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#### Legislative Oversight Commission on Education Accountability January 2025

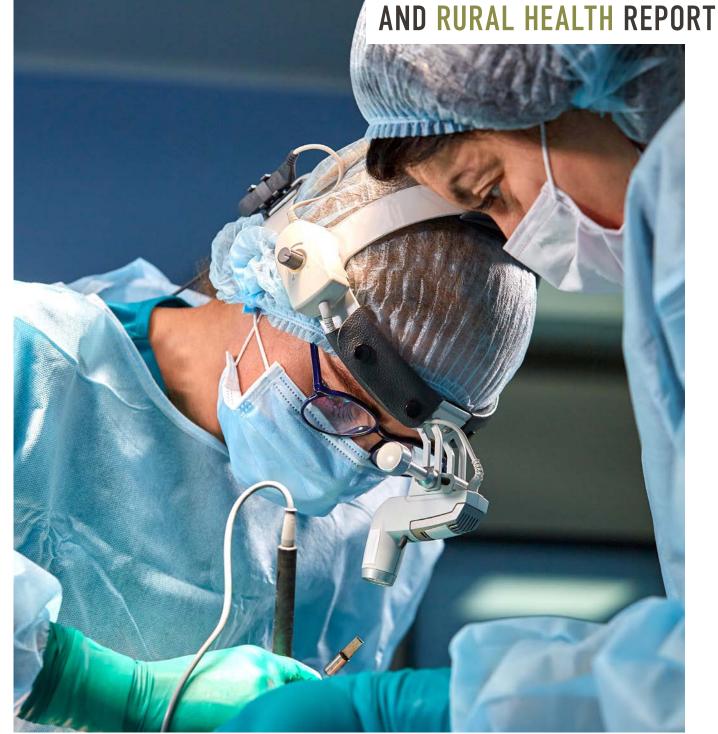
• 2024 West Virginia Health Sciences and Rural Health Report (§18B-16-9) Jordyn Reed, Administrator, Center for Nursing



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

2024 Health Sciences and Rural Health Report Card (§18B-16-9)

# 2024 WEST VIRGINIA HEALTH SCIENCES



WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

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# About the **DIVISION OF HEALTH SCIENCES**

The Division of Health Sciences of 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, which began in 2021. In 2024 the Division launched year 3 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 2023-2024, 27 percent (237) of the 875 medical students who enrolled in the first-year classes of the state's three medical schools were West Virginia residents.

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 94-100 percent for the last five years.

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 2024 medical school graduates in West Virginia, 56 percent (61) chose to do primary care residencies in West Virginia.

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 third 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 250 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 Virgina medical students who agree to remain in West Virginia to practice in an underserved area of the state.

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.

## **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<sup>®</sup> score for students entering allopathic medical schools during the 2023-2024 academic year was 511.7. For students entering osteopathic medical schools, the score was 503. National performance data on the old MCAT<sup>®</sup> for students entering medical schools is no longer reported.

For the 2023-2024 academic year, the national mean grade point average (GPA) for students matriculating to allopathic medical schools was 3.64, 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

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
In-State					
Acceptances/Applicants	71/161	86/151	103/199	95/209	88/190
Admission Rate	44%	57%	52%	45%	46%
Out-of-State					
Acceptances / Applicants	68/1,680	32/1,765	25/2,123	15/1,922	29/2,015
Admission Rate	4%	2%	1.2%	0.8%	1%
Total Acceptances / Applicants	139/1,841	118/1,916	128/2,322	110/2,131	117/2,205
Total Admission Rate	7.5%	7%	6%	5%	5%

#### ENTERING CLASS ACADEMIC QUALIFICATIONS

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Mean GPA	3.8	3.66	3.63	3.61	3.65
Mean MCAT <sup>(R)</sup> (New Version)	505	503	504	502	502

#### ACADEMIC YEAR DATA

		2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
First Year New Enrollment	In-State	41	59	63	69	63
	Out-of-State	31	21	17	11	17
	Total	72	80	80	80	80
Total Graduates		56	79	69	74	79
Total Medical Students		290	330	321	315	335
Tuition and Fees	In-State	\$25,615	\$24,376	\$24,324	\$24,004	\$23,904
	Out-of-State	\$59,198	\$57,734	\$57,682	\$56,788	\$54,772

#### West Virginia School of Osteopathic Medicine







2024 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT

#### ENTERING CLASS ADMISSION RATE

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
In-State					
Acceptances/Applicants	73/112	48/100	67/143	53/139	57/131
Admission Rate	65%	48%	47%	38%	44%
Out-of-State					
Acceptances / Applicants	485/5,019	483/4,923	533/5,173	465/5,290	374/5,081
Admission Rate	9.6%	10%	10%	8%	7%
Total Acceptances / Applicants	558/5,131	531/5,023	600/5,316	465/5,429	431/5,212
Total Admission Rate	11%	11%	11%	<b>9</b> %	8%

#### ENTERING CLASS ACADEMIC QUALIFICATIONS

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Mean GPA	3.63	3.59	3.59	3.58	3.59
Mean MCAT <sup>(R)</sup> (Old Version)	-	-	-	21.8	24.7
Mean MCAT <sup>(R)</sup> (New Version)	502.0	503.5	501.8	500.7	500.8

#### ACADEMIC YEAR DATA

		2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
First Year New Enrollment	In-State	51	32	46	41	42
	Out-of-State	146	169	154	166	158
	Total	197	201	200	207	200
Total Graduates		189	181	199	178	194
Total Medical Students		798	793	806	800	809
Tuition and Fees	In-State	\$23,594	\$22,472	\$21,472	\$21,472	\$21,472
	Out-of-State	\$56,394	\$53,710	\$52,710	\$52,710	\$52,710

#### West Virginia University School of Medicine









#### ENTERING CLASS ADMISSION RATE

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
In-State					
Acceptances/Applicants	93/189	66/165	81/212	75/212	79/208
Admission Rate	49%	40%	38%	35%	38%
Out-of-State					
Acceptances / Applicants	85/5,039	113/4,578	86/4,850	90/4,841	78/5,356
Admission Rate	1.7%	3%	2%	2%	1%
Total Acceptances / Applicants	178/5,228	179/4,743	166/5,062	165/5,053	157/5,356
Total Admission Rate	3.4%	4%	3%	3%	3%

#### ENTERING CLASS ACADEMIC QUALIFICATIONS

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Mean GPA	3.8	3.8	3.8	3.8	3.8
Mean MCAT <sup>(R)</sup> (New Version)	509	511	510	510	509

#### ACADEMIC YEAR DATA

		2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
First Year New Enrollment	In-State	76	47	65	63	67
	Out-of-State	36	65	47	49	45
	Total	112	112	112	112	112
Total Graduates		96	106	103	117	101
Total Medical Students		428	441	434	456	446
Tuition and Fees	In-State	\$34,398	\$33,426	\$32,940	\$32,643	\$32,643
	Out-of-State	\$68,202	\$66,231	\$64,935	\$64,152	\$64,152

## **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 2021 is 97 percent. The high rate is consistent with previous years, reflecting the strong preparation and performance of medical graduates. (source: United States Medical Licensing Examination Program).

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

	2021	2020	2019	2018	2017
Marshall University	70/71	74/78	54/55	64/65	66/69
	99%	95%	98%	98%	96%
West Virginia University	115/115	103/103	88/91	92/93	99/101
	100%	100%	98%	99%	98%

#### **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 98% in 2021. (source: United States Medical Licensing Examination Program)

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

	2021	2020	2019	2018	2017
West Virginia School of Osteopathic Medicine	166/176	182/190	191/198	188/192	168/178
	94%	96%	96%	98%	94%

## 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 2024, medical students leave medical school with an average of \$236,607 in total education debt.

#### AVERAGE MEDICAL STUDENT DEBT, BY GRADUATING CLASS

Class	Marshall University	West Virginia School of Osteopathic Medicine	West Virginia University
2024	\$189,109	\$242,465	\$185,378
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

## **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.

Sponsoring Institution	Primary Site	City	Specialty	Filled Residency
Access Health THC	Access Health THC	Beckley	Family Medicine	12
CAMC	САМС	Charleston	Emergency Medicine	18
CAMC	САМС	Charleston	Urological Surgery	10
CAMC	САМС	Charleston	Family Medicine	18
CAMC	САМС	Charleston	Internal Medicine Cate-gorical	38
CAMC	САМС	Charleston	Internal Medicine Preliminary	2
САМС	САМС	Charleston	Internal Medicine/ Psychiatry	9
САМС	САМС	Charleston	Obstetrics and Gynecology	12
CAMC	CAMC	Charleston	Pediatrics	23
CAMC	CAMC	Charleston	Psychiatry	20
CAMC	САМС	Charleston	Surgery Categorical	25
CAMC	САМС	Charleston	Surgery Preliminary	1
CAMC	САМС	Charleston	Vascular Surgery Integrated	5
CAMC	САМС	Charleston	Neurology	8
Greenbrier Valley Medical Center	Greenbrier Valley Med Center	Ronceverte	Family Medicine	14
Greenbrier Valley Medical Center	Greenbrier Valley Med Center	Ronceverte	Osteopathic Neuromusculoskeletal Medicine	9
Marshall Community Health Consortium	Pleasant Valley Hospital	Point Pleasant	Psychiatry (Rural)	4
Marshall Community Health Consortium	Logan Regional Medical Center	Logan	Surgery (Rural)	6
Marshall University	Cabell Huntington Hospital	Huntington	Family Medicine	25
Marshall University	Cabell Huntington Hospital	Huntington	Internal Medicine	68

#### WEST VIRGINIA RESIDENCY PROGRAMS

Data were obtained September 2024

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Sponsoring Institution	Primary Site	City	Specialty	Filled Residency
Marshall University	Cabell Huntington Hospital	Huntington	Internal Medicine/ Pediatrics	8
Marshall University	Cabell Huntington Hospital	Huntington	Neurology	13
Marshall University	Cabell Huntington Hospital	Huntington	Obstetrics and Gynecology	13
Marshall University	Cabell Huntington Hospital	Huntington	Orthopedic surgery	17
Marshall University	Cabell Huntington Hospital	Huntington	Pediatrics	20
Marshall University	Marshall/Univ Phys.& Surgeons Clinics	Huntington	Psychiatry	24
Marshall University	Cabell Huntington Hospital	Huntington	Surgery	23
MSOPTI	Greenbrier Valley Med Center	Ronceverte	Transitional Year	0
United Hospital Center	United Hospital Center	Bridgeport	Family Medicine	20
West Virginia University	1 Medical Center Drive	Morgantown	Anesthesiology	36
West Virginia University	1 Medical Center Drive	Morgantown	Dermatology	7
West Virginia University	Robert C. Byrd HSC North	Morgantown	Emergency Medicine	30
West Virginia University	Clark K. Sleeth Family Medicine Center	Morgantown	Family Medicine	18
West Virginia University	WVU Rural Family Medicine	Harpers Ferry	Family Medicine	18
West Virginia University	WVU Health Sciences	Morgantown	Internal Medicine	80
West Virginia University	Camden Clark Med Center	Parkersburg	Internal Medicine	18
West Virginia University	WVU SOM	Morgantown	Internal Medicine/ Pediatrics	16
West Virginia University	WVU SOM	Morgantown	Neurological Surgery	7
West Virginia University	WVU Health Sciences	Morgantown	Neurology	29
West Virginia University	WVU Hospitals	Morgantown	Obstetrics and Gynecology	12
West Virginia University	WVU SOM	Morgantown	Ophthalmology	12
West Virginia University	WVU Dept. of Orthopedics	Morgantown	Orthopedic surgery	20
West Virginia University	WVU SOM	Morgantown	Otolaryngology	15
West Virginia University	WVU Robert C. Byrd	Morgantown	Pathology-Anatomic and Clinical	12
West Virginia University	WVU SOM	Morgantown	Pediatrics	18
West Virginia University	WVU SOM	Morgantown	Plastics - Integrated	6
West Virginia University	WVU SOM	Morgantown	Psychiatry	36
West Virginia University	WVU SOM	Morgantown	Radiation Oncology	3
West Virginia University	WVU Hospitals	Morgantown	Radiology-Diagnostic	26
West Virginia University	WVU SOM	Morgantown	Surgery	30
West Virginia University	WVU SOM	Morgantown	Transitional Year	13
West Virginia University	WVU Robert C. Byrd	Morgantown	Urology	10
Wheeling Hospital	Wheeling Hospital	Wheeling	Family Medicine	24
Total Filled Slots				961

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. Nationally for the 2024 single match program, there were a record number 19,423 categorical primary care positions available during the match. Compared to 2023, this is an increase of 719 primary care positions (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

	2024	2023	2022	2021	2020
Marshall University	22 (37%)	35 (45%)	38 (56%)	37 (50%)	36 (46%)
West Virginia School of Osteopathic Medicine	114 (60%)	114 (63%)	114 (58%)	100 (56%)	117 (60%)
West Virginia University	46 (48%)	56 (54%)	49 (48%)	65 (56%)	51 (50%)

### **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.

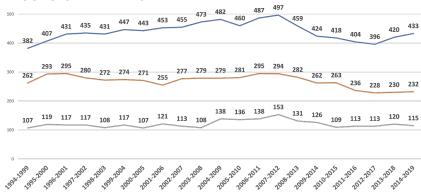
- Primary care is defined as family medicine, internal medicine, internal medicine/pediatrics, obstetrics/gynecology, and pediatrics.
- Rural areas include all areas of the state with a 2006 Rural Urban Commuting Area (RUCA) code of 4.0 or higher. These codes classify U.S. Census tracts using measures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

Between 2014 and 2019, of the 2,045 students who graduated from the state's three medical schools and have completed residency training, either in West Virginia or out-of-state, 22 percent (433) of these graduates are practicing in West Virginia, 12% (232) are practicing in primary care in West Virginia, and 6% (115) 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 2014-2019

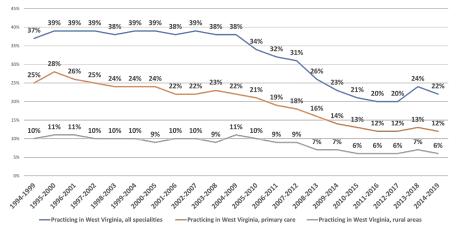
	Total with completed training	Total in practice in West Virginia	Total in primary care in West Virginia	Total in rural areas of West Virginia
Marshall University	397	119 (30%)	58 (15%)	20 (5%)
West Virginia School of Osteopathic Medicine	1,110	159 (14%)	101 (9%)	72 (6%)
West Virginia University	538	155 (29%)	73 (14%)	23 (4%)
Total	2,045	433 (22%)	232 (12%)	115 (6%)

### NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1994-2019



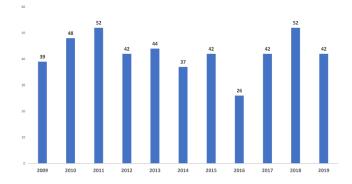
acticing in West Virginia, rural areas

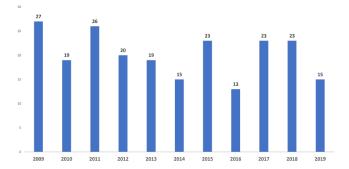
### PERCENTAGE OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1994-2019



#### 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 2014 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 2014-2016

County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Barbour	2	2	2
Berkeley	9	0	4
Boone	4	4	3
Braxton	3	3	2
Brooke *	0	0	0
Cabell *	84	0	37
Calhoun	1	1	1
Clay	0	0	0
Doddridge	0	0	0
Fayette	1	1	1
Gilmer	0	0	0
Grant	0	0	0
Greenbrier	14	14	12
Hampshire	3	3	3
Hancock	1	1	1
Hardy	0	0	0
Harrison	17	17	10
Jackson	2	2	1
Jefferson	7	7	7
Kanawha *	65	1	31
Lewis	1	1	1
Lincoln	1	1	1
Logan	4	4	2
Marion	2	2	2

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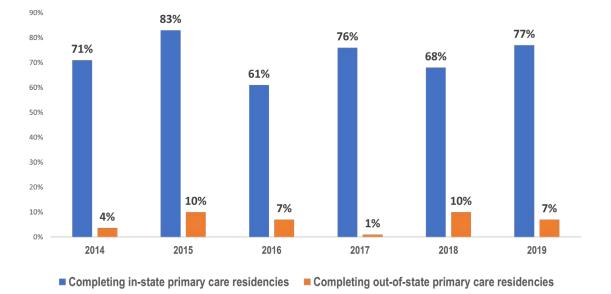
County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Marshall *	3	0	2
Mason	10	10	8
McDowell	2	2	2
Mercer	10	10	4
Mineral	1	1	0
Mingo	0	0	0
Monongalia*	108	2	40
Monroe	2	2	2
Morgan	0	0	0
Nicholas	2	2	1
Ohio*	12	0	7
Pendleton	0	0	0
Pleasants	0	0	0
Pocahontas	1	1	1
Preston	2	2	2
Putnam*	8	0	6
Raleigh	15	1	12
Randolph	4	4	3
Ritchie	0	0	0
Roane	1	1	1
Summers	2	2	1
Taylor	0	0	0
Tucker	0	0	0
Tyler	1	1	1
Upshur	4	4	3
Wayne	4	3	3
Webster	0	0	0
Wetzel	0	0	0
Wirt	2	2	2
Wood*	12	0	7
Wyoming	1	1	1
County Unknown	5	0	4
Total	433	115	232

\* 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.

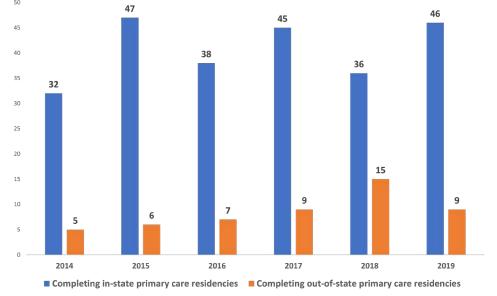
#### Retention of West Virginia Medical School Graduates Completing Primary Care Residencies

The location of a medical school graduate's residency program frequently predicts whether that graduate will practice in West Virginia. For the 2019 graduates of West Virginia medical schools, 195 graduates went on to complete primary care residency programs. Upon completing residency, 77% of those who completed in-state primary care residencies were retained in West Virginia to practice, while only 7% 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



2024 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT

## 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 third 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	2024
Entering Class Data					
Applicants	In-State	98	29	28	42
	Out-of-State	24	76	74	82
	Total	122	105	102	124
Acceptances Issued	In-State	37	23	28	39
	Out-of-State	45	50	50	64
	Total	82	73	78	103
Entering Class Mean GPA		3.47	3.52	3.51	3.45

Continued on next page

		2021	2022	2023	2024
Academic Year Data					
First Year New Enrollment	In-State	32	21	22	32
	Out-of-State	29	21	27	32
	Total	61	42	49	64
Total Graduates		81	77	68	48
Total PharmD Students		287	224	197	195
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

Entering Class Data		2021	2022	2023	2024
Applicants	In-State	28	32	23	37
	Out-of-State	104	65	63	67
	Total	132	97	86	104
Acceptances Issued	In-State	25	23	16	29
	Out-of-State	39	25	29	28
	Total	64	48	45	57
Entering Class Mean GPA		3.2	3.31	3.34	3.31
Academic Year Data					
First Year New Enrollment	In-State	17	17	12	24
	Out-of-State	17	11	17	14
	Total	34	28	29	38
Total Graduates		59	54	54	67
Total PharmD Students		240	211	176	151
Tuition and Fees					
In-State		\$21,848	\$23,508	\$23,992	\$25,584
Out-of-State		\$35,278	\$38,796	\$39,566	\$41,786
Avg Final Year Indebtedness		\$148,476	N/A	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 2023 was 77.5%. (source: National Association of Boards of Pharmacy).

#### WVU SCHOOL OF PHARMACY, PHARMACY BOARD EXAMINATION PASS RATES\*

Graduating Class	2023	2022	2021	2020	2019
Number Passing	50	50	73	62	63
Number of Examinees	66	70	82	67	69
Passage Rate (%)	76%	74%	89%	93%	92%

\* First time test takers

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

Graduating Class	2023	2022	2021	2020	2019
Number Passing	29	34	42	54	55
Number of Examinees	50	52	56	65	76
Passage Rate (%)	58%	65.4%	75%	83%	72%

#### 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
2022	77	28 (37%)	17 (22%)	18 (24%)	1 (2%)
2023	68	30 (45%)	13 (20%)	19 (28%)	6 (9%)
2024	50	20 (40%)	11 (22%)	8 (16%)	5 (10%)

## 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
2022	54	15 (28%)	16 (30%)	38 (71%)	N/A
2023	54	12 (23%)	N/A	N/A	N/A
2024	67	16 (24%)	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 third 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

		2021	2022	2023	2024
Entering Class Data					
Applicants	In-State	41	55	45	49
	Out-of-State	812	891	683	705
	Total	853	946	728	754
Acceptances Issued	In-State	26	33	31	26
	Out-of-State	49	55	60	65
	Total	75	88	91	91
Entering Class Mean GPA		3.73	3.75	3.82	3.81
Entering Class Mean Total DAT Score		19	20	20	20
Academic Year Data					
First Year New Enrollment	In-State	25	30	24	19
	Out-of-State	23	17	24	29
	Total	48	47	48	48
Total Graduates		46	44	46	49*
Total DDS Students		184	185	192	193
Tuition and Fees					
In-State		\$49,985	\$51,484	\$53,569	\$54,122
Out-of-State		\$97,532	\$100,324	\$103,897	\$106,718
Average Final Year Indebtedness		\$282,787	\$253,288	N/A	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 2023, the national pass rate for accredited programs was 95.8.%

#### WVU DENTISTRY, NATIONAL BOARD EXAMINATION PASS RATES PART 1\*

Graduating Class	2024	2023	2022	2021	2020
Number Passing	-	-	-	44	33
Number of Examinees	-	-	-	50	46
Passage Rate (%)	-	-	-	88%	71%

\* First time test takers

#### WVU DENTISTRY, NATIONAL BOARD EXAMINATION PASS RATES PART 2\*

Graduating Class	2024	2023	2022	2021	2020
Number Passing	46	44	41	44	41
Number of Examinees	46	44	44	48	43
Passage Rate (%)	100%	100%	93%	91%	95%

\* First time test takers

#### West Virginia Retention and Rural Practice

West Virginia has opportunities for dentists in all counties. In 2023, West Virginia had 121 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%)
2024	46	11	11 (24%)	5 (11%)



## 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, 250 participants have completed their service obligation. In the 2023-2024 academic year, 7 awards totaling \$150,000 were offered to:

- 3 dental students
- > 2 nursing education students
- I physical therapy student
- 1 clinical social work 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

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Total number of applicants	843	693	588	568	413
Number of individual awardees*	344	295	211	182	169
Total number of awards distributed	602	465	320	272	250
Total value of awards distributed	\$1,351,500	\$1,244,750	\$378,350	\$343,100	\$294,172

\* 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

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Loans awarded in Fiscal Year	0	154	229	352	242
Total amount awarded	\$0	\$1,264,257	\$962,700	\$1,712,559	\$1,801,000
Amount of unexpended funds*	\$4,990,322	\$3,380,302	\$4,290,480	\$3,143,604	\$2,760,525
Loan postponement**	311	334	322	315	300
Loan forgiveness***	25	9	11	10	11
Default rate on previous awards	2.76%	6.24%	4.43%	6.74%	7.97%

\* 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 2022-2023 AND 2023-2024

				2022-2023
	Marshall University	West Virginia School of Osteopathic Medicine	West Virginia University	Total
Number of New Awards	0	3	3	6
Number of Awards Renewed	4	3	3	10
New Tuition Waivers	\$0	\$93,714	\$98,415	\$192,129
Renewed Tuition Waivers	\$101,306	\$124,952	\$79,844	\$306,102
Total School Awards	\$101,306	\$218,666	\$178,259	\$498,231
				2023-2024
Number of New Awards	1	3	3	7
Number of Awards Renewed	3	5	4	12
New Tuition Waivers	\$45,748	\$93,714	\$99,117	\$238,309
Renewed Tuition Waivers	\$117,012	\$156,190	\$132,795	\$405,997
Total School Awards	\$162,760	\$249,904	\$231,912	\$644,306

#### 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 2023-2024, 35 awards totaling \$350,000 were offered to:

- 5 Licensed doctoral-level clinical psychologists
- 11 licensed independent social workers

• 16 licenses professional counselors

3 psychiatric nurse practioners

•

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## 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 2024, 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 2024 include:

- Mew River Community & Technical College students to attend the WV National Association of Social Workers Conference
- > Sponsoring student scholarships to the WV Rural Health Conference

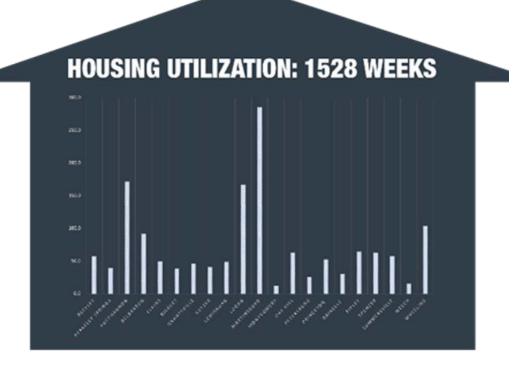
The following pages contain a profile of the statewide student housing system for clinical rotations and program overviews for each of the academic health center's RHI activities during FY 2024.

#### 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 2024, the housing was most frequently used by medical, physician assistant, pharmacy, pathologist's assistant, and dental students. The typical length of stay for students utilizing housing is about 4 weeks.

In FY2024, 24 housing units located in 21 cities throughout WV 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/week fee paid by students utilizing the housing. Often, the cost of housing is covered by the student's institution. A total of 1,528 weeks were utilized across all housing unit locations in FY 2024.







2024 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT



#### 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 \$1,543,406.00 in rural research grants. The research efforts benefit both the communities and the students. The research efforts benefit the communities in that data is gathered in

the community allowing for in depth analysis and innovative solutions particular to that community for challenging health care issues. For the students, research has 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 32 state, national and international presentations and 23 publications.



#### Pharmacy Students - Six pharmacy students participated in

rural/underserved community-based field experiences/rotations as they completed 50% of their fourth-year training in rural West Virginia counties. These students also completed additional study of rural practice responsibilities, payment challenges, rural health care problems and issues. Additionally, they conducted research projects addressing current rural health issues.

Health Policy Fellowship – There were two residents in the Health Policy Fellowship who participated in the legislative session this year. The Fellows provided a community forum in April addressing issues around medical marijuana, in addition to conducting internal educational events for students, residents and faculty on relevant state and national health policy topics. Alumni of the health policy fellows program continue to stay actively involved in the program and are creating an impact by serving in national and state roles to drive health policy for the benefit of rural communities.



**Rural Health Service Program:** This opportunity provides a financial incentive of \$25,000 for third and/or fourth year medical students and second year Physician Assistance (PA) students in exchange for a year of practice in a rural or underserved area. Three medical students and two PA students were selected in 2023-2024 and received \$25,000 each.

There are currently fourteen Rural Health Service award participants who have completed their residency/education, and 9 of those are now fulfilling their service commitment. Nine participants are still in medical school and residency with service commitments required after residency. To date we have provided \$750,000 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 2023-2024 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 11 counties, involving 1,212 students via 32 events. Events included health care club formation, trips to the medical school, medical and other speakers, suturing clinics and other activities for the schools that wish to pursue the more intensive approach. In addition, this program helps to identify candidates for Marshall's pathway programs.

This is a very valuable resource especially for counties like Webster who struggle with funds to take their students onto college campuses and break through the fears and worries of what college is like and teach them the logistics of how to travel to and move around on a campus-learning the help and resources that are available to them is invaluable! – Sharon Ray, Webster County High School

I absolutely think exposure from SOAR increases interest in the health care field. Several of our students who were not interested in nursing thought our trip last Friday was extremely interesting and enjoyed the hands-on activities. Hopefully, we will influence several of them to convert to health care careers. Our students greatly enjoy the exposure to different careers and opportunities that SOAR affords them. - Kim Fisher, Spring Valley High School Science Teacher

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

The Center for Rural Health, the West Virginia School of Osteopathic Medicine (WVSOM) and Coalfield Health Center (Coalfield) in Logan County are combining resources to support community health outreach and provide students with valuable rural health experiences. Students in this initiative have an opportunity to work in interdisciplinary teams with a rural focus including the challenges and the rewards of a rural

healthcare practice. The collaborative intent is for students to understand and value the impact they can make in rural health and provide rural communities the opportunities to identify and recruit potential providers.

Recognizing the importance of collaboration, the Center for Rural Health worked with the West Virginia Rural Health Association and Community Care in central West Virginia to identify gaps in resources for rural providers and to address those specific needs. For example, the collaborative established that there was a need for health equity education for rural providers. In response to that need, this collaboration created and implemented a Health Equity event in the fall of 2023 that was attended by over 30 rural providers from all over West Virginia. The day-long event featured both national and local speakers and rural care was a focal point of the event. Moving forward, the collaborative will continue work with our partners to identify areas of isolation and gaps in resources for rural providers.





#### 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 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 2024:** WVSOM hosted its 13th annual Rural Practice Day, marking a significant milestone as it was integrated into first- and second-year medical students' curriculum for the first time. The event, themed "Impact," provided future doctors with insights from experienced rural physicians on the challenges and rewards of serving rural populations.

Student Rotations: RHI students complete rotations in six different WVSOM Statewide Campus regions. Nine hospitals serve as RHI base sites in rural/underserved areas. RHI base sites for the 2023-24 academic year included:

- CAMC Greenbrier Valley Medical Centerr
- Charleston Area Medical Center
- Davis Medical Center
- Logan Regional Medical Center
- Mon Health Medical Center
- WVU Medicine Grant Memorial Hospital
- WVU Medicine Princeton Community Hospital
- WVU Medicine St. Joseph's Hospital
- WVU Medicine United Hospital Center

**Rural Physician Service Program:** The Rural Physician Service Program incentivizes WVSOM students to remain in West Virginia by offering financial awards in exchange for their commitment to practice in eligible rural or underserved areas within the state. This year, 10 students were selected to receive \$22,000 each, and agreed to practice in these critical service sites for one year. Additionally, these students benefit from enhanced rural health training during medical school through the RHI program.

**Rural or Underserved Rotation Housing**: Multiple WVSOM students utilized shared housing that totaled 712 weeks of use during their rural or underserved rotations in West Virginia. Students utilized shared housing most often when completing clinical rotations more than 50 miles from their Statewide Campus base site.

### Increase the retention rate of healthcare providers in rural areas.

**Residency Sign-on Incentive:** Four of the 14 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 WVU Medicine United Hospital Center in Bridgeport, WV, one accepted a residency at WVU Medicine Wheeling Hospital in Wheeling, WV, and two accepted residencies at Charleston Area Medical Center in Charleston, WV.

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

**PreK/Elementaty School:** In collaboration with the student admnissions leadership team and the WVSOM Pediatric Club, RHI helped host a program for 49 pre-K students aimed at encouraging healthy habits and teaching about thier bodies.

Middle School: RHI collaborated with WVSOM students to host 19 Wyoming County middle school students from the Gear-Up Wyoming program.

**High School:** RHI co-sponsored tours of WVSOM for five high school groups. Students had the opportnunity to tour the school's anatomy lab to increase their medical knowledge and explore careers in health care. A total of 97 high school students attended the tours.

Undergraduate: RHI sponsored a mult-day Just Say KNOW educational camp for eight students on the Lewisburg camus in June.

**Green Coat Program**: The Green Coat program is an opportunity for undergraduate students or healthcare professionals that offers exposure to clinical responsibilities in a hospital environment. This year, four students participated in the program at Charlestion Area Medical Center, and five students participated at David Health System.

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#### 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 fiscal year 2023-24:

- "Poultry Safety and Plant Tour" in Moorefield, WV on Sept. 1, 2023
- "Coal Mining Safety with MSHA" in Beaver, WV on Dec. 4, 2023
- "Coal Mine Tour" in Eccles, WV on Dec. 5, 2023
- "RHI at the Capitol" in Charleston, WV on Jan. 26, 2024
- "Natural Gas Rig Tour" in Wheeling, WV on April 15, 2024
- Mental Health in the Mountain State" in Weston, WV makeup activity throughout the year

**Coalfield Collaboration:** The Rural Health Initiative, in collaboration with the Coalfield Health Center and Marshall University's Center for Rural Health, is engaging in outreach efforts in Logan County. Coalfield, a key member of the "Wild, Wonderful and Healthy Logan County" initiative, serves as a hub for medical student outreach from Marshall University and WVSOM. The collaboration aims to improve health outcomes, support community-based research and encourage health care students to practice in the region. WVSOM students on rotation at Coalfield complete a quality improvement project.





**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.







#### West Virginia University Health Sciences Center

#### Increase the recruitment of healthcare providers to rural areas.

WV AHEC: 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 serving rural and underserved populations. The WV AHEC Program includes a program office and five regional centers that strategically partner to conduct and evaluate outcomes of pipeline programs, interprofessional education and training, continuing education, and rural immersions across the state.

WV AHEC Rural Community Health Scholars: The WV AHEC 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 FY24, 38 students from six institutions were recruited into the sixth cohort of the WV AHEC RCH Scholars program, and 27 Scholars graduated in May 2024. Thirty Scholars from cohort 6 are moving into the second year of the program, and recruitment for cohort 7 is underway.

**Rural Track-Family Medicine:** The mission of the Rural Track is to increase the number of primary care physicians practicing in rural/underserved areas of WV. Rural Track provides additional learning opportunities working in rural settings and caring for individuals in those areas while maintaining the requirements, goals and objectives of the traditional track. A total of 64 students have graduated from the program.

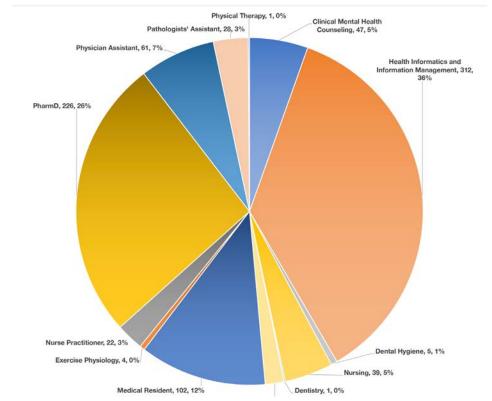
**Rural Immersions:** Health professions students attend rural immersions to gain supplemental educational experience regarding community health and disease processes. In FY24, WV AHEC Rural Community Health Scholars participated in at least one of five immersions: Food Insecurity and Nutrition (two centers), Provider Advocacy through Policy and Outreach, Integration of Primary Care and Oral Health, and Health Inequities and Disparities.

**R.H.I.G.**: The Rural Health Interest Group is a student-led group of health professions students of different disciplines who learn about rural health issues through guest speakers and activities. In FY24, seven meetings were held. Six via Zoom and one in-person meeting that was part of a poverty simulation with the WVU School of Nursing. Topics covered included homelessness and healthcare, global rural healthcare, rural dentistry, and emergency medicine. Students also participated in a service-learning project by organizing a food and toiletries drive for the Greenbrier County Wellness Center.

**Interprofessional Teams:** WVU collaborated with WV AHEC to coordinate 11 interprofessional team activities that included 77 students from physician assistant, behavioral health, medicine, pharmacy, public health, physical therapy, speech pathology, nursing and medical assistant disciplines. Activities addressed diabetes & periodontal, community health worker, integration of primary/oral health, provider advocacy, health inequities/disparities in rural communities, rural women's health, social determinants of health, substance use prevention in adolescents and nutrition and food insecurity.



## WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES, BY DISCIPLINE 7/1/23- 6/30/24



NUMBER AND LOCATION OF WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES 7/1/23 - 6/30/24



2024 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT

#### Increase the retention of healthcare providers in rural areas.

**Continuing Education Opportunities:** WVU partnered with WV AHEC to provide continuing education opportunities for 1,034 individuals working in WV. These opportunities included two conferences, the WV Rural Health Conference and the National Association of Social Workers Spring Conference. Topics of the CE activities ranged from Motivational Interviewing to Understanding Pain Management and Opioids. Of the 1,034 participants working in WV, 68.0% work for an employer located in a rural and/or underserved area of WV. Employers located in Charleston, Morgantown and Huntington contributed significantly to the non-rural employers. WV Project ECHO offers virtual CE sessions that are available to anyone who has access to basic video conferencing technology. These CE sessions addressed topics such as Substance Use Disorder, HCV/HIV, Pregnant Women with SUD, Chronic Lung Disease, COVID-19, Psychiatry, Diabetes and Campus Mental Health.

#### Develop pipeline programs to enhance student interest in healthcare activities.

**H.S.T.A.:** HSTA is a unique mentoring program in WV 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, disadvantage, and/or rural backgrounds. In addition to health profession-related presentations and field trips, HSTA students develop research projects under the mentorship of teachers that examine, and address health issues faced by their communities. In FY24 WVU collaborated with HSTA clubs in all 27 HSTA counties in WV with 684 students participating. Of the HSTA student participants, 98.5% attended schools in rural and/or underserved areas and/or a disadvantaged school.

**Rural Health Day:** An annual event that brings pre-health undergraduate students together to learn more 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 6, 2024, at the WVU Health Sciences Center in Morgantown, WV. Students participated from colleges and universities in WV, PA, MD, and OH.

**R.U.S.H.**: The Rural Undergraduate Shadowing in Healthcare Program is designed to provide pre-medical participants with a unique experience that offers insight into what it is like to practice a health profession in rural WV. Selected students were placed in Calhoun, Upshur, Jefferson, Pendleton, and Wyoming counties for the 20-hour shadowing program. All six 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 FY24, the third cohort of ten students participated and completed the program. Requirements included attending RHIG meetings, a Project REACH event, one Rural Immersion, attending Rural Health Day, and the completion of a rural healthcare topics poster.

#### MEDICAL AND DENTAL STUDENT SERVICE PROGRAMS AWARDED 2011-2024





of Dentists have fulfilled their 2-year service program commitment



of Physicians have fulfilled their service program commitment



of health professionals continue to practice in a rural/underserved area of WV 5 years beyond their commitment



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

**Community and Rural Health Service Program:** This Service Program financial incentive is for medical and dental students in exchange for a service obligation in a rural and/or underserved area or dental HPSA (dental only). Since 2011, thirty-three (25 dental and 8 medical) recipients out of 37 (25 dental and 12 medical) have fulfilled their commitment (89%). Fourteen (13 dental and 1 medical) recipients out of a total of 20 (18 dental and 2 medical) continue to practice in rural and/or underserved areas of WV 5 years beyond their service obligation (70%). Twenty-eight awards have been granted to medical students, 11 are still in training, 4 are currently fulfilling their service obligation. Twenty-nine awards have been granted to dental students.

**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 FY24, students participated in ten health education events that served 320 people from Hampshire, Preston, and Greenbrier, counties.

**Community and Rural Rotation Support:** The CARRS program enhances rural rotation experiences of students by engaging them in community projects with community mentors in underserved areas of West Virginia. CARRS is open to WVU health profession students on rural rotations from Medicine, Dentistry, PharmD, and Physician Assistant programs. Prospective CARRS students must complete an application for review and then be chosen as an award recipient. The student requests a community project interest of their choice. Students' interest in practicing in a rural community is evaluated after completion of the project. Since the beginning of the program in Spring 2018, 48 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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