AHEC



www.scahec.net/scohw