

Legislative Oversight Commission on Education Accountability **January 7, 2024**

- **2023 West Virginia Health Sciences and Rural Health Report**
(§18B-16-9)
Jordyn Reed, Administrator, Center for Nursing

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**Report to the Legislative Oversight Commission
on Education Accountability**

**2023 West Virginia Health Sciences and Rural Health Report
(\$18B-16-9)**

2023 WEST VIRGINIA

HEALTH SCIENCES

AND RURAL HEALTH REPORT



WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

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About the

DIVISION OF HEALTH SCIENCES

The Division of Health Sciences at the Higher Education Policy Commission leads by leveraging expertise, fostering collaboration, and supporting innovation to improve the health of West Virginians, particularly rural and underserved populations. These initiatives grow and strengthen the healthcare workforce of the future through promoting equitable access to health sciences and behavioral sciences education and support of research, practice, and policy. The Division coordinates health sciences programs, particularly those involving the state's three academic health centers at Marshall University, the West Virginia School of Osteopathic Medicine, and West Virginia University. The Division collaborates with stakeholders around key topics in the state's healthcare landscape. Current topics include behavioral health workforce development, graduate medical education, nursing workforce development, Emergency Medical Services (EMS) workforce development, mapping primary care and behavioral health access, and community based clinical research. The Division also oversees the Rural Health Initiative, a statewide program directed at improving the recruitment and retention of healthcare providers to rural areas of the state. In addition, the Division administers the West Virginia Nursing Scholarship Program, Health Sciences Service Program, the Choose WV practice program, the Medical Student Loan Repayment Program, and the new Mental Health Loan Repayment Program which began in 2021. In 2023 the Division launched year 2 funding for the Nursing Workforce Expansion Initiative after receiving funding through legislative appropriations.

EXECUTIVE SUMMARY

West Virginia's three state-funded medical schools enroll more medical students per capita than any other state in the country. Due to its large number of medical student slots, the state typically can offer all qualified West Virginians the opportunity to complete their medical education in the state. In the academic year of 2023, 25 percent (200) of the 828 medical students who enrolled in the first-year classes of the state's three medical schools were West Virginia residents. (Pages 2-8)

In-state tuition at West Virginia medical schools is among the most affordable in the nation. In addition to affordability, all three schools continue to well prepare students to succeed as practitioners and report licensure exam passage rates ranging from 95-100 percent for the last five years. (Page 9)

Retaining medical school graduates in the state for their residencies is one of the most proven strategies for eventually recruiting them to practice in the state. The Commission and the three medical schools all offer programs to incentivize the state's medical students, particularly those students interested in primary care and rural practice, to complete their residency training in West Virginia. Among all 2023 medical school graduates in West Virginia, 56 percent (205) chose to do primary care residencies, up from 55 percent last year. (Pages 13-17)

In recent years, West Virginia higher education institutions have expanded the number of health professions programs offered. West Virginia has experienced growth in social work, pharmacy, public health, occupational therapy, psychology, and physical therapy. It is hoped that graduates of these programs will assist in better addressing healthcare needs of the state's rural and underserved communities.

In this report we are reporting on public dentistry and pharmacy program outcomes for the second time. The Commission administers three financial aid programs for students in health professions. These programs help to keep healthcare practitioners in West Virginia by providing incentives. The West Virginia Nursing Scholarship Program provides scholarships to LPNs, RNs, and graduate nursing students in exchange for completing service obligations in West Virginia. Since its inception in 1995, the Health Sciences Service Program has had 243 participants complete the service program. The Medical Student Loan Program provides needs-based loans each year to the state's medical students. Loans are forgiven for service in underserved areas of the state or in shortage specialties. The newest program, the Choose WV Practice Program, began in 2019-2020. This program provides a tuition waiver to nonresident West Virginia Medical Students who agree to remain in West Virginia to practice in an underserved area of the state. (Page 23-24)

West Virginia medical school graduates select primary care residencies at a rate higher than the national average. Many of these graduates remain in-state to practice, however, a maldistribution of primary care physicians persists especially in rural and low-income areas. The Commission and the medical schools, through the Rural Health Initiative and other programs, develop innovative models and engage underserved communities to help redistribute the primary care physician workforce. (Pages 27-34)

MEDICAL SCHOOL PROFILES

The Marshall University Joan C. Edwards School of Medicine and the West Virginia University School of Medicine are allopathic medical schools, and the West Virginia School of Osteopathic Medicine is an osteopathic medical school. The structure and content of allopathic and osteopathic medical education and training are similar in many ways, while different in others. For this report, where similarities exist, the three schools are discussed together, and where differences exist, the information for allopathic and osteopathic programs is broken out.

All medical school applicants complete the Medical College Admission Test® (MCAT®) as part of the application process. In 2015, the Association of American Medical Colleges redesigned the MCAT®. As a result, some West Virginia medical schools still accept scores from either the new and old versions of the MCAT®. The new MCAT® consists of four multiple choice sections each worth between 118 and 132 points (Biological and Biochemical Foundations of Living Systems, Chemical and Physical Foundations of Biological Systems, Psychological, Social, and Biological Foundations of Behavior, and Critical Analysis and Reasoning Skills). The old version of the MCAT® consisted of three multiple choice sections each worth 15 points (physical sciences, verbal reasoning, and biological sciences) and a writing sample.

The new national combined mean MCAT® score for students entering allopathic medical schools during the 2022-2023 academic year was 506.5. For students entering osteopathic medical schools, the score was 504.77. National performance data on the old MCAT® for students entering medical schools is no longer reported.

For the 2022-2023 academic year, the national mean grade point average (GPA) for students matriculating to allopathic medical schools was 3.62, and the national mean grade point average for students matriculating to osteopathic schools was 3.61 (Association of American Medical Colleges and American Association of Colleges of Osteopathic Medicine).

Marshall University Joan C. Edwards School of Medicine



ENTERING CLASS ADMISSION RATE

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
In-State					
Acceptances/Applicants	86/151	103/199	95/209	88/190	88/189
Admission Rate	57%	52%	45%	46%	47%
Out-of-State					
Acceptances / Applicants	32/1,765	25/2,123	15/1,922	29/2,015	27/1,807
Admission Rate	2%	1.2%	0.8%	1%	1%
Total Acceptances / Applicants	118/1,916	128/2,322	110/2,131	117/2,205	115/1,996
Total Admission Rate	7%	6%	5%	5%	6%

ENTERING CLASS ACADEMIC QUALIFICATIONS

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
Mean GPA	3.66	3.63	3.61	3.65	3.70
Mean MCAT [®] (New Version)	503	504	502	502	504

ACADEMIC YEAR DATA

		2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
First Year New Enrollment	In-State	59	63	69	63	62
	Out-of-State	21	17	11	17	17
	Total	80	80	80	80	79
Total Graduates		79	69	74	79	61
Total Medical Students		330	321	315	335	340
Tuition and Fees	In-State	\$24,376	\$24,324	\$24,004	\$23,904	\$23,904
	Out-of-State	\$57,734	\$57,682	\$56,788	\$56,888	\$54,772

West Virginia School of Osteopathic Medicine



ENTERING CLASS ADMISSION RATE

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
In-State					
Acceptances/Applicants	48/100	67/143	53/139	57/131	62/126
Admission Rate	48%	47%	38%	44%	50%
Out-of-State					
Acceptances / Applicants	483/4,923	533/5,173	412/5,290	374/5,081	378/4,591
Admission Rate	10%	10%	8%	7%	8%
Total Acceptances / Applicants	531/5,023	600/5,316	465/5,429	431/5,212	440/4,717
Total Admission Rate	11%	11%	9%	8%	9%

ENTERING CLASS ACADEMIC QUALIFICATIONS

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
Mean GPA	3.59	3.59	3.58	3.59	3.55
Mean MCAT [®] (Old Version)	-	-	21.8	24.7	20.6
Mean MCAT [®] (New Version)	503.5	501.8	500.7	500.8	499.6

ACADEMIC YEAR DATA

		2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
First Year New Enrollment	In-State	32	46	41	42	43
	Out-of-State	169	154	166	158	158
	Total	201	200	207	200	201
Total Graduates		181	199	178	194	208
Total Medical Students		793	806	800	809	841
Tuition and Fees	In-State	\$22,472	\$21,472	\$21,472	\$21,472	\$21,472
	Out-of-State	\$53,710	\$52,710	\$52,710	\$52,710	\$52,710

West Virginia University School of Medicine



ENTERING CLASS ADMISSION RATE

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
In-State					
Acceptances/Applicants	66/165	81/212	75/212	79/208	88/226
Admission Rate	40%	38%	35%	38%	39%
Out-of-State					
Acceptances / Applicants	113/4,578	86/4,850	90/4,841	78/5,356	74/5,062
Admission Rate	3%	2%	2%	1%	1%
Total Acceptances / Applicants	179/4,743	166/5,062	165/5,053	157/5,356	162/5,288
Total Admission Rate	3%	3%	3%	3%	3%

ENTERING CLASS ACADEMIC QUALIFICATIONS

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
Mean GPA	3.8	3.8	3.8	3.8	3.86
Mean MCAT [®] (New Version)	511	510	510	509	508

ACADEMIC YEAR DATA

		2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
First Year New Enrollment	In-State	47	65	63	67	73
	Out-of-State	65	47	49	45	39
	Total	112	112	112	112	112
Total Graduates		106	103	117	101	93
Total Medical Students		441	434	456	446	432
Tuition and Fees	In-State	\$33,426	\$32,940	\$32,643	\$32,643	\$32,373
	Out-of-State	\$66,231	\$64,935	\$64,152	\$64,152	\$63,342

MEDICAL LICENSURE EXAMS

All medical students must complete a series of licensing exams to become licensed physicians. Allopathic students take the United States Medical Licensing Exam (USMLE), and osteopathic students take the Comprehensive Osteopathic Medical Licensing Examination (COMLEX)-USA.

These exams have multiple parts. Students typically take the final USMLE or COMLEX soon after graduating from medical school. The data reported below is for the final exam for first-time test takers who took their respective licensing exam within two years of graduation. In evaluating the data presented below, it is important to consider some of its limitations:

- ▶ The data is for first-time test takers.
- ▶ Graduates can elect to not report their results to their medical schools.
- ▶ The data does not reflect graduates who take the exam more than two years after graduation.
- ▶ Not all graduates enter residency programs and therefore do not sit for these exams.

Allopathic Medical School Graduates

The USMLE, Step 3 is the final of three tests completed by allopathic medical students. Graduates normally take USMLE, Step 3 at the end of their first year of residency. The national average passage rate for first-time test takers for the graduating class of 2020 is 97 percent. (source: United States Medical Licensing Examination Program)

NUMBER PASSING/NUMBER OF EXAMINEES, USMLE, STEP 3 GRADUATING CLASS

	2020	2019	2018	2017	2016
Marshall University	74/78	54/55	64/65	66/69	59/59
	95%	98%	98%	96%	100%
West Virginia University	101/101	82/84	92/93	99/101	89/90
	100%	98%	99%	98%	99%

Osteopathic Medical School Graduates

Osteopathic graduates take the final COMLEX, Level 3 as early as six months into residency training. They must complete Level 3 before starting their third year of residency training. The national average is 91% in 2020. (source: United States Medical Licensing Examination Program)

NUMBER PASSING/NUMBER OF EXAMINEES, COMLEX, LEVEL 3 GRADUATING CLASS

	2020	2019	2018	2017	2016
West Virginia School of Osteopathic Medicine	182/190	191/198	188/192	168/178	169/181
	96%	96%	98%	94%	93%

MEDICAL SCHOOL INDEBTEDNESS

The average indebtedness of each graduating medical school class is calculated from all loans, public and private, accumulated while pursuing medical degrees. It does not include pre-medical school debt. Members of the graduating class who do not have any debt are excluded from the calculation. The difference in graduate indebtedness among the schools can be attributed in part to differences in the proportion of students paying out-of-state tuition and fees. Historically, the West Virginia School of Osteopathic Medicine has had classes composed of more out-of-state students. As of 2023, 73% of medical students leave medical school with an average of \$202,453 in total education debt. (source: AAMC, 2023)

AVERAGE MEDICAL STUDENT DEBT, BY GRADUATING CLASS

Class	Marshall University	West Virginia School of Osteopathic Medicine	West Virginia University
2023	\$121,925	\$266,304	\$187,443
2022	\$150,911	\$252,340	\$186,254
2021	\$160,827	\$271,200	\$194,955
2020	\$149,691	\$253,341	\$201,334
2019	\$158,731	\$240,727	\$197,999

RESIDENCY TRAINING

Upon graduation from medical school, physicians complete specialized residency training programs (also referred to as graduate medical education) before beginning practice. Residency training typically takes three to five years to complete. The federal Medicare program is the major funder of residency programs nationwide. Sponsoring hospitals provide additional funding for residency training.

Through a computerized process referred to as “the match”, medical students rank their top residency program choices, and residency programs rank the top medical students they would like to recruit. Based on these rankings, an algorithm then matches each medical student with a residency program. Previously, there was an allopathic matching program and an osteopathic matching program. In 2020, the “Single Match” represented the first time that all allopathic and osteopathic applicants participated in one matching program. The Single Match comes after the creation of a single accreditation system forged by the Accreditation Council for Graduate Medical Education (ACGME), the American Osteopathic Association (AOA), and the American Association of Colleges of Osteopathic Medicine. In 2014, those organizations approved an agreement to recognize the ACGME as the primary accrediting body for graduate medical education programs by 2020. As part of that transition, the AOA Match ended in 2019 (National Resident Matching Program). Across West Virginia, more than 50 different residency programs exist. Although many of these programs are for primary care specialties such as family medicine and pediatrics, training programs for other critical non-primary care specialties are offered that help ensure West Virginia has providers practicing critical specialties such as dermatology, anesthesiology, psychiatry, ophthalmology, and surgery.

WEST VIRGINIA RESIDENCY PROGRAMS

Sponsoring Institution	Primary Site	City	Specialty	Filled Residency
Access Health THC	Access Health Teaching Health Center	Beckley	Family Medicine	12
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Emergency Medicine	19
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Urological Surgery	10
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Family Medicine	19
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Internal Medicine Categorical	35
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Internal Medicine Preliminary	2
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Internal Medicine/Psychiatry	10
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Obstetrics and Gynecology	11
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Pediatrics	19
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Psychiatry	17
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Surgery Categorical	22
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Surgery Preliminary	0
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Vascular Surgery Integrated	5
Charleston Area Medical Center	Charleston Area Medical Center	Charleston	Neurology	5
Charleston Area Medical Center	Greenbrier Valley Med Center	Ronceverte	Family Medicine	12
Charleston Area Medical Center	Greenbrier Valley Med Center	Ronceverte	Osteopathic Neuromusculoskeletal Medicine	8
MSOPTI	Greenbrier Valley Med Center	Ronceverte	Transitional Year	0
Marshall University	Cabell Huntington Hospital	Huntington	Family Medicine	25
Marshall University	Cabell Huntington Hospital	Huntington	Psychiatry	25
Marshall University	Cabell Huntington Hospital	Huntington	Internal Medicine	71
Marshall University	Cabell Huntington Hospital	Huntington	Internal Medicine/Pediatrics	8

Data were obtained September 2023

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Sponsoring Institution	Primary Site	City	Specialty	Filled Residency
Marshall University	Cabell Huntington Hospital	Huntington	Neurology	11
Marshall University	Cabell Huntington Hospital	Huntington	Obstetrics and Gynecology	12
Marshall University	Cabell Huntington Hospital	Huntington	Orthopedic surgery	15
Marshall University	Cabell Huntington Hospital	Huntington	Pediatrics	20
Marshall University	Cabell Huntington Hospital	Huntington	Surgery	23
Marshall University	Logan Regional Medical Center	Logan	Surgery (Rural)	3
United Hospital Center	United Hospital Center	Bridgeport	Family Medicine	20
West Virginia University School of Medicine	Camden Clark Medical Center	Parkersburg	Internal Medicine	18
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Anesthesiology	36
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Dermatology	7
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Emergency Medicine	30
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Everest Surgery Preliminary	1
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Family Medicine	18
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Internal Medicine	72
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Internal Medicine/Pediatrics	16
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Neurosurgery	7
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Neurology	29
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Obstetrics and Gynecology	12
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Ophthalmology	12
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Orthopedic surgery	20
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Otolaryngology	14
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Pathology-Anatomic and Clinical	12
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Pediatrics	18
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Plastics - Integrated	6
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Psychiatry	38
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Radiation Oncology	3
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Radiology-Diagnostic	26
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Surgery	30
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Transitional Year	13
West Virginia University School of Medicine	Ruby Memorial Hospital	Morgantown	Urology	10
West Virginia University School of Medicine	West Virginia University Rural Family Medicine	Harpers Ferry	Family Medicine	18
Wheeling University	Wheeling Hospital	Wheeling	Family Medicine	N/A
Total Filled Slots				905

Key indicators related to residency choice affecting the supply of physicians across West Virginia are:

- ▶ Location: graduates who complete residencies in West Virginia are much more likely to remain in the state, which is consistent with national trends.
- ▶ Specialty: primary care fields generally are most needed in rural West Virginia.

Graduates of all three West Virginia medical schools typically enter primary care residency programs at a rate at or above the national average for these same programs. Among all three medical schools, 56 percent (205) of 2023 medical school graduates chose a primary care residency. Nationally for the 2023 single match program, there were a record number 18,312 categorical primary care positions available during the match, increasing 3.2 percentage points over the last year and an increase of 17 percentage points over the last five years. (source: National Resident Matching Program)

Selecting a primary care residency program does not always translate to practicing primary care, particularly in an outpatient setting. For example, individuals entering internal medicine residencies often forego a general internal medicine track, and instead subspecialize in fields not traditionally viewed as primary care such as cardiovascular disease, gastroenterology, and infectious diseases. Additionally, primary care graduates frequently elect to work as hospitalists in inpatient settings. Thus, some of the graduates reported below ultimately may not practice in an outpatient, primary care setting.

NUMBER AND PERCENTAGE OF GRADUATES CHOOSING PRIMARY CARE RESIDENCIES, BY GRADUATING CLASS

	2023	2022	2021	2020	2019
Marshall University	35 (45%)	38 (56%)	37 (50%)	36 (46%)	30 (51%)
West Virginia School of Osteopathic Medicine	114 (63%)	114 (58%)	100 (56%)	117 (60%)	119 (59%)
West Virginia University	56 (54%)	49 (48%)	65 (56%)	51 (50%)	50 (55%)

MEDICAL SCHOOL GRADUATE RETENTION

for practice in West Virginia

Retention denotes the number or percentage of West Virginia medical school graduates who remain in the state to practice. Retention is tracked annually for a six-year cohort of medical school graduates who have completed residency training. The data in this section focuses on retention of West Virginia medical school graduates in primary care and/or rural practice.

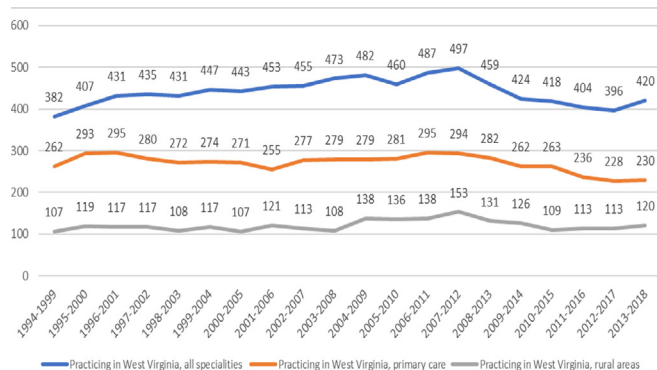
- ▶ Primary care is defined as family medicine, internal medicine, internal medicine/pediatrics, obstetrics/gynecology, and pediatrics.
- ▶ Rural areas include all areas of the state with a 2006 Rural Urban Commuting Area (RUCA) code of 4.0 or higher. These codes classify U.S. Census tracts using measures of population density, urbanization, and daily commuting.
- ▶ Data is provided only for graduates who have completed their residency training.

Between 2013 and 2018, of the 1,810 students who graduated from the state's three medical schools and have completed residency training, either in West Virginia or out-of-state, 24 percent (420) of these graduates are practicing in West Virginia, 13% (230) are practicing in primary care in West Virginia, and 7% (120) are practicing in rural West Virginia. The growth in medical school class sizes in recent years is supplying more graduates to practice in West Virginia; however, issues persist in recruiting graduates to practice in both primary care and rural settings.

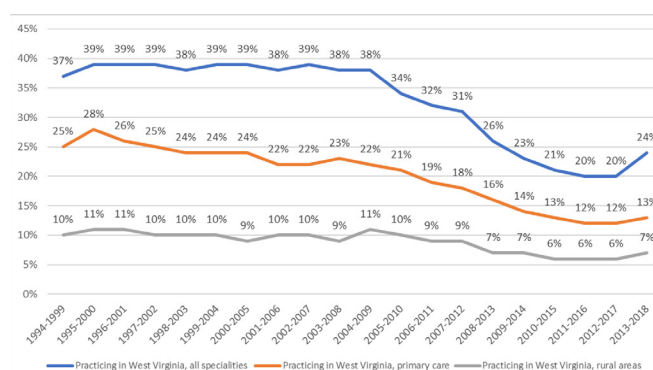
MEDICAL SCHOOL GRADUATES RETAINED, BY INSTITUTION, GRADUATING CLASSES OF 2013–2018

	Total with completed training	Total in practice in West Virginia	Total in primary care in West Virginia	Total in rural areas of West Virginia
Marshall University	341	83 (25%)	40 (12%)	17 (5%)
West Virginia School of Osteopathic Medicine	927	175 (19%)	113 (12%)	81 (9%)
West Virginia University	532	162 (31%)	77 (15%)	22 (5%)
Total	1,810	420 (24%)	230 (13%)	120 (7%)

NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1995–2018

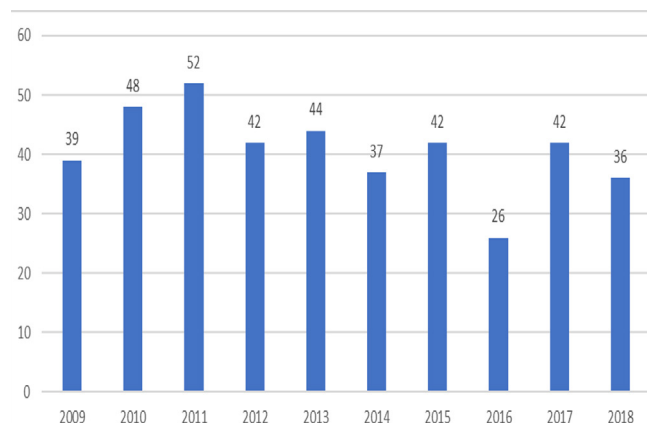


PERCENTAGE OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1995–2018

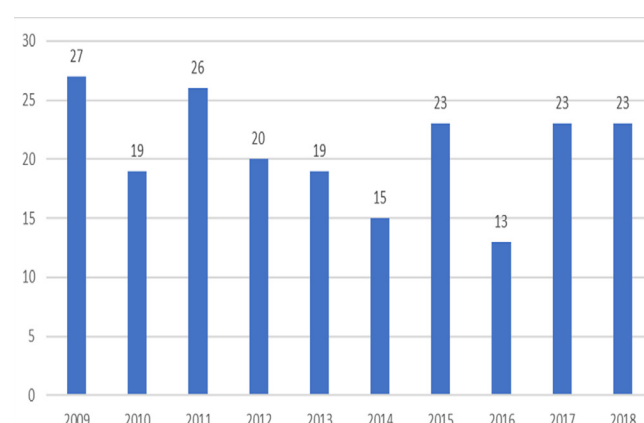


NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES PRACTICING PRIMARY CARE OR IN RURAL AREAS, BY GRADUATING CLASS

Practicing Primary Care in West Virginia



Practicing in Rural Areas of West Virginia



* These numbers only reflect those graduates who have completed their residency training.

County of Practice of Recent West Virginia Medical School Graduates

West Virginia continues to focus on recruiting more physicians to the state, especially to rural areas. Having physicians who practice primary care and/or in rural areas is crucial to ensuring communities across the state have access to health care.

The table below illustrates recruitment of the most recent six-year cohort of West Virginia medical school graduates to all 55 counties of West Virginia. This information must be interpreted carefully. It is a snapshot of the placement of the most recent West Virginia medical school graduates over a six-year period only and does not include graduates of out-of-state medical schools or physicians who graduated prior to 2013 who are practicing in these counties. Thus, a zero listed in any column does not necessarily indicate that a county is underserved. At the same time, tracking this type of information over an extended period can help inform education and training program activities and physician recruitment priorities.

WEST VIRGINIA MEDICAL SCHOOL GRADUATES PRACTICING IN WEST VIRGINIA BY COUNTY, GRADUATING CLASSES OF 2013–2015

County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Barbour	1	1	1
Berkeley	11	5	7
Boone	5	5	4
Braxton	2	1	2
Brooke *	1	0	1
Cabell *	66	0	31
Calhoun	1	1	1
Clay	0	0	0
Doddridge	0	0	0
Fayette	2	2	2
Gilmer	0	0	0
Grant	0	0	0
Greenbrier	19	19	14
Hampshire	0	0	0
Hancock	2	1	2
Hardy	0	0	0
Harrison	14	14	8
Jackson	3	3	2
Jefferson	4	4	3
Kanawha *	66	2	28
Lewis	2	2	1
Lincoln	1	1	1
Logan	3	3	2
Marion	3	3	1

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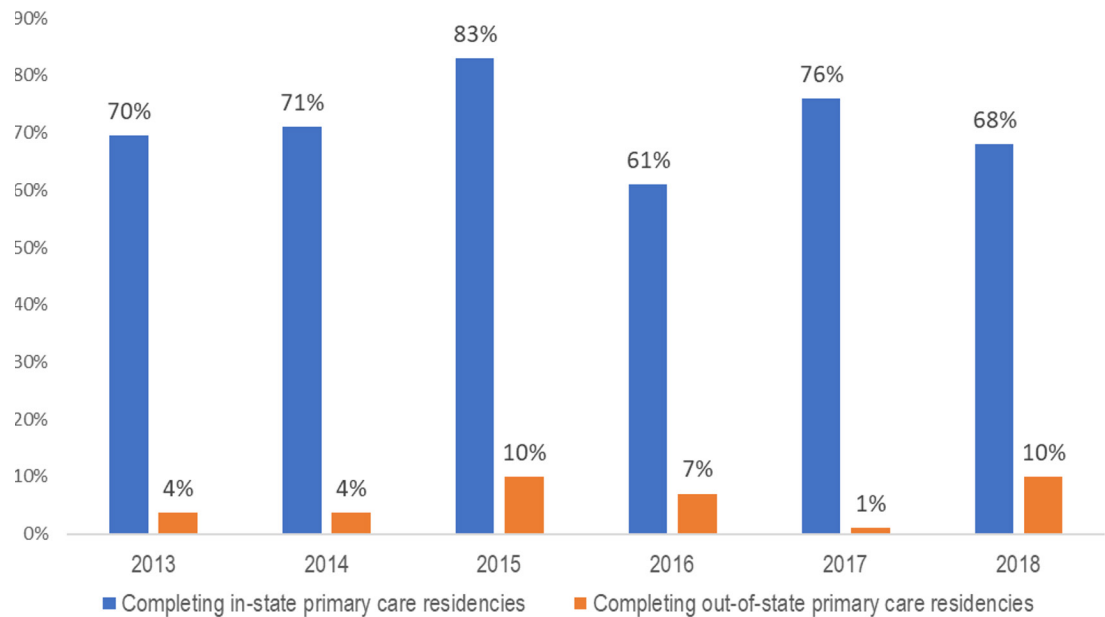
County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Marshall *	2	0	2
Mason	7	7	6
McDowell	2	2	1
Mercer	6	6	4
Mineral	1	1	0
Mingo	1	1	1
Monongalia*	118	2	51
Monroe	0	0	0
Morgan	0	0	0
Nicholas	3	3	2
Ohio*	12	1	8
Pendleton	0	0	0
Pleasants	0	0	0
Pocahontas	0	0	0
Preston	2	2	2
Putnam*	9	0	6
Raleigh	13	1	11
Randolph	5	5	3
Ritchie	0	0	0
Roane	1	1	1
Summers	0	0	0
Taylor	1	1	1
Tucker	1	1	0
Tyler	1	1	1
Upshur	6	6	5
Wayne	3	2	2
Webster	2	2	2
Wetzel	0	0	0
Wirt	2	2	2
Wood*	15	5	7
Wyoming	1	1	1
Total	420	120	230

* Denotes urban/non-rural county with a 2006 Rural Urban Community Area Code (RUCA) of less than 4.0, and therefore, the county has no rural areas.

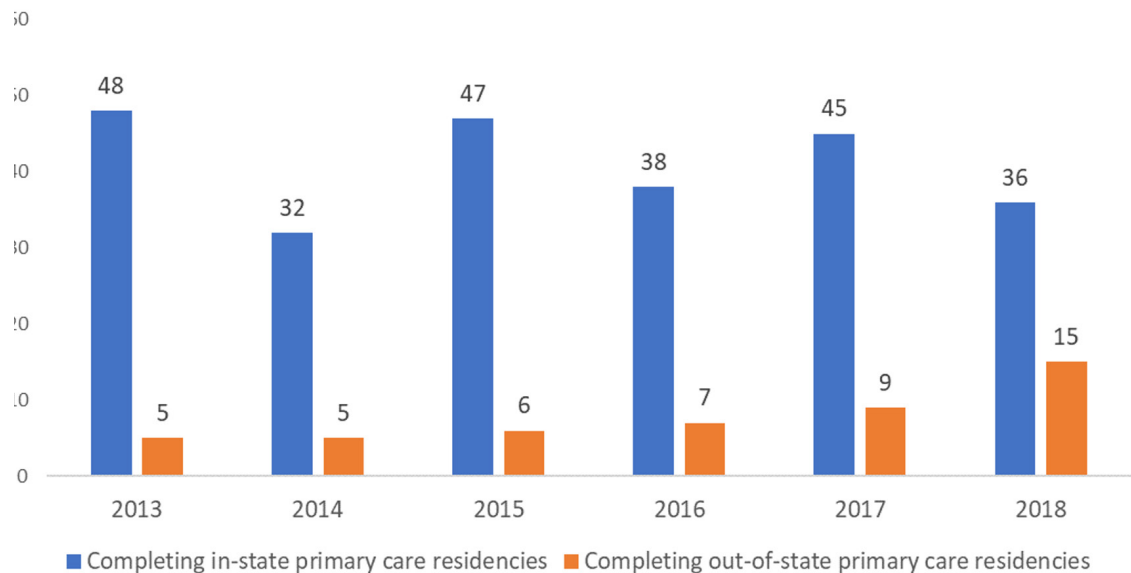
Retention of West Virginia Medical School Graduates Completing Primary Care Residencies

The location of a medical school graduate's residency program frequently predicts whether that graduate will practice in West Virginia. For the 2018 graduates of West Virginia medical schools, 207 graduates went on to complete primary care residency programs. Upon completing residency, 68% of those who completed in-state primary care residencies were retained in West Virginia to practice, while only 10% of graduates who completed out-of-state primary care residencies returned to West Virginia to practice.

PERCENTAGE OF WEST VIRGINIA MEDICAL STUDENTS GRADUATES COMPLETING PRIMARY CARE RESIDENCIES RETAINED, BY GRADUATING CLASS



NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES COMPLETING PRIMARY CARE RESIDENCIES RETAINED, BY GRADUATING CLASS



PHARMACY PROGRAM PROFILES

West Virginia University School of Pharmacy

West Virginia University (WVU) School of Pharmacy is the oldest pharmacy school in the state, providing pharmacy education for more than a century. Students can enter the program through the pre-pharmacy pathway, which prepares students for the Doctor of Pharmacy (PharmD) program, or the Direct Admit Pathway (DAP), an early assurance program for high achieving high school students who wish to pursue the PharmD. The program also offers a PhD program specializing in either Health Services and Outcomes Research or Pharmaceutical and Pharmacological Sciences. The program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE).

The WVU School of Pharmacy and WVU Medicine also offers postgraduate year 1 and 2 residency programs for individuals wishing to pursue advanced clinical skills and training. The School of Pharmacy also offers a one-year academic pharmacy fellowship.

Marshall University School of Pharmacy

Marshall University School of Pharmacy provides a four-year PharmD program. The program does not require a bachelor's degree for admission. Students can complete the necessary pre-requisite coursework for pharmacy school in as few as two years from any regionally accredited institution. Application is competitive. Active learning is the focus of Marshall's curriculum. Students earn three certifications while in the program including Immunization (APhA) certification, Medication Therapy Management (APhA) certification and Diabetes Management (APhA) certification. The program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE).

This is the second year that Pharmacy programs are included in the West Virginia Health Sciences and Rural Health Report. Data including admissions (in-state and out-of-state), GPA, graduates, total students, tuition costs, licensure pass rates and areas of practice of graduates are included here.

Admissions and Academic Year Report

WVU SCHOOL OF PHARMACY, ENTERING CLASS AND ACADEMIC YEAR REPORT

			2021	2022	2023
Entering Class Data					
Applicants	In-State		40	29	28
	Out-of-State		78	76	74
	Total		118	105	102
Acceptances Issued	In-State		35	23	28
	Out-of-State		58	50	50
	Total		93	73	78
Entering Class Mean GPA			3.47	3.52	3.51

Continued on next page

		2021	2022	2023
Academic Year Data				
First Year New Enrollment	In-State	32	21	22
	Out-of-State	29	21	27
	Total	61	42	49
Total Graduates		81	77	68
Total PharmD Students		287	224	197
Tuition and Fees				
In-State		\$21,768	\$22,266	\$22,914
Out-of-State		\$43,152	\$44,460	\$42,270
Avg Final Year Indebtedness		Not available		

MARSHALL UNIVERSITY PHARMACY, ENTERING CLASS AND ACADEMIC YEAR REPORT

		2021	2022	2023
Entering Class Data				
Applicants	In-State	28	32	23
	Out-of-State	104	65	63
	Total	132	97	86
Acceptances Issued	In-State	25	23	16
	Out-of-State	39	25	29
	Total	64	48	45
Entering Class Mean GPA		3.2	3.31	3.34
Academic Year Data				
First Year New Enrollment	In-State	17	17	12
	Out-of-State	17	11	17
	Total	34	28	29
Total Graduates		59	54	54
Total PharmD Students		240	211	176
Tuition and Fees				
In-State		\$21,848	\$23,508	\$23,992
Out-of-State		\$35,278	\$38,796	\$39,566
Avg Final Year Indebtedness		\$148,476	N/A	N/A

Licensure Examinations

Pharmacy students take their Pharmacy Board examinations (NAPLEX) after graduation (in addition to other state-specific licensure requirements) to be eligible to practice in the United States. The national average pass rate for 2022 was 80%. (source: National Association of Boards of Pharmacy).

WVU SCHOOL OF PHARMACY, PHARMACY BOARD EXAMINATION PASS RATES*

Graduating Class	2022	2021	2020	2019	2018
Number Passing	50	73	62	63	70
Number of Examinees	70	82	67	69	79
Passage Rate (%)	74%	89%	93%	92%	89%

* First time test takers

MARSHALL UNIVERSITY SCHOOL OF PHARMACY, PHARMACY BOARD EXAMINATION PASS RATES*

Graduating Class	2022	2021	2020	2019	2018
Number Passing	34	42	54	55	63
Number of Examinees	52	56	65	76	74
Passage Rate (%)	65.4%	75%	83%	72%	85.1%

West Virginia Retention and Rural Practice

Opportunities for pharmacists are available in West Virginia in rural and underserved communities. The tables below show the number of graduates from each of the state's two public pharmacy programs, along with the number who continued training and the number who entered practice in either West Virginia or another state.

WVU SCHOOL OF PHARMACY GRADUATES: RETENTION IN WEST VIRGINIA AND RURAL AREAS

Year	Number of Graduates	Number of Graduates who entered residency or continued training	Number of graduates practicing in WV	Number of graduates practicing outside of WV	Number of graduates practicing in rural WV
2021	81	35 (44%)	35 (41%)	18 (56%)	4 (5%)
2022	77	28 (37%)	17 (22%)	18 (24%)	1 (2%)
2023	68	30 (45%)	13 (20%)	19 (28%)	6 (9%)

MARSHALL UNIVERSITY SCHOOL OF PHARMACY GRADUATES: RETENTION IN WEST VIRGINIA AND RURAL AREAS

Year	Number of Graduates	Number of Graduates who entered residency or continued training	Number of graduates practicing in WV	Number of graduates practicing outside of WV	Number of graduates practicing in rural WV
2021	59	9 (16%)	17 (34%)	33 (66%)	15 (26%)
2022	54	15 (28%)	16 (30%)	38 (71%)	N/A
2023	54	12 (23%)	N/A	N/A	N/A

DENTISTRY PROGRAM PROFILE

West Virginia University School of Dentistry

The only school of dentistry in West Virginia is located at West Virginia University. A Doctor of Dental Surgery degree (D.D.S.) guarantees graduates can profoundly transform the first impression made by an individual. The curriculum includes a blend of biomedical, behavioral and dental sciences with the goal of developing a competent oral health professional capable of practicing safely, ethically and independently. Every dental student learns and treats patients in a student clinic, the Center for Dental Innovation, rural practices and at community clinics. The program is fully accredited by the Commission on Dental Accreditation.



This is the second year that the dentistry program is included in the West Virginia Health Sciences and Rural Health Report. Data including admissions (in-state and out-of-state), GPA, graduates, total students, tuition costs, licensure pass rates and areas of practice of graduates are included here.

Admissions and Academic Year Report

WVU DENTISTRY, ENTERING CLASS AND ACADEMIC YEAR REPORT

		2020	2021	2022	2023
Entering Class Data					
Applicants	In-State	53	41	55	45
	Out-of-State	909	812	891	683
	Total	962	853	946	728
Acceptances Issued	In-State	37	26	33	31
	Out-of-State	48	49	55	60
	Total	85	75	88	91
Entering Class Mean GPA		3.62	3.73	3.75	3.82
Entering Class Mean Total DAT Score		19	19	20	20
Academic Year Data					
First Year New Enrollment	In-State	34	25	30	24
	Out-of-State	14	23	17	24
	Total	48	48	47	48
Total Graduates		46	46	44	46*
Total DDS Students		187	184	185	192
Tuition and Fees					
In-State		\$48,292	\$49,985	\$51,484	\$53,569
Out-of-State		\$95,839	\$97,532	\$100,324	\$103,897
Average Final Year Indebtedness		N/A	\$282,787	\$253,288	N/A
* Projected graduates					

Licensure Examinations

The National Dental Board Examination (NBDE) is in two parts, part 1 and part 2. Most students take part 1 after the first two years of dental school. Most students take part 2 during their final year of dental school. To be eligible, the student must have passed part 1. Beginning in 2022, there was an Integrated National Board Dental Examination (INBE), meaning there is now only one part (reported on the "Part 2" table below). In 2022, the national pass rate for accredited programs was 88.3%.

WVU DENTISTRY, NATIONAL BOARD EXAMINATION PASS RATES PART 1*

Graduating Class	2023	2022	2021	2020	2019
Number Passing	-	-	44	33	43
Number of Examinees	-	-	50	46	46
Passage Rate (%)	-	-	88%	71%	93%

* First time test takers

WVU DENTISTRY, NATIONAL BOARD EXAMINATION PASS RATES PART 2*

Graduating Class	2023	2022	2021	2020	2019
Number Passing	44	41	44	41	45
Number of Examinees	44	44	48	43	46
Passage Rate (%)	100%	93%	91%	95%	97%

* First time test takers

West Virginia Retention and Rural Practice

West Virginia has opportunities for dentists in all counties. In 2022, West Virginia had 106 dental health professions shortage areas (HPSA) as designated by the Health Resources and Services Administration (HRSA). These include geographic HPSAs, as well as low income and facility designated HPSAs.

WVU DENTISTRY, 2021-2023 WEST VIRGINIA UNIVERSITY SCHOOL OF DENTISTRY GRADUATES: RETENTION IN WEST VIRGINIA AND RURAL AREAS

Year	Number of Graduates	Number of Graduates who entered residency or continued training	Number of graduates practicing in WV	Number of graduates practicing outside of WV
2021	46	13	7 (21%)	26 (79%)
2022	44	13	6 (14%)	3 (7%)
2023	44	10	14 (32%)	3 (7%)

LOANS AND INCENTIVES

Health Sciences Service Program

The Health Sciences Service Program is a state-funded incentive program and is administered by the Commission. The program provides financial awards to health professions students who agree to practice in underserved areas of the state upon completion of their education and training. Participants complete either two years of full-time service or four years of part-time service. Medical and dental students receive a \$30,000 award. Doctoral clinical psychology, licensed independent clinical social work, nursing education, nurse practitioner, physical therapy, occupational therapy, public health, pharmacy, and physician assistant trainees receive a \$15,000 award.

Since 1995, 243 participants have completed their service obligation. In the 2022-2023 academic year, 11 awards totaling \$240,000 were offered to:

- ▶ 3 medical students
- ▶ 2 dental students
- ▶ 2 physical therapy students
- ▶ 1 clinical social work student
- ▶ 1 physician assistant student
- ▶ 1 public health student

West Virginia Nursing Scholarship Program

The West Virginia Nursing Scholarship Program is a state-funded scholarship program and is administered jointly by the West Virginia Higher Education Policy Commission and the West Virginia Center for Nursing. The program's funding source was eliminated by legislation in 2022 (Senate Bill 518). Through the governor's one-time Nursing Expansion Program, the West Virginia Higher Education Policy Commission has been able to fund the scholarships temporarily fully by offering the maximum award amounts allowed for in West Virginia Code, and awarding all applicants who meet the eligibility criteria. However, a dedicated funding stream is needed to ensure stability and continuation of the program.

The West Virginia Nursing Scholarship Program provides LPNs, RNs, and graduate-level nursing students with scholarships in exchange for completion of service obligations in West Virginia. An examination of the program in August 2020 found that 87.7% of service obligation completers since 2016 still maintain an active West Virginia nursing license. While some nursing students without previous degrees may qualify for other awards, the West Virginia Nursing Scholarship Program is open to nursing students at all levels, regardless of previous degrees they may have. Many nursing students in West Virginia are non-traditional students and do not qualify for traditional financial aid, making this scholarship vitally important in ensuring these students can afford their nursing education

WEST VIRGINIA NURSING SCHOLARSHIP PROGRAM, BY PROGRAM YEAR

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
Total number of applicants	693	588	568	413	560
Number of individual awardees*	295	211	182	169	149
Total number of awards distributed	465	320	272	250	217
Total value of awards distributed	\$1,244,750	\$378,350	\$343,100	\$294,172	\$274,450

* The finalized number of awardees, total number of awards, and total value of awards distributed does not include those applicants who were extended awards but declined them or those whose scholarship funds were returned due to withdrawing from nursing programs.

Medical Student Loan Program

The Medical Student Loan Program, which is funded from student fees, is a need-based program for students at West Virginia medical schools and administered by the Commission. Institutions award loans of up to \$10,000 each year per eligible student, and a student may receive a loan in more than one year of medical school. Upon graduation and once in practice, borrowers either must repay the loan or seek loan forgiveness. Borrowers are eligible for loan forgiveness of up to \$10,000 per year for each year they practice in West Virginia in an underserved area or in a medical shortage field. Borrowers are permitted to reapply for loan forgiveness in subsequent years.

MEDICAL STUDENT LOAN PROGRAM ACTIVITY, BY PROGRAM YEAR

	2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
Loans awarded in Fiscal Year	154	229	352	242	246
Total amount awarded	\$1,264,257	\$962,700	\$1,712,559	\$1,801,000	\$1,732,612
Amount of unexpended funds*	\$3,380,302	\$4,290,480	\$3,143,604	\$2,760,525	\$2,628,242
Loan postponement**	9	11	10	11	16
Loan forgiveness***	334	322	315	300	300
Default rate on previous awards	6.24%	4.43%	6.74%	7.97%	7.17%

* Amount of unexpended funds includes loan repayments.

** Loan postponement is the number of borrowers who applied for the first time in a given year to begin practicing toward earning loan forgiveness. If these borrowers complete one year of service, they receive up to \$10,000 in loan forgiveness, and then, are included in the subsequent year's loan forgiveness count.

*** Loan forgiveness is the number of borrowers who received up to \$10,000 in loan forgiveness in a given year.

Choose WV Practice Program

The Choose WV Practice Program is a state-funded incentive program administered by the Commission. The program provides a tuition waiver to non-resident West Virginia medical students who agree to remain in West Virginia to practice in an underserved area of the state upon completion of their education and training. Two students from each West Virginia medical school are eligible to be awarded each academic year and receive a tuition waiver for the difference between in-state and out-of-state tuition (approximately \$30,000). The first awards were held in 2019-2020.

CHOOSE WEST VIRGINIA PRACTICE PROGRAM 2021-2022

	Marshall University	West Virginia School of Osteopathic Medicine	West Virginia University	Total
Number of New Awards	0*	3	3	6
Number of Awards Renewed	3	4	4	11
New Tuition Waivers	\$0	\$93,714	\$98,415	\$192,129
Renewed Tuition Waivers	\$101,306	\$124,952	\$128,502	\$354,760
Total School Awards	\$101,306	\$218,666	\$226,917	\$546,889

* No applications were received from Marshall University for the 2021-2022 award year.

Mental Health Loan Repayment Program

The Mental Health Loan Repayment Program is a state-funded incentive program and is administered by the Commission. The program provides approximately 30 awards annually for loan repayment to practicing mental health professionals who agree to complete a service obligation to deliver therapy or counseling services in underserved areas of West Virginia. The award amount will be at least \$10,000 (depending on outstanding debt) and is renewable up to three (3) years based on availability of funds and continued eligibility for the loan repayment program.

Eligible disciplines include: Licensed doctoral level clinical psychologist, Master's level licensed psychologist, Licensed independent clinical social worker, Licensed certified social worker, Licensed professional counselor, Licensed marriage and family therapist, or psychiatric mental health nurse practitioner. Other mental health disciplines identified by the Senior Director of Health Sciences as experiencing a shortage of practitioners may be considered. In 2022-2023, 24 awards totaling \$240,000 were offered to:

- ▶ 4 Licensed doctoral-level clinical psychologists
- ▶ 3 Licensed masters-level clinical psychologists
- ▶ 8 licensed independent social workers
- ▶ 5 licensed clinical social workers
- ▶ 4 licensed professional counselors

RURAL HEALTH INITIATIVE PROGRAM

The West Virginia Rural Health Initiative (RHI) Program is derived from West Virginia Code §18B-16-1 et seq. and focuses on several goals, including:

1. Increasing the recruitment of healthcare providers to rural areas.
2. Increasing the retention rate of healthcare providers in rural areas.
3. Developing pipeline programs to enhance student interest in rural healthcare careers.
4. Supporting the involvement of rural areas of the state in the health education process.

Overall responsibility for the RHI Program rests with the West Virginia Higher Education Policy Commission. To carry out the goals, the Commission grants most of the funding to the Joan C. Edwards School of Medicine at Marshall University, the West Virginia School of Osteopathic Medicine, and the West Virginia University Health Sciences Center (the academic health centers). In FY 2023, each academic health center received \$587,000.

The Commission also uses RHI Program funding to make smaller grants to other higher education programs, healthcare facilities, and nonprofit organizations to further advance RHI activities across the state. Examples of projects funded during FY 2023 include:

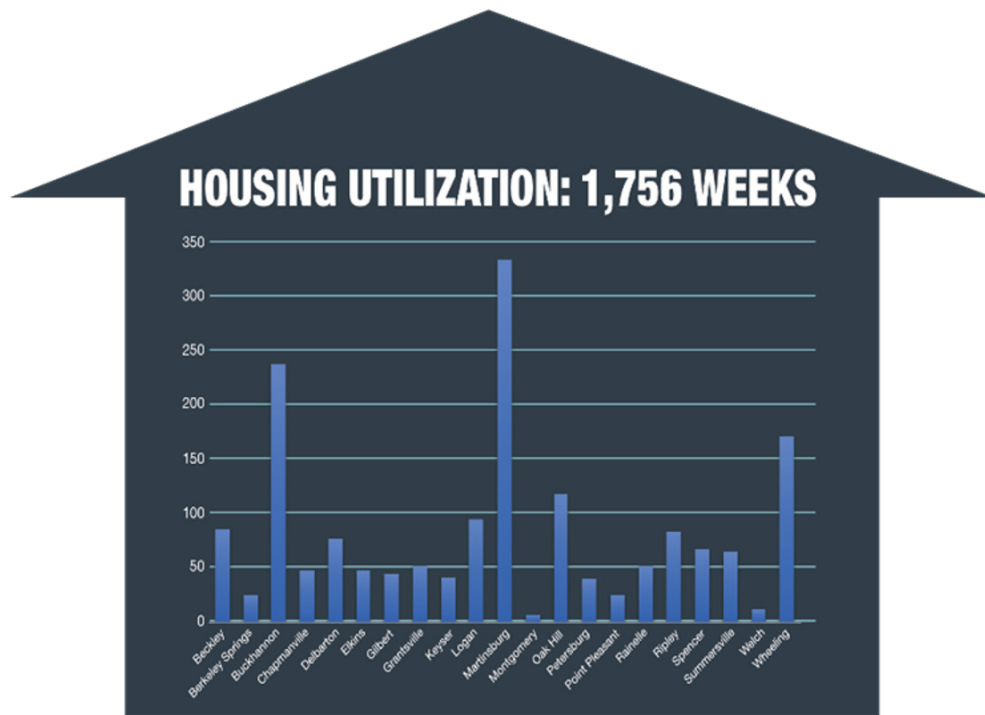
- ▶ Marshall University's Psychology Department to create informational resources for high school and college students to increase awareness of the psychological profession.
- ▶ West Virginia Rural Health Association's Annual Conference to offer student scholarships to attend their annual conference to learn more about rural health in West Virginia
- ▶ Wheeling Hospital to help offset start up costs for their Family Medicine/ER fellowship Rural Scholars program.

The following pages contain a profile of the statewide student housing system for clinical rotations and program overviews for each of the academic health center's RHI activities during FY 2023.

Statewide Housing System

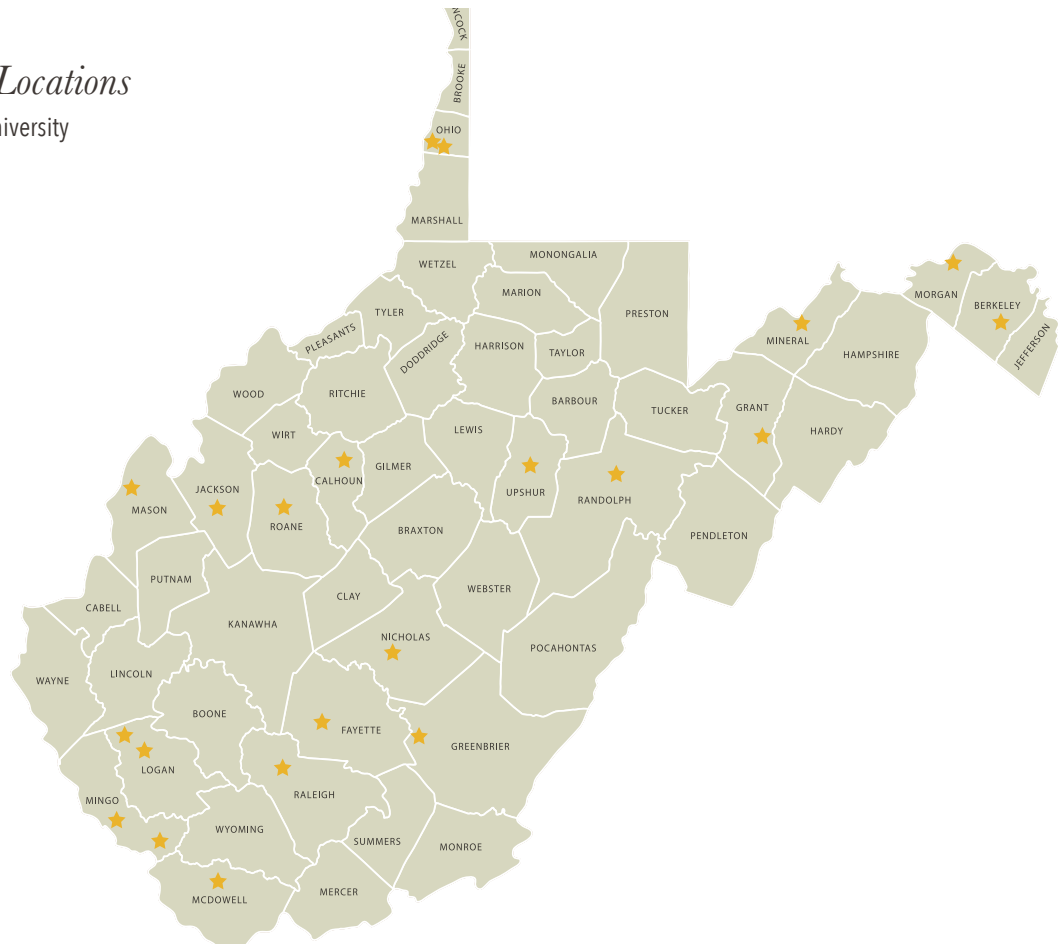
The RHI statewide housing system for health sciences students has allowed students to complete clinical rotations away from the main campus and immerse themselves in a rural or underserved community. The housing is open to all health sciences students, but in FY 2023, the housing was most frequently used by medical, pharmacy, physician assistant, physical therapy, and dental students. The typical length of stay for students utilizing housing is about four weeks.

In FY 2023, 26 housing units located in 21 cities throughout West Virginia were utilized by students engaged in community-based clinical experiences. These units are primarily leased houses or apartments that are property managed by West Virginia University. Housing locations are identified based on demand for clinical rotations in certain geographic areas, as well as the ability to secure the appropriate type of rental property. The operating costs of the program are supported through the Commission's RHI funding and a \$150 per week fee paid by students utilizing the housing. Often, the cost of housing is covered by the student's institution. A total of 1,756 weeks were utilized across all housing unit locations in FY 2023.



21 Housing Unit Locations

Managed by West Virginia University





Marshall University Joan C. Edwards School of Medicine

Marshall University Joan C. Edwards School of Medicine (Marshall) is dedicated to providing high quality medical education and postgraduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of West Virginia. Marshall is committed to the development of innovative rural initiatives that encourage and prepare students and residents to practice in rural communities.

Increase the recruitment of healthcare providers to rural and underserved areas.

Rural Research: This successful initiative provides students and residents with an immersion experience in some of the most rural underserved communities in the state. To date, the Center has provided approximately \$1,403,208 in rural research grants. The research efforts benefit both the communities and the students and have helped develop critical leadership and communication skills for the students. Students are required to publish and present their work, thereby introducing West Virginia's best and brightest to the national stage through 27 state, national and international presentations and 21 publications.

Increase the retention rate of healthcare providers in rural and underserved areas.

Rural Health Service Program: This opportunity provides a financial incentive of \$25,000 for third and/or fourth year medical students in exchange for a year of practice in a rural or underserved area. In collaboration with the Marshall University Physician Assistance (PA) program and in keeping with the goal of retaining providers to work in rural communities, the Rural Health Service Program was expanded this year to include funding for PA students. Two medical students and one PA student were selected in 2022-2023 and received \$25,000 each.

There are currently eight Rural Health Service award participants who have completed their residency/education, and six of those are now fulfilling their service commitment. Twelve participants are still in medical school and residency with service commitments required after residency. To date, we have provided \$625,000 to fund this program



Develop pipeline programs to enhance student interest in rural and underserved healthcare careers.

High School Pipeline: Center for Rural Health staff continue the high school pipeline activities in the 2022-2023 academic year. This pipeline works to encourage students to consider health care careers, remove perceived barriers and provide tools to help the students achieve their goals. Center staff worked in 13 counties, involving 1,367 students via 39 events. Events included running the medical portion of the West Virginia Science Olympiad, arranging for interdisciplinary speakers in health care, and hosting student groups on campus for a variety of science and health care activities such as kinesiology and patient simulator workshops. In addition, this program helps to identify candidates for Marshall's pathway programs.

Bachelor of Science/Doctor of Medicine (BS/MD) Program: Marshall University and the Joan C. Edwards School of Medicine's Bachelor of Science/Doctor of Medicine (BS/MD) program for West Virginia high school students identifies



high achieving seniors who receive medical school tuition waivers if they complete program requirements. This year, seven students were selected, bringing the total to 26 undergraduate students in the program. There are currently 29 students that have completed the undergraduate portion of the program and are in medical school. In addition, in the program's first two cohorts, 20 students have completed medical school and successfully matched in residencies. Of those, 40% are in primary care residencies and 30% have stayed in West Virginia for residency at Marshall and WVU. The investment in these promising young West Virginians is paying off, with program participants staying in West Virginia for their advanced education and accruing multiple honors for their academic achievements as well as their leadership and service to our communities.

Support the involvement of rural and underserved areas of the state in the health education process.

The Center for Rural Health along with the West Virginia School of Osteopathic Medicine (WVSOM) and Coalfield Health Center (Coalfield) in Logan County, are combining resources to support community outreach and to improve health outcomes in southern West Virginia. Utilizing community-based research methods, medical students and undergraduate students are working with community leaders in a variety of focused health care activities and initiatives. The goal is for students to recognize the value of rural health and consider practicing in this region.

In a new initiative this year, Marshall and WVSOM have created a joint Digital Learning Library, hosted by the West Virginia Rural Health Association. This online platform will provide a variety of virtual educational events to the students, residents, and faculty of Marshall and WVSOM, and to rural health care providers and staff throughout West Virginia.



West Virginia School of Osteopathic Medicine

The Rural Health Initiative's (RHI) mission is to enhance the rural primary care curriculum at the West Virginia School of Osteopathic Medicine (WVSOM) in order to produce graduates uniquely qualified to practice medicine in underserved communities of West Virginia. In addition to offering rural training opportunities to all students, WVSOM operates an intensive RHI program that provides special training and enrichment opportunities to students who express the strongest interest in rural practice.

Increase the recruitment of health care providers to rural areas.

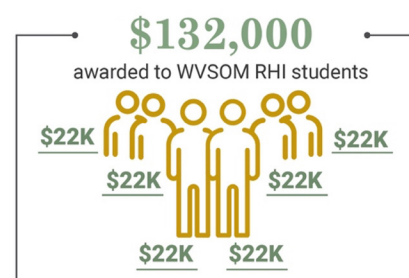
RHI Rural Practice Day 2023: WVSOM hosted its 12th annual Rural Practice Day to 112 attendees including WVSOM students, spouses/significant others, faculty, staff and speakers on Feb. 10, 2023. This year's theme was "Physician Resilience." Future doctors heard from experienced rural physicians about healthy habits resulting in impressive outcomes.

Student Rotations: RHI students' complete rotations in six different WVSOM Statewide Campus regions. Seven hospitals serve as RHI base sites in rural/underserved areas. RHI base sites for the 2022-23 academic year included

- ▶ Davis Medical Center
- ▶ WVU Medicine St. Joseph's Hospital
- ▶ Grant Memorial Hospital
- ▶ CAMC Greenbrier Valley Medical Center
- ▶ Logan Regional Medical Center
- ▶ WVU Medicine Princeton Community Hospital
- ▶ WVU Medicine United Hospital



Rural Physician Service Program: The Rural Physician Service Program incentivizes WVSOM students to remain in West Virginia to practice. Students selected receive a monetary award in exchange for agreeing to practice in an eligible rural/underserved service site in West Virginia for one year. Additionally, students receive enhanced rural health training during medical school through the Rural Health Initiative Program. Seven students were selected for the program to be awarded during fall semester 2023.



Increase the retention rate of healthcare providers in rural areas.

Residency Sign-on Incentive: Four of the 13 RHI program graduates from WVSOM's Class of 2023 each received a \$6,500 sign-on incentive for acceptance into a primary care or emergency medicine residency in West Virginia. One graduate accepted a residency at CAMC Greenbrier Valley Medical Center in Ronceverte, West Virginia, and three accepted residencies at Charleston Area Medical Center in Charleston, West Virginia.

Develop pipeline programs to enhance student interest in rural healthcare careers.

Green Coat Programs: The WVSOM Green Coat Program provides undergraduate students who are interested in medical school or a health care profession an opportunity to gain exposure to clinical responsibilities in a hospital environment. The seventh cohort of Davis Health System Green Coat students was composed of six students.

WVSOM Lending Library: RHI's Health Education Lending Library expands on the health education supplies available to community groups, medical students and schools through RHI for in-state health education-related events. The resource library provides education and demonstration materials geared toward various age groups. Additionally, items such as handwashing stations and thermometers are available to facilitate proper sanitation and screening at educational events.

High School Pipeline: A weeklong "Just Say KNOW" educational camp for six high school students took place on the Lewisburg campus in June. The theme for the camp was lifestyle medicine. RHI co-sponsored the event.

RHI co-sponsored tours of WVSOM for five high school groups. Students had the opportunity to tour the school's anatomy lab to increase their medical knowledge and explore careers in health care. A total of 104 high school students attended the RHI sponsored tours.

RHI collaborated with WVSOM's Southeastern Area Health Education Center and 12 WVSOM student organizations to host Mini-Med School, a health education program for residents of Lewisburg and surrounding areas. The collaboration facilitated high school student participation. Fifty-three high school students attended the event.

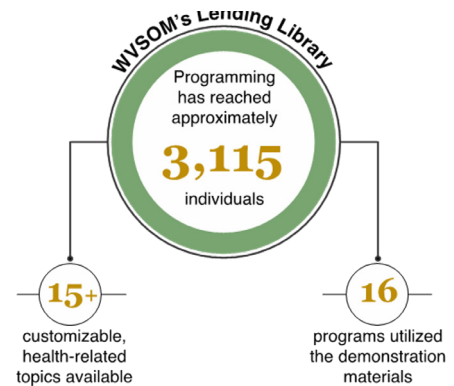


Support the involvement of rural areas of the state in the health education process.

RHI Industry Activities: Rural Health Initiative activities seek to acquaint RHI students with state industries to understand environmental exposures that could cause injury or disease to rural patients. Six RHI industry activities occurred during FY 2023:

- ▶ "Canine Search and Rescue" in Caldwell, West Virginia on Sept. 12, 2022
- ▶ "Coal Mining Safety with MSHA" in Beaver, West Virginia on Nov. 28, 2022
- ▶ "Coal Mine Tour" in Eccles, West Virginia on Nov. 29, 2022
- ▶ "Rural Health Workforce Day" in Charleston, West Virginia on Jan. 27, 2023
- ▶ "WV Water Quality: Drinking and Recreational Water" in Lewisburg, West Virginia on April 12, 2023
- ▶ "Mental Health in the Mountain State" in Weston, West Virginia makeup activity throughout the year

Coalfield Collaboration: The Rural Health Initiative is collaborating with the Coalfield Health Center (Coalfield) and Marshall University's Center for Rural Health in an outreach effort in Logan County. Coalfield is a strategic member of the "Wild, Wonderful and Healthy Logan County" initiative, which is working to change poor health outcomes in Logan County and surrounding areas. Coalfield, a Federally Qualified Health Center look-alike, has served as a hub for outreach opportunities for medical students from Marshall University Joan C. Edwards School of Medicine and WVSOM. The goals of the collaboration are to use resources to assist Coalfield in reaching more positive health outcomes for the community, provide opportunities for community-based research, support an underserved area and encourage health care students to consider practicing in the region. WVSOM students on rotation at Coalfield Health Center complete a quality improvement project.



West Virginia University Health Sciences Center

Increase the recruitment of healthcare providers to rural areas.

A.H.E.C.: The West Virginia Area Health Education Centers Program (WV AHEC) was developed by Congress in 1971 to recruit, train and retain a health professions workforce committed to underserved populations. WVU's AHEC program includes five regional Centers that conduct continuing education, pipeline programs, interprofessional education and training, and rural immersions throughout the state.

WVAHEC Rural Community Health Scholars: The WVAHEC Rural Community Health Scholars (RCH Scholars) program provides supplemental and interprofessional educational experiences for graduate health professions students interested in practicing in rural and/or medically underserved communities. In FY23, 38 students from eight institutions were recruited into the fifth cohort of the WV AHEC RCH Scholars program, and 35 Scholars graduated in June 2023. Thirty-three Scholars from cohort five are moving into the second year of the program, and recruitment for the sixth cohort of Scholars is underway.

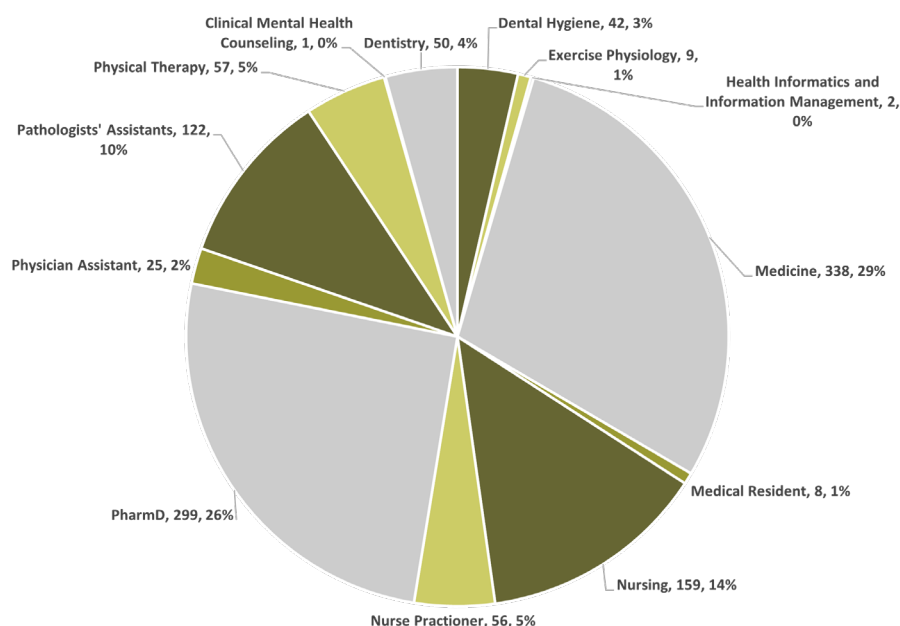
Rural Track: The mission of Rural Track is to increase the number of primary care physicians practicing in rural/underserved areas of West Virginia. Rural Track provides additional learning opportunities of working in a rural setting and caring for individuals in those areas while maintaining the requirements, goals, and objectives of the traditional track. Fifty-six have graduated from the program and 16 scholarships have been awarded.

Rural Immersions: Health profession students attend rural immersions to gain supplemental educational experience regarding community health and disease processes. In FY23, RCH Scholars participated in at least one of five immersions: Food Insecurity & Preservation in Rural Communities, Health Policy and Advocacy for Rural/Underserved Communities, Food Insecurity & Nutrition in Rural Communities, Rural Maternal Healthcare, and Health Inequities & Disparities in Rural Communities.

R.H.I.G.: The RHIG is a student-led group of health professions students of different disciplines who learn about rural health issues through guest speakers and activities. In FY23, six meetings were held all via Zoom. Topics covered included healthcare policy in rural communities, veterans' healthcare, rural and underserved women's health, and rural global issues. Students also participated in a service-learning project by organizing a raffle for the food bank in Preston County, West Virginia.

Interprofessional Teams: WVU collaborated with WVAHEC to coordinate eleven IPT activities that included 50 students from an array of disciplines: physician assistant, behavioral health, medicine, pharmacy, public health, physical therapy, speech pathology, and nursing. IPT activities addressed a broad range of topics: women's health in rural/underserved communities, health career shadowing, nutrition and food insecurity, and strengthening families.

WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES, BY DISCIPLINE 7/1/22- 6/30/23



NUMBER AND LOCATION OF WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES 7/1/22 - 6/30/23



Increase the retention of healthcare providers in rural areas.

Continuing Education: WVU partnered with WV AHEC to provide 23 continuing education opportunities for 1,287 individuals working in West Virginia. Topics included: motivational interviewing, the aging brain and pain management. Of the 1,287 participants working in WV, 47.6% work for an employer located in a rural and/or underserved area of West Virginia. Employers located in Charleston, Morgantown and Huntington contributed significantly to the non-rural employers. West Virginia Project ECHO provides virtual CE sessions that can be accessed by anyone with basic video conferencing technology. These sessions addressed Substance Use Disorder, HCV/HIV, chronic lung disease, COVID-19 and campus mental health.

Develop pipeline programs to enhance student interest in healthcare activities.

H.S.T.A.: HSTA is a unique mentoring program that prepares participating high school students to enter and succeed in STEM-based (Science, Technology, Engineering and Mathematics) undergraduate and graduate degree programs. HSTA strives to increase college attendance of students from underrepresented minority, disadvantaged, and/or rural backgrounds and increase healthcare providers in rural and underserved communities. HSTA students develop research projects under the mentorship of teachers that address health issues faced by their communities. In FY23, WVU collaborated with HSTA clubs in 25 of the 27 HSTA counties with 749 students participating.

Rural Health Day: An annual event that brings pre-health undergraduate students together to learn through various speakers and hands-on activities about the medical school application process and health professions career opportunities in rural areas. RHD was held on April 1, 2023 at the WVU Health Sciences Center in Morgantown, West Virginia. Nearly 50 students from colleges and universities in West Virginia and Maryland attended. 62% stated that they would stay in West Virginia after training.

R.U.S.H.: The Rural Undergraduate Shadowing in Healthcare Program is designed to provide pre-health participants with a unique experience that offers insight into what it is like to practice in rural West Virginia. Selected students were placed in Calhoun, Upshur, Jefferson, Pendleton, and Wyoming counties for the 20-hour shadowing program. All seven students reported the experience increased their interest in rural health.

PREP: Pipeline Rural Education Program introduces WVU rising juniors and seniors to pathways into rural healthcare professions. In FY23, the second cohort of fourteen students participated and completed the program. Requirements included attending a RHIG meeting, two Project REACH events, one Rural Immersion, attending Rural Health Day, and the completion of a rural healthcare topics poster.

Support the involvement of rural areas of the state in the health education process.

MEDICAL AND DENTAL STUDENT SERVICE PROGRAMS AWARDED 2022-2023

\$2.75 MILLION

WHERE OUR AWARD RECIPIENTS ARE TODAY

27 DENTAL STUDENTS



22 MEDICAL STUDENTS



5 IN SCHOOL

5 RESIDENCY

12 PRACTICING IN WV

77% (30 out of 39 recipients; 24 dental and 6 medical students) have honored their service obligation. Fifteen of 27 recipients are 5 years beyond their service commitment. 80% continue to practice in a rural and/or underserved area of WV or dental HPSA. No medical recipients are five years beyond their service commitment.

Project R.E.A.C.H.: Project Rural Education Alliance for Community Health is a student-run outreach program that provides education and health information throughout the state. In FY23, students participated in eight health education events that served 300 people from Raleigh, Preston, Greenbrier, Boone, Wyoming, and Mingo counties.

CARRS: Community and Rural Rotation Support Program enhances the student's rural rotation experience by engaging and participating in a non-clinical community project in underserved areas of West Virginia. CARRS is for WVU health profession students on rural rotations in the following academic programs: Medicine, Dentistry, PharmD, and Physician Assistant. Prospective CARRS students must complete an application for review and then be chosen as an award recipient. Since beginning the program in Spring 2018 semester, 46 students have completed the program.

Newsletter: Provides annual updates on WVU health profession students' educational and outreach activities to nearly 1,000 field faculty across the state.

West Virginia Higher Education Policy Commission

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