

September 2024 | Data Brief

South Carolina's Medical Schools by the Numbers, 2023

Introduction

To understand the dynamics of physician supply, it is important to understand where, how, and how many medical students are educated in South Carolina. This brief describes basic, comparative information about the state's medical schools using data from the schools, the Association of American Medical Colleges (AAMC), and the American Association of Colleges of Osteopathy (AACOM).

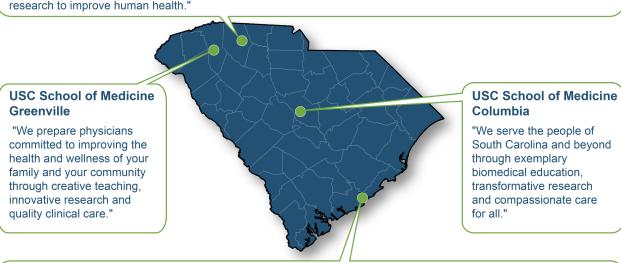
Location and Selected Characteristics

There are four medical schools in South Carolina (**Figure 1**). The Medical University of South Carolina College of Medicine (MUSC COM), University of South Carolina School of Medicine – Columbia (USC SOM Columbia), and University of South Carolina School of Medicine – Greenville (USC SOM Greenville) are allopathic medical schools with a focus on treating disease, and graduates receive a doctor of medicine (MD) degree. Graduates of the Edward Via College of Osteopathic Medicine – Carolinas Campus (VCOM CC) receive a doctor of osteopathic medicine (DO) degree. Osteopathic medical schools incorporate physical manipulation techniques and focus on holistic health. Graduates from both types of schools are eligible to obtain a license to practice full-scope medicine upon successfully completing graduate medical education (GME, also known as residency training).

Figure 1. Locations and Mission Statements of South Carolina's Medical Schools

Edward Via College of Osteopathic Medicine – Carolinas Campus

"The MISSION of the Edward Via College of Osteopathic Medicine (VCOM) is to prepare globally-minded, community-focused physicians to meet the needs of rural and medically underserved populations and promote research to improve human health."



Medical University of South Carolina

"The Medical University of South Carolina (MUSC) is South Carolina's only comprehensive academic health sciences system. Our purpose is to preserve and optimize human life in South Carolina and beyond. MUSC provides an interprofessional environment for learning, discovery, and healing through (1) education of health care professionals and biomedical scientists, (2) research in the health sciences, and (3) provision of comprehensive health care."

Sources: MUSC, USC SOM Columbia, USC SOM Greenville, VCOM CC websites, retrieved 3/10/2024.

Table 1 shows selected characteristics of each school in 2021-2022 and 2022-2023. MUSC COM is the state's oldest and largest medical school and admitted a higher percentage of students from South Carolina (83%)^a, compared to the other schools. USC SOM Greenville had the most diverse student body, with 57% of students identifying as female and 23% identifying as American Indian/Alaska Native, Black/African American, Hispanic, or Native Hawaiian/Pacific Islander. These racial and ethnic groups are considered under-represented minorities in medicine in the US.^{1,2}

Table 1. Selected Characteristics of South Carolina Medical Schools

	MUSC COM	USC SOM Columbia	USC SOM Greenville	VCOM CC	
Location ¹	Charleston	Columbia	Greenville	Spartanburg	
Public or Private ¹	Public	Public	Public	Private	
Type ¹	Allopathic	Allopathic	Allopathic	Osteopathic	
Year Founded ¹	1824	1977	2012	2011	
Year of First Graduating Class ¹	1826	1981	2016	2015	
Number of Applicants, 2022-2023 ^{2,3}	3,954	3,258	4,740	4,795	
% In State	13.9%	14.0%	10.5%	3.4%	
% Out of State	86.1%	85.7%	89.5%	96.6%	
Number of Matriculants, 2022-2023 ^{2, 3}	171	100	105	163	
% In State	83.0%	74.0%	58.1%	23.3%	
% Out of State	17.0%	26.0%	41.9%	76.7%	
Total Enrollment, 2022-2023 ^{2, 3}	738	399	434	627	
% Under-Represented Minority	18.2%	6.3%	22.6%	9.9%	
% Female	54.1%	47.4%	56.5%	57.4%	
Number in Graduating Class, 2021-2022 ^{2,3}	153	97	101	160	

Sources: ¹ MUSC COM, USC SOM Columbia, USC SOM Greenville, VCOM CC websites, retrieved 4/17/2023; ² AAMC retrieved 4/17/2023; ³ AACOM, retrieved 9/27/2023.

Between 2004-2019, the percentage of out-of-state students admitted to South Carolina allopathic schools increased, by 5.3% for MUSC COM and 10.7% for both USC SOM Columbia and Greenville^{b.3} However, according to AAMC's 2007-2021 biennial state physician workforce data reports, South Carolina has consistently ranked among the top three states for the highest percentage of in-state students matriculating to in-state allopathic schools. For the academic year 2020-2021, South Carolina had the second-highest in-state matriculation rate behind West Virginia, with 89% of entering students reporting South Carolina as their state of legal residence.⁴ VCOM is a private, multi-campus system with a regional focus. They strive to recruit students from and retain them in the Appalachian (which includes seven South Carolina counties⁵), Delta, and rural southern regions.⁶

Tracking in-state matriculation rates can be useful for justifying the state's investment in the public allopathic medical schools. However, in-state matriculation rates are not guaranteed predictors that physicians will stay to practice within South Carolina. AAMC reports that 45.7% of U.S. physicians (MD and DO) practicing in 2020 who had graduated from a South Carolina medical school were practicing within South Carolina.⁷

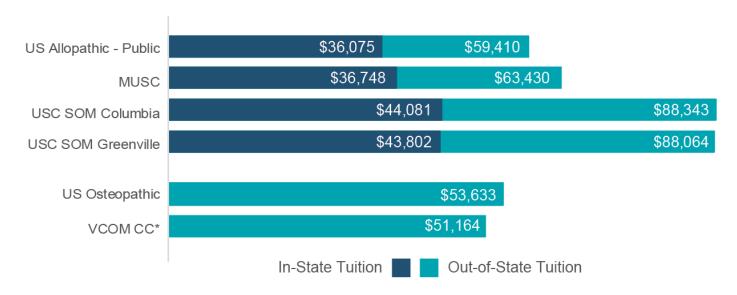
^a Use caution when comparing to data cited in news articles and other sources. The data included in Table 1 come from AAMC and AACOM and are effective for the 2022-2023 school year.

^b USC SOM Greenville's first class graduated in 2012, so the percent change here is calculated between 2012-2019.

Tuition

Tuition varies across the state by school, year, and public/private status (**Figure 2**). MUSC COM has the lowest tuition among the public medical schools and is comparable to the national yearly average for public allopathic schools. USC SOM Columbia's and Greenville's in-state tuition is slightly more than the national average, and their out-of-state tuition is nearly \$30,000 more than the national average. The VCOM system, like most osteopathic medical schools, is private and charges one rate of tuition for both in-state and out-of-state students. VCOM's tuition is slightly lower than the national average for all osteopathic medical schools. Tuition at VCOM CC is higher than in-state tuition at the three public medical schools, but lower than the other schools' out-of-state tuition.

Figure 2. Average Yearly Tuition and Fees for South Carolina Medical Schools, 2022-2026, and United States Medical Schools, 2022



Sources: MUSC COM, USC SOM Columbia, USC SOM Greenville, VCOM CC, AAMC, retrieved 4/17/2023; AACOM, retrieved 9/27/2023. Tuition reported here includes fees but excludes other expenses such as books, supplies, health insurance, and room and board. VCOM does not charge additional fees above tuition.

National Rankings

U.S. News releases Best Medical Schools Rankings each year, and they recently began including criteria based on data from the American Medical Association Physician Masterfile.^c The analyses for these selected criteria were conducted by the Robert Graham Center^d, a non-profit research arm of the American Academy of Family Physicians. Inclusion in the analysis was not dependent on a school's participation in the U.S News statistical survey.

In the 2023 Best Medical School Rankings, US allopathic and osteopathic schools were ranked according to the percentage of graduates between 2014-2016 who were practicing in 2022 and were:

1. **Practicing in primary care**, where a physician's primary specialty is reported as family medicine, general internal medicine, general pediatrics, general practice, internal medicine-pediatrics, or geriatrics;

^c For the current methodology on these metrics, see https://www.usnews.com/education/best-graduate-schools/articles/med-diversity-methodology, retrieved 7/28/2023.

d https://www.graham-center.org/home.html

- 2. **Practicing in a rural area**, defined as a nonmetropolitan county according to USDA Rural-Urban Continuum Codes; and
- 3. **Practicing in a medically underserved area**, defined as federally designated geographic or population Health Professional Shortage Areas (HPSAs).

Table 2 summarizes the results for the state's medical schools out of approximately 168 total medical schools^e. Note that the Rankings methodology aggregated all four VCOM campuses under the VCOM Blacksburg campus (labeled as VCOM System) as one data point^f; it was not possible to separate out the VCOM Carolinas Campus.

Table 2. South Carolina Medical Schools in U.S. News Best Medical School Rankings, 2023

	MUSC COM		USC SOM Columbia		USC SOM Greenville		VCOM System*	
	Rank	%	Rank	%	Rank	%	Rank	%
Graduates Practicing in Primary Care	93	23.5%	47	29.9%	9	39.6%	13	38.0%
Graduates Practicing in Rural Areas	75	4.0%	69	4.3%	68	4.4%	30	8.4%
Graduates Practicing in HPSAs	11	37.0%	5	40.4%	7	39.1%	24	30.9%

^{*}The Rankings methodology aggregated all four VCOM campuses under the VCOM Blacksburg campus as one data point; VCOM CC cannot be separated out. Source: U.S. News Best Medical School Rankings 2023, based on analyses from the Robert Graham Center, https://www.usnews.com/best-graduate-schools/top-medical-schools; Methodology: https://www.usnews.com/education/best-graduate-schools/articles/med-diversity-methodology, retrieved 7/28/2023. These rankings are updated regularly, and the data here will not match rankings at later dates.

Conclusions

Understanding the number of physicians educated in South Carolina medical schools is the first step in understanding the dynamics of physician supply. With the addition of VCOM-CC in 2011 and USC SOM Greenville in 2012, the state is graduating more than 500 new physicians each year. However, medical school is only one part of the education required to become a fully licensed and independent physician.

After completing medical school, graduates must complete a residency program before becoming fully licensed to practice as a physician. Fourth-year medical students are matched to residency training through a competitive, national market via the National Residency Match Program[®]. While the program strives to meet the preferences of both the students and the residency programs, students are not guaranteed to match with the specialty or the training location they want.

Simply knowing how many medical graduates South Carolina's medical schools produce does not indicate how many physicians will stay in the state to complete their residency or fellowship training or how many will stay or come back to practice in the state once they have completed residency training.

Related briefs⁹ explore Match data to understand where and in what locations South Carolina medical graduates match to residency programs, the number of available entry-level (PGY-1) residency positions, and other information to better understand the medical education landscape in South Carolina.

^e The total number of schools ranked in 2023-2024 was not captured. As of 9/4/2024, there were 168 medical schools ranked for percent of graduates practicing in medically underserved areas and rural areas, and 169 schools ranked for percent of graduates practicing in primary care.

f Personal communication with Hoon Byun, economist at the Robert Graham Center, September 11, 2023.

⁹ Additional reports on medical education outcomes in South Carolina are available at https://www.scahec.net/scohw.html.

Data Sources

Figure 1: Mission statements, retrieved 3/10/2024:

- MUSC: https://web.musc.edu/about/mission
- USC SOM Columbia: https://sc.edu/study/colleges-schools/medicine/about-the-school/mission-values-priorities/index.php
- USC SOM Greenville: https://sc.edu/study/colleges_schools/medicine_greenville/about/mission.php
- VCOM: https://www.vcom.edu/about/mission-and-goals; mission is system-wide and applies to all campuses

Table 1: Selected Characteristics of South Carolina Medical Schools

- 1. Location, public/private, type, retrieved 4/19/2023
 - o MUSC COM: https://web.musc.edu/about/mission
 - USC SOM Columbia: https://sc.edu/study/colleges/schools/medicine/about/the/school/mission/index.php
 - USC SOM Greenville: https://sc.edu/study/colleges_schools/medicine_greenville/about/mission.php
 - VCOM CC: https://www.vcom.edu/about/mission-and-goals; mission is system-wide and applies to all campuses
- 2. Allopathic applicants, matriculants, enrollment, graduates
 - AAMC. 2022 FACTS: Applicants and Matriculants Data. https://www.aamc.org/data-reports/students-residents/data/2022-facts-applicants-and-matriculants-data, retrieved 4/18/2023.
 - Table A-1. U.S. Medical School Applications and Matriculants by School, State of Legal Residence, and Gender, 2022-2023.
 - o AAMC. 2022 FACTS: Enrollment, Graduates, and MD-PhD Data. https://www.aamc.org/data-reports/students-residents/data/2022-facts-enrollment-graduates-and-md-phd-data, retrieved 4/17/2023.
 - Table B-1.2. Total Enrollment by U.S. Medical School and Gender, 2018-2019 through 2022-2023
 - Table B-5.2. Total Enrollment by U.S. Medical School and Race/Ethnicity (Alone or In Combination), 2022-2023.
 - Table B-2.2. Total Graduates by U.S. Medical School, Gender and Year, 2017-2018 through 2021-2022.
 - Table 1. Applicants, Matriculants, Enrollment, and Graduates to U.S. Medical Schools, 2013-2014 through 2022-2023.
- 3. Osteopathic applicants, matriculants, enrollment, graduates
 - AACOM. https://www.aacom.org/searches/reports
 - Applicants (1977-2022) and Matriculants (2009-2022) by Gender. Date: June 7, 2023.
 Retrieved 9/27/2023.
 - Applicants & Matriculants by Legal State of Residency & COM 2009-2022. Date: January 13, 2023. Retrieved 7/20/2023.
 - Applicants & Matriculants by Gender & COM 2009-2022. Date: June 2, 2023. Retrieved 7/20/2023.
 - Osteopathic Medical College Total Enrollment by Race/Ethnicity 2000-2023. Date: September 13, 2023. Retrieved 9/27/2023.
 - Osteopathic Medical College Graduates by Race/Ethnicity 2000-2022. Date: May 3, 2023. Retrieved 9/27/2023.
 - 2022-23 Osteopathic Medical College Total Enrollment by Gender and Race/Ethnicity. Date: September 13, 2023. Retrieved 9/27/2023.

Figure 2: Tuition, retrieved 4/19/2023 unless otherwise noted:

• MUSC COM (as of 3/28/2023): https://education.musc.edu/students/enrollment/financial-aid/financial-aid-application-process/cost-of-attendance/medicine. Tuition increases each year - see website for details.

- USC SOM Columbia: https://sc.edu/study/colleges_schools/medicine/education/md_program/tuition/index.php
- USC SOM Greenville
 https://sc.edu/study/colleges schools/medicine greenville/financial aid/tuition expenses/index.php
- VCOM tuition: https://vcom.cld.bz/VCOM-College-Catalog-and-Student-Handbook/II/
- AAMC. 2013-2023 Tuition and Student Fees Report. https://www.aamc.org/media/8381/download
- AACOM. 2021-22 Osteopathic Medical College Cost of Attendance.
 https://www.aacom.org/searches/reports/report/2021-22-COA Excel, retrieved 9/27/2023. VCOM's tuition is posted for the current year, subject to change based on Board decisions. Average yearly tuition was calculated by the author to estimate a 1.8% annual increase for years 3 and 4.

Table 2. South Carolina Medical Schools in U.S. News Best Medical School Rankings, 2023-2024

- U.S. News Best Medical School Rankings 2023-2024, based on analyses from the Robert Graham Center, https://www.usnews.com/best-graduate-schools/top-medical-schools, retrieved 7/28/2023.
- Methodology: https://www.usnews.com/education/best-graduate-schools/articles/med-diversity-methodology, retrieved 7/28/2023.

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Suggested citation

Gaul K. South Carolina's Medical Schools by the Numbers, 2023. Charleston, SC: South Carolina Office for Healthcare Workforce, South Carolina Area Health Education Consortium. September 2024.

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¹ AAMC. FACTS Glossary: Underrepresented in Medicine (URiM). https://www.aamc.org/data-reports/students-residents/data/facts-glossary, retrieved 9/27/2023.

² AACOM. Osteopathic Medical College Graduates by Race/Ethnicity. May 3, 2023.
https://www.aacom.org/searches/reports/reports/report/COMGradbyRE_2000-23_PDF, retrieved 9/27/2023, link updated 9/26/2024.

³ Kraus MB, Hasan SH, Buckner-Petty SA, Files JA, Hayes SN, Habermann EB, LeMond LM. Out-of-State Students at State Medical Schools and Increasing Medical Education Debt. *Academic Medicine*. 2023;98(5):595-605. doi: 10.1097/ACM.00000000000005079.

⁴ AAMC. 2021 State Physician Workforce Data Report. Table 2.4. Washington, DC: AAMC; 2021. https://store.aamc.org/2021-state-physician-workforce-data-report.html, retrieved 7/28/2023.

⁵ Appalachian Regional Commission. Appalachian Counties Served by ARC. https://www.arc.gov/appalachian-counties-served-by-arc/, retrieved 8/2/2023.

⁶ Our Goals. VCOM. https://www.vcom.edu/about/mission-and-goals, retrieved 7/25/2023.

⁷ AAMC. AAMC. 2021 State Physician Workforce Data Report. Table 4.1. Washington, DC: AAMC; 2021. https://store.aamc.org/2021-state-physician-workforce-data-report.html, retrieved 7/28/2023.