# 2018 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 at the Higher Education Policy Commission (the Commission) 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 regularly collaborates with stakeholders around key topics in the state's healthcare landscape. Current topics include behavioral health workforce development, graduate medical education, mapping primary care access issues, 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 Health Sciences Service Program, which offers a recruitment incentive to West Virginia students in advanced degree health professions programs in exchange for a commitment to practice for at least two years in an underserved area of the state.

# **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 is able to offer all qualified West Virginians the opportunity to complete their medical education in the state. In the academic year 2017-2018, 41 percent of the 391 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 at over 90 percent for the last five years. (Page 10)

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 2018 medical school graduates in West Virginia, 60 percent chose to do primary care residencies. (Pages 14-19)

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, 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. (Pages 20-24)

The Commission administers two financial aid programs for students in health professions. These programs help to keep healthcare practitioners in West Virginia by providing loans and financial incentives. Since its inception in 1995, the Health Sciences Service Program has had 192 participants complete the service program. The Medical Student Loan Program makes more than 200 loans each year to the state's medical students. (Page 25)

West Virginia medical school graduates select primary care residencies at a rate similar to the national average. Many of these graduates remain in state to practice, however, a maldistribution of primary care physicians persists. 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 26-33)

# **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. The Association of American Medical Colleges recently redesigned the MCAT®. As a result, some West Virginia medical schools currently accept scores from both 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 2017-2018 academic year was 510.4. For students entering osteopathic medical schools, the score was 503.05. For the old MCAT<sup>®</sup>, the national combined mean MCAT<sup>®</sup> score for students entering osteopathic medical schools was 25.62. Performance data on the old MCAT<sup>®</sup> for students entering allopathic medical schools is no longer reported.

For the 2017-2018 academic year, the national mean grade point average (GPA) for students matriculating to allopathic medical schools was 3.71, and for students matriculating to osteopathic medical schools, it was 3.53 (Association of American Medical Colleges and American Association of Colleges of Osteopathic Medicine).

#### Marshall University Joan C. Edwards School of Medicine







2018 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT

#### **ENTERING CLASS ADMISSION RATE**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
In-State					
Acceptances/Applicants	81/160	98/207	73/165	87/149	80/169
Admission Rate	51%	47%	44%	58%	47%
Out-of-State					
Acceptances / Applicants	44/1,800	17/1,575	51/1,655	31/1,651	43/1,419
Admission Rate	2%	1%	3%	2%	3%
Total Acceptances / Applicants	125/1,960	115/1,782	124/1,820	118/1,800	123/1,588
Total Admission Rate	6%	6%	7%	7%	<b>8</b> %

#### **ENTERING CLASS ACADEMIC QUALIFICATIONS**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Mean GPA	3.60	3.60	3.60	3.60	3.60
Mean MCAT <sup>(R)</sup> (Old Version)	30.0	28.8	28.7	28.5	27.9
Mean MCAT <sup>(R)</sup> (New Version)	503.0	501.0	-	-	-

#### ACADEMIC YEAR DATA

		2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
First Year New Enrollment	In-State	49	73	53	61	53
	Out-of-State	26	10	29	18	22
	Total	75	83	82	79	75
Total Graduates		68	73	62	64	65
Total Medical Students		305	304	315	281	292
Tuition and Fees	In-State	\$22,154	\$21,104	\$20,806	\$20,806	\$20,806
	Out-of-State	\$52,542	\$50,074	\$47,676	\$47,676	\$47,676

#### West Virginia School of Osteopathic Medicine











2018 WEST VIRGINIA HEALTH SCIENCES AND RURAL HEALTH REPORT

#### **ENTERING CLASS ADMISSION RATE**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
In-State					
Acceptances/Applicants	52/121	66/148	67/146	62/123	65/147
Admission Rate	43%	45%	46%	50%	44%
Out-of-State					
Acceptances / Applicants	391/4,581	401/4,703	416/4,988	439/4,340	379/4,183
Admission Rate	9%	9%	8%	10%	9%
Total Acceptances / Applicants	443/4,702	467/4,851	483/5,134	501/4,463	444/4,330
Total Admission Rate	<b>9</b> %	10%	<b>9</b> %	11%	10%

#### **ENTERING CLASS ACADEMIC QUALIFICATIONS**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Mean GPA	3.51	3.52	3.51	3.48	3.49
Mean MCAT <sup>(R)</sup> (Old Version)	23.5	23.3	24.8	24.8	24.6
Mean MCAT <sup>(R)</sup> (New Version)	498.3	496.8	-	-	-

#### ACADEMIC YEAR DATA

		2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
First Year New Enrollment	In-State	46	52	52	47	63
	Out-of-State	158	160	158	151	130
	Total	204	212	210	198	193
Total Graduates		192	182	187	181	184
Total Medical Students		849	847	827	819	817
Tuition and Fees	In-State	\$21,472	\$20,950	\$20,950	\$20,950	\$20,950
	Out-of-State	\$52,710	\$50,950	\$50,950	\$50,950	\$50,950

#### West Virginia University School of Medicine



#### **ENTERING CLASS ADMISSION RATE**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
In-State					
Acceptances/Applicants	77/182	64/227	72/166	79/189	99/231
Admission Rate	42%	28%	43%	42%	43%
Out-of-State					
Acceptances / Applicants	89/4,370	112/4,623	92/3,885	102/3,222	72/2,852
Admission Rate	2%	2%	2%	3%	3%
Total Acceptances / Applicants	166/4,552	176/4,850	164/4,051	181/3,411	171/3,083
Total Admission Rate	4%	4%	4%	5%	6%

#### **ENTERING CLASS ACADEMIC QUALIFICATIONS**

	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Mean GPA	3.80	3.72	3.78	3.80	3.79
Mean MCAT <sup>(R)</sup> (Old Version)	-	29.0	29.0	29.0	29.0
Mean MCAT <sup>(R)</sup> (New Version)	507.0	507.0	-	-	-

#### ACADEMIC YEAR DATA

		2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
First Year New Enrollment	In-State	66	55	63	58	77
	Out-of-State	46	55	47	52	33
	Total	112	110	110	110	110
Total Graduates		100	106	93	103	78
Total Medical Students		427	441	428	421	404
Tuition and Fees	In-State	\$31,023	\$30,348	\$29,295	\$28,134	\$26,604
	Out-of-State	\$60,642	\$58,914	\$56,673	\$55,107	\$53,028

# **MEDICAL LICENSURE EXAMS**

All medical students must complete a series of licensing exams in order 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 2015 is 98 percent.

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

	2015	2014	2013	2012	2011
Marshall University	53/58	64/65	67/68	62/64	55/58
	91%	98%	99%	97%	95%
West Virginia University	94/99	77/78	94/95	94/95	93/93
	95%	99%	99%	99%	100%

#### **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 not available.

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

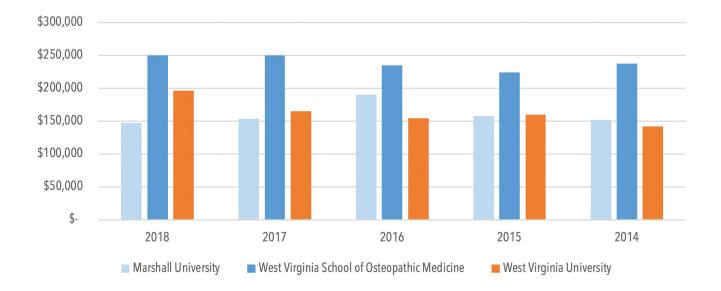
	2015	2014	2013	2012	2011
West Virginia School of Osteopathic Medicine	189/200	175/183	190/194	144/147	180/191
	95%	96%	98%	98%	94%

# **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, although the number of out-of-state students at both West Virginia University and Marshall University has grown in recent years.

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

Class	Marshall University	West Virginia School of Osteopathic Medicine	West Virginia University
2018	\$147,414	\$249,870	\$196,694
2017	\$153,435	\$250,378	\$165,289
2016	\$190,345	\$235,108	\$154,789
2015	\$158,408	\$224,457	\$159,944
2014	\$151,980	\$237,900	\$141,807



# **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. In West Virginia, the Bureau for Medical Services (Medicaid) and the Public Employees Insurance Agency also provide 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. There is an allopathic matching program and an osteopathic matching program. Allopathic medical students are only eligible for the allopathic matching program, and osteopathic medical students can enter either the allopathic or osteopathic matching program.

Across West Virginia, 55 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, ophthalmology and surgery.

Program Name	City	Specialty	Filled Residency Slots
AccessHealth Teaching Health Center	Beckley	Family Medicine	12
Bluefield Regional Medical Center	Bluefield	Family Medicine	12
Bluefield Regional Medical Center	Bluefield	Internal Medicine	8
Charleston Area Medical Center	Charleston	Family Medicine	19
Charleston Area Medical Center	Charleston	Internal Medicine Categorical	34
Charleston Area Medical Center	Charleston	Internal Medicine Preliminary	2
Charleston Area Medical Center	Charleston	Obstetrics and Gynecology	12
Charleston Area Medical Center	Charleston	Pediatrics	20
Charleston Area Medical Center	Charleston	Psychiatry	13
Charleston Area Medical Center	Charleston	Surgery Categorical	20
Charleston Area Medical Center	Charleston	Surgery Preliminary	1
Charleston Area Medical Center	Charleston	Vascular Surgery Integrated	4
Charleston Area Medical Center	Charleston	Internal Medicine/Psychiatry	9
Charleston Area Medical Center	Charleston	Emergency Medicine	16
Charleston Area Medical Center	Charleston	Urological Surgery	10
Greenbrier Valley Medical Center	Ronceverte	Traditional Rotating Internship	4
Greenbrier Valley Medical Center	Ronceverte	Osteopathic Neuromusculoskeletal Medicine	6
Greenbrier Valley Medical Center	Ronceverte	Neuromusculoskeletal Medicine +1	0
Greenbrier Valley Medical Center	Ronceverte	Family Medicine	13
Marshall University	Huntington	Family Medicine	24
Marshall University	Huntington	Internal Medicine	63
Marshall University	Huntington	Obstetrics and Gynecology	12
Marshall University	Huntington	Orthopedic Surgery	15

#### WEST VIRGINIA RESIDENCY PROGRAMS

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#### WEST VIRGINIA RESIDENCY PROGRAMS (CONTINUED)

Program Name	City	Specialty	Filled Residency Slots
Marshall University	Huntington	Pediatrics	25
Marshall University	Huntington	Psychiatry	16
Marshall University	Huntington	Surgery	24
Marshall University	Huntington	Neurology	6
Marshall University	Huntington	Internal Medicine/Pediatrics	8
Ohio Valley Medical Center	Wheeling	Internal Medicine	15
Ohio Valley Medical Center	Wheeling	Emergency Medicine	19
United Hospital Center	Bridgeport	Family Medicine	23
West Virginia University	Morgantown	Family Medicine	18
West Virginia University	Harpers Ferry	Family Medicine	18
West Virginia University	Morgantown	Anesthesiology	26
West Virginia University	Morgantown	Dermatology	4
West Virginia University	Morgantown	Emergency Medicine	30
West Virginia University	Morgantown	Internal Medicine	66
West Virginia University	Parkersburg	Internal Medicine	18
West Virginia University	Morgantown	Neurological Science (Surgery)	7
West Virginia University	Morgantown	Neurology	21
West Virginia University	Morgantown	Obstetrics and Gynecology	12
West Virginia University	Morgantown	Ophthalmology	10
West Virginia University	Morgantown	Otolaryngology	12
West Virginia University	Morgantown	Pediatrics	19
West Virginia University	Morgantown	Psychiatry	29
West Virginia University	Morgantown	Radiology-Diagnostic	19
West Virginia University	Morgantown	Surgery	24
West Virginia University	Morgantown	Urology	4
West Virginia University	Morgantown	Transitional Year	13
West Virginia University	Morgantown	Internal Medicine/Pediatrics	15
West Virginia University	Morgantown	Orthopedic Surgery	19
West Virginia University	Morgantown	Pathology-Anatomic and Clinical	10
West Virginia University	Morgantown	Plastics - Integrated	3
West Virginia University	Morgantown	Radiation Oncology	4
Wheeling Hospital	Wheeling	Family Medicine	24
Wheeling Hospital Total Filled Slots	Wheeling	Family Medicine	

Data was obtained September 2018

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.
- > 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, 60 percent of 2018 medical school graduates chose a primary care residency in West Virginia. Nationally for the 2018 allopathic residency match program, 46.1 percent of allopathic medical school graduates matched with a primary care residency program, and 58.7 percent of osteopathic medical school graduates matched with a primary care residency program. National data is not available for the osteopathic only 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

	2018	2017	2016	2015	2014
Marshall University	38 (58%)	38 (54%)	28 (47%)	31 (48%)	33 (51%)
West Virginia School of Osteopathic Medicine	124 (66%)	119 (66%)	113 (61%)	111 (62%)	126 (68%)
West Virginia University	47 (47%)	54 (51%)	44 (48%)	48 (48%)	40 (51%)

### **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.

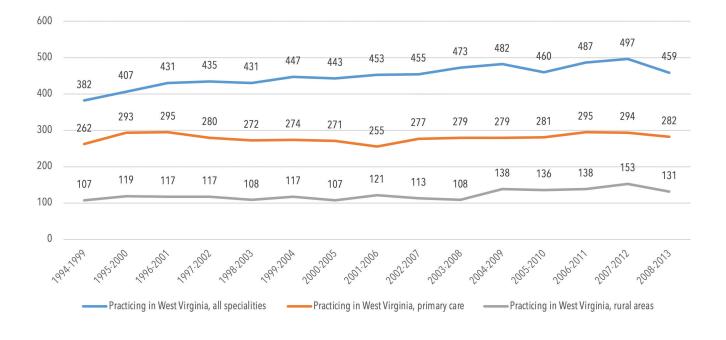
- Primary care is defined as family medicine, internal medicine, internal medicine/pediatrics, obstetrics/gynecology, and pediatrics.
- Rural areas include all areas of the state with a 2006 Rural Urban Commuting Area (RUCA) code of 4.0 or higher. These codes classify U.S. Census tracts using measures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

Between 2008 and 2013, 1,778 graduates of the state's three medical schools completed residency training, either in West Virginia or another state, and 26 percent of these graduates (459) are now practicing in West Virginia – Seven percent of the graduates (131) in this cohort are practicing in rural West Virginia, and 16 percent (282) are practicing primary care in the state (either in a rural or urban location). The growth in medical school class sizes in recent years is supplying more graduates to practice in West Virginia; however, issues still persist in recruiting graduates to practice in both outpatient primary care and rural settings.

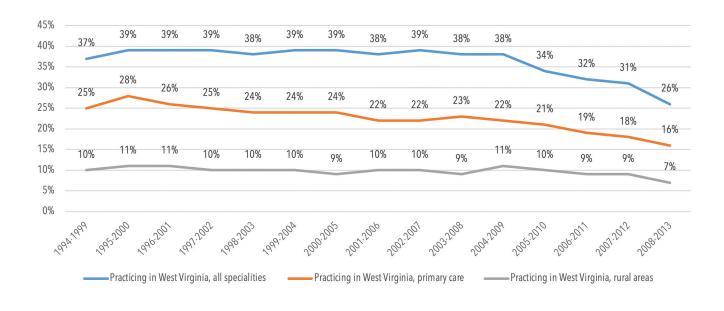
#### MEDICAL SCHOOL GRADUATES RETAINED, BY INSTITUTION, GRADUATING CLASSES OF 2008–2013

	Total with completed training	•	Total in primary care in West Virginia	Total in rural areas of West Virginia
Marshall University	327	109 (33%)	73 (22%)	23 (7%)
West Virginia School of Osteopathic Medicine	879	177 (20%)	126 (14%)	78 (9%)
West Virginia University	572	173 (30%)	83 (15%)	30 (5%)
Total	1,778	459 (26%)	282 (16%)	131 (7%)

### NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1994–2013



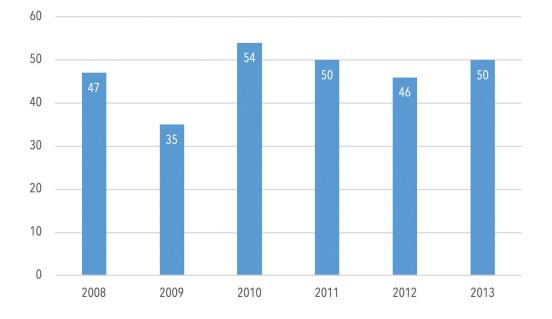
### PERCENTAGE OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES RETAINED, GRADUATING CLASSES OF 1994–2012



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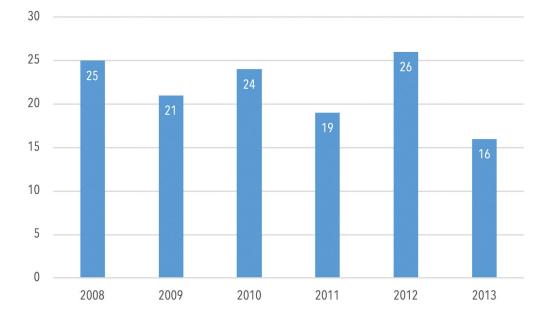
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## NUMBER OF WEST VIRGINIA MEDICAL SCHOOL GRADUATES PRACTICING PRIMARY CARE OR IN RURAL AREAS, BY GRADUATING CLASS



Practicing Primary Care in West Virginia

Practicing in Rural Areas of West Virginia



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#### 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 2008 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 2008–2013

County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Barbour	2	2	2
Berkeley	17	0	11
Boone	3	3	3
Braxton	1	1	1
Brooke*	1	0	0
Cabell*	64	0	43
Calhoun	0	0	0
Clay	2	2	2
Doddridge	1	1	1
Fayette	5	3	4
Gilmer	0	0	0
Grant	3	3	3
Greenbrier	26	26	17
Hampshire	0	0	0
Hancock	3	0	3
Hardy	0	0	0
Harrison	18	18	14
Jackson	1	1	0
Jefferson	9	2	8
Kanawha*	85	0	42
Lewis	5	5	4
Lincoln	1	1	1
Logan	5	5	2
Marion	7	7	4

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# WEST VIRGINIA MEDICAL SCHOOL GRADUATES PRACTICING IN WEST VIRGINIA BY COUNTY, GRADUATING CLASSES OF 2008–2013 (CONTINUED)

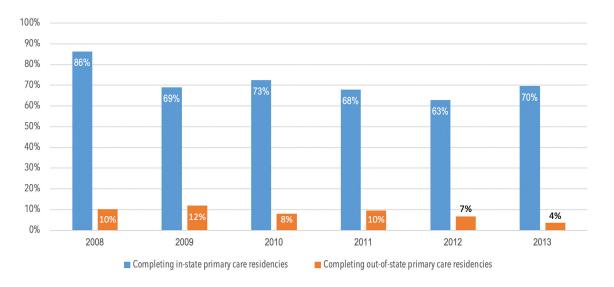
County	Number in Practice	Number Practicing in Rural Areas	Number Practicing in Primary Care
Marshall *	3	0	2
Mason	4	4	4
McDowell	1	1	1
Mercer	8	8	7
Mineral	1	1	1
Mingo	0	0	0
Monongalia*	103	0	42
Monroe	0	0	0
Morgan	1	1	1
Nicholas	1	1	1
Ohio*	17	0	9
Pendleton	0	0	0
Pleasants	0	0	0
Pocahontas	3	3	3
Preston	3	1	3
Putnam*	6	0	5
Raleigh	12	12	11
Randolph	4	4	2
Ritchie	0	0	0
Roane	2	2	2
Summers	0	0	0
Taylor	1	1	1
Tucker	0	0	0
Tyler	1	1	0
Upshur	4	4	4
Wayne	4	0	4
Webster	3	3	2
Wetzel	2	2	1
Wirt	1	1	1
Wood*	14	0	9
Wyoming	1	1	1
Total	459	131	282

\* 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.

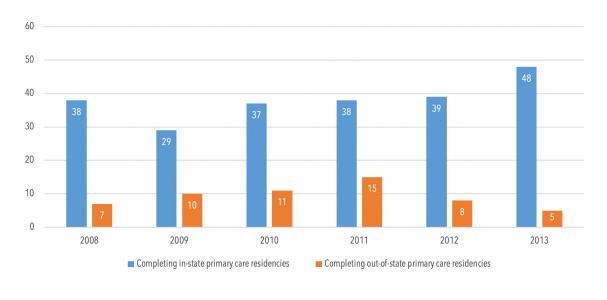
#### Retention of West Virginia Medical School Graduates Completing Primary Care Residencies

The location of a medical school graduate's residency program frequently predicts whether that graduate will practice in West Virginia. For the 2013 graduates of West Virginia medical schools, 209 graduates went on to complete primary care residency programs. Upon completing residency, 48 of the 55 graduates who completed in-state primary care residencies were retained in West Virginia to practice, while only five of the 154 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



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### **OTHER HEALTH PROFESSIONS** *Program graduates*

Although this report historically emphasized medical education, the Commission has increased its focus on the role of other health professions in completing our state's healthcare workforce. The following charts provide graduation numbers for a variety of health professions programs at public and private institutions, as well as two and four-year institutions.

#### NUMBER OF GRADUTES OF COUNSELING PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Marshall University	Master's	60	42	41	37	52
West Virginia University	Master's	25	22	26	21	24
West Virginia University	Master's (Rehabilitation)	25	9	10	22	21
West Virginia University	Doctoral	1	6	8	7	7
Total	Master's	110	73	77	80	97
Total	Doctoral	1	6	8	7	7

#### NUMBER OF GRADUATES OF DENTAL HYGIENE PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
BridgeValley Community and Technical College*	Associate	16	16	19	13	15
West Liberty University	Associate	33	36	22	34	32
West Liberty University	Baccalaureate	31	29	33	22	22
West Virginia University	Baccalaureate	22	21	25	12	19
West Virginia University	Master's	-	-	-	1	-
Total	Associate	49	52	41	47	47
Total	Baccalaureate	52	50	58	34	41
Total	Master's	-		-	1	•

\* BridgeValley Community and Technical College graduated its first dental hygiene class in 2015. Bridgemont Community and Technical College offered a dental hygiene degree, but the institution ceased operation at the end of 2014 academic year. It merged with Kanawha Valley Community and Technical College to become BridgeValley Community and Technical College.

#### NUMBER OF GRADUATES OF DENTISTRY PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
West Virginia University	Doctoral	55	58	54	48	48

#### NUMBER OF GRADUATES OF NURSING PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Bluefield State College	Associate	71	55	94	57	70
Blue Ridge Community and Technical College	Associate	25	32	44	29	30
BridgeValley Community and Technical College	Associate	63	51	50	56	78
Davis and Elkins College (private institution)	Associate	22	23	29	35	40
Eastern West Virginia Community and Technical College*	Associate	16	-	14	-	19
Fairmont State University	Associate	82	64	68	78	97
Marshall University	Associate	100	87	75	103	97
Southern West Virginia Community and Technical College	Associate	46	51	34	42	47
University of Charleston (private institution)**	Associate	25	32	12	-	-
West Virginia Northern Community College	Associate	36	47	35	50	42
West Virginia University at Parkersburg	Associate	61	33	34	54	48
Alderson Broaddus University (private institution)	Baccalaureate	20	41	24	32	30
Bluefield State College	Baccalaureate	23	9	21	15	19
Davis and Elkins College (private institution)***	Baccalaureate	31	31	28	-	-
Fairmont State University	Baccalaureate	44	57	59	45	33
Marshall University	Baccalaureate	128	112	115	108	81
Shepherd University	Baccalaureate	65	79	80	75	71
University of Charleston (private institution)	Baccalaureate	27	30	24	24	14
West Liberty University	Baccalaureate	20	18	27	39	29
West Virginia University****	Baccalaureate	185	194	215	243	230
West Virginia Wesleyan College (private institution)	Baccalaureate	28	13	15	15	20
Wheeling Jesuit University (private institution)	Baccalaureate	33	31	47	66	47
West Virginia University at Parkersburg*****	Baccalaureate	8	14	5	-	-
Marshall University	Master's	34	35	38	46	52
West Virginia University	Master's	38	40	37	44	72
West Virginia Wesleyan College (private institution)	Master's	25	27	14	5	2
Wheeling Jesuit University (private institution)	Master's	30	44	61	48	55
Shepherd University*****	Clinical Doctoral	7	-	-	-	-

Continued on next page

#### NUMBER OF GRADUATES OF NURSING PROGRAMS, BY GRADUATING CLASS (CONTINUED)

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
West Virginia University	Clinical Doctoral	3	5	3	7	7
West Virginia University	Doctoral	1	2	2	3	1
Total	Associate	547	475	489	504	568
Total	Baccalaureate	612	629	660	662	574
Total	Master's	127	146	150	143	181
Total	Doctoral	11	7	5	10	8

\* Eastern West Virginia Community and Technical College enrolls and graduates students every other year.

\*\* University of Charleston graduated its first baccalaureate nursing class in 2016.

\*\*\* Davis and Elkins College graduated its first baccalaureate nursing class in 2016.

\*\*\*\* Data reported includes students enrolled at WVU Institute of Technology.

\*\*\*\*\* West Virginia University at Parkersburg graduated its first baccalaureate nursing class in 2016.

\*\*\*\*\*\* Shepherd University graduated its first doctoral-level nurse practitioner class in 2018.

#### NUMBER OF GRADUATES OF PHARMACY PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Marshall University*	Doctoral	75	65	75	-	-
University of Charleston (private institution)	Doctoral	62	84	67	69	68
West Virginia University	Doctoral	78	82	91	85	82
Total	Doctoral	215	231	233	154	150

\* Marshall University graduated its first pharmacy class in 2016.

#### NUMBER OF GRADUATES OF PHYSICIAN ASSISTANT PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Alderson Broaddus University (private institution)	Master's	36	32	34	29	12
University of Charleston (private institution)*	Master's	30	26	20	27	36
West Liberty University**	Master's	18	19	16	-	17
Total	Master's	84	77	70	56	65

\* University of Charleston graduated its first physician assistant class in 2015. It also taught out the remaining physician assistant students at Mountain State University prior to 2015.

\*\* West Liberty University graduated its first physician assistant class in 2014, but did not graduate its second class until 2016.

#### NUMBER OF GRADUATES OF PHYSICAL THERAPY PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Marshall University*	Doctoral	36	38	36	25	-
West Virginia University	Doctoral	40	37	36	37	36
Wheeling Jesuit University (private institution)	Doctoral	47	48	47	47	47
Total	Doctoral	123	123	119	109	83

\* Marshall University graduated its first physical therapy class in 2015.

#### NUMBER OF GRADUATES OF PSYCHOLOGY PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Alderson Broaddus University (private institution)	Baccalaureate	14	8	7	6	9
Bethany College (private Institution)	Baccalaureate	24	13	22	18	28
Concord University	Baccalaureate	23	12	25	24	18
Davis and Elkins College (private institution)	Baccalaureate	15	9	12	12	7
Fairmont State University	Baccalaureate	46	38	49	44	42
Marshall University	Baccalaureate	98	71	91	92	90
Ohio Valley University (private institution)	Baccalaureate	9	5	10	8	8
Shepherd University	Baccalaureate	24	24	25	24	28
University of Charleston (private institution)	Baccalaureate	17	13	15	14	11
West Liberty University	Baccalaureate	12	17	20	18	15
West Virginia State University	Baccalaureate	25	23	22	29	26
West Virginia University	Baccalaureate	188	187	188	209	174
West Virginia Wesleyan College (private institution)	Baccalaureate	18	24	19	27	32
Wheeling Jesuit University (private institution)	Baccalaureate	15	16	18	28	13
WVU Institute of Technology	Baccalaureate	5	6	8	8	3
Marshall University	Master's	29	42	27	32	34
West Virginia University	Master's	16	19	10	16	17
Marshall University	Doctoral	11	13	8	11	8
West Virginia University	Doctoral	12	9	13	18	10
Total	Baccalaureate	533	466	531	561	504
Total	Master's	45	61	37	48	51
Total	Doctoral	23	22	21	29	18

#### NUMBER OF GRADUATES OF PUBLIC HEALTH PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Marshall University	Baccalaureate	5	7	17	5	10
West Virginia University*	Baccalaureate	27	-	-	-	-
Marshall University**	Master's	3	14	1	-	
West Virginia University	Master's	38	37	58	62	57
West Virginia University	Doctoral	9	6	3	4	3
Total	Baccalaureate	32	7	17	5	10
Total	Master's	41	51	59	62	57
Total	Doctoral	9	6	3	4	3

\* West Virginia University graduated its first baccalaureate public health class in 2018. \*\* Marshall University graduated its first master of public health class in 2015-2016.

#### NUMBER OF GRADUATES OF SOCIAL WORK PROGRAMS, BY GRADUATING CLASS

	Degree Level	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Bethany College (private institution)	Baccalaureate	9	19	17	9	6
Concord University	Baccalaureate	27	23	20	31	28
Marshall University	Baccalaureate	30	22	17	44	26
University of Charleston (private institution)*	Baccalaureate		1	14	3	6
Shepherd University	Baccalaureate	24	20	19	24	22
West Liberty University	Baccalaureate	12	6	6	16	9
West Virginia State University	Baccalaureate	15	20	29	26	22
West Virginia University	Baccalaureate	39	59	43	43	41
Concord University	Master's	58	43	30	17	-
Marshall University**	Master's	60	-	-	-	-
West Virginia University	Master's	71	61	77	90	83
Total	Baccalaureate	156	170	165	196	160
Total	Master's	189	104	107	107	83

\* University of Charleston is no longer admitting new students to its program. \*\* Marshall University graduated its first master of social work class in 2018.

# 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, pharmacy, and physician assistant trainees receive a \$15,000 award.

Since 1995, 192 participants have completed their service obligation. In the 2017-2018 academic year, 18 awards totaling \$375,000 were offered to:

- 4 medical students
- 3 dental students
- 4 physical therapy students
- 3 nurse practitioner students
- 2 pharmacy students
- 2 social work students

#### 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

	2017-2018	2016-2017	2015-2016	2014-2013	2013-2014
Loans awarded in Fiscal Year	240	247	247	256	245
Total amount awarded	\$1,830,125	\$1,424,846	\$1,404,300	\$1,462,142	\$1,523,500
Amount of unexpended funds*	\$2,643,084	\$2,535,240	\$1,991,422	\$1,993,939	\$1,811,521
Loan postponement**	35	12	23	24	26
Loan forgiveness***	255	33	49	42	48
Default rate on previous awards	7.2%	2.5%	2.5%	2.5%	1.8%

\* 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.

# **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 the majority of 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 2018, 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 2018 include:

- Eastern Area Health Education Center Sponsoring a family medicine physician in completing a rural maternal child health fellowship at West Virginia University-Eastern Campus.
- Tug River Health Association Sponsoring a Wyoming County physician in attaining her obesity medicine certification.
- West Virginia Rural Health Association Training for West Virginia institutions of higher education on using the Association's rural health workforce data portal.
- West Virginia University Geography Department Development of a web-based mapping program to identify the state's highest need areas for additional primary care workforce.

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 2018.

#### Statewide Housing System

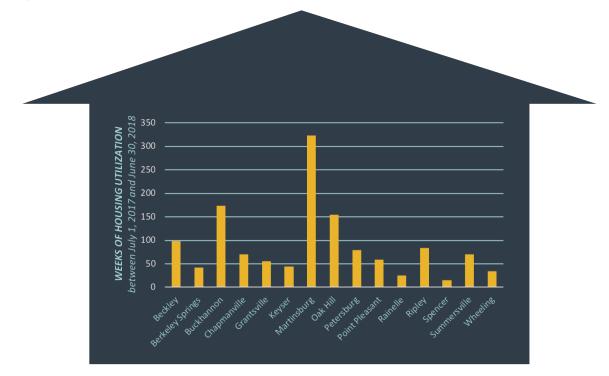
The RHI statewide housing system for health sciences students has allowed students to complete clinical rotations away from the main campus and immerse themselves in a rural or underserved community. The housing is open to all health sciences students, but in FY 2018, the housing was most frequently used by medical, dental, occupational therapy, pharmacy, and physical therapy students. The typical length of stay for students utilizing housing is about four weeks.

The 16 housing locations are primarily leased houses or apartments, which 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 \$125/week fee paid by students utilizing the housing. Often, the cost of housing is covered by the student's institution.

Students enrolled in training programs in West Virginia receive priority for housing. Students from out-of-state programs are accommodated based on availability. In FY 2018, students from the following institutions utilized housing: Marshall University, West Virginia University, West Virginia School of Osteopathic Medicine, University of Charleston, Avalon University School of Medicine (OH), New York Medical College (NY), Spalding University (KY), and Mary Baldwin University, Liberty University, and Virginia Tech (VA).



#### Housing Utilization: 1,330 Weeks





2018 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. This rural educational model focuses on students and residents with an interest in rural medicine and provides them with intensive, high-quality educational experiences.

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

An initiative on rural health research places medical students and residents in rural communities. Conducting research on rural topics gives students and residents opportunities to learn about study design and methodology while becoming immersed in a rural community or health issue. Students and residents, with faculty mentors, apply for rural research grants to support projects which could enhance rural health care, lead to more effective health promotion and disease prevention programs, and address barriers to care. Seven residents and eight students were awarded in FY 2018 and are currently still working on eight rural research projects with topics such as:

- A Comparative Analysis of Opioid Use Disorder (OUD) Interventions of Pregnant Women with Depression
- Loneliness and Isolation among the Rural, Community-Dwelling Oldest-Old
- Rural versus Urban Physician and Health Care Providers Burnout: Is there a Difference?

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

Marshall focuses on increasing the retention rate of healthcare providers in rural areas by connecting rural providers to activities at the medical school. Marshall's Rural Health Fellowship is an opportunity for new physicians, who recently completed residency, to participate in rural health fellowship programs while beginning their practice. The fellowship is designed to:

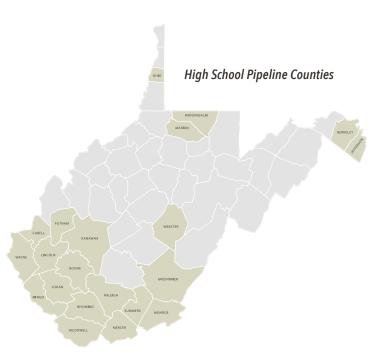
- Strengthen their ties to the medical school after graduation.
- Reduce isolation of rural practice.
- Explore additional clinical areas they might not have had time to pursue while in residency.

This program makes an enormous impact as it keeps participating rural physicians involved with Marshall through teaching and working with residents on a number of rural initiatives.

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

Marshall has developed a very active pipeline program that begins in high school and continues through college, medical school, residency training, and into practice. This program includes dozens of initiatives along the pathway to increase exposure to health professions careers.

Most recently, Marshall University and the Joan C. Edwards School of Medicine have created an Accelerated Bachelor of Science/Doctor of Medicine (BS/MD) program for West Virginia high school students. This pathway seeks to attract high performing and highly motivated high school students and supports them on a fast track to medical education. The goal is to educate more physicians who will want to practice medicine in the state.



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The program allows students to complete the requirements for both the Bachelor of Science and Doctor of Medicine program in seven, instead of eight years. Incentives include:

- No Medical College Admission Test (MCAT<sup>®</sup>) required.
- Guaranteed acceptance into medical school at Marshall upon successful completion of the program requirements.
- A tuition waiver for the medical school portion of the program.

Nine students were accepted in 2018, bringing the total to 28 students enrolled in the program. All 13 students from the first class have begun their first year of medical school.

For over a decade, Marshall has carried out a high school pipeline program in southern and southwestern West Virginia, expanding this year to six more counties. Eighty-two events reached over 2,900 students from 40 high schools in 21 counties. Several collaborative events were held with entities that serve minority and underserved students. Activities included trips to Marshall's anatomy lab, real-time surgeries via videoconference, hands-on suturing workshops, and lectures from a variety of healthcare specialists.

On the college level, the fifth annual residential academy was held on the Marshall campus on June 11-15, 2018, to prepare undergraduate students interested in medical school. Fifteen participants included students from colleges around the state and Hampton University in Virginia. The 59 participants in past academies include: 21 students (36%) currently attending medical school and seven students (12%) pursuing other medical health programs. In addition to the academy, regular visits by staff to West Virginia colleges and universities ensure that faculty advisors and students receive up-to-date information on changes in medical education.

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

There are ongoing partnerships with communities and the medical school regarding substance abuse and behavioral health needs in rural communities. An Endocrinology - Cardiology Project ECHO (Extension for Community Healthcare Outcomes) program officially started in March 2018. Project ECHO increases access to specialty treatment in rural and underserved areas by providing front-line clinicians with the knowledge and support they need to manage patients with complex conditions by engaging clinicians in a continuous learning system and partnering them with specialist mentors at an academic medical center or hub. Five rural community health centers participate. The Center for Rural Health anticipates continuing to grow this initiative.



Pictured: Marshall University BS/MD ceremony



Pictured: Marshall University Summer Academy



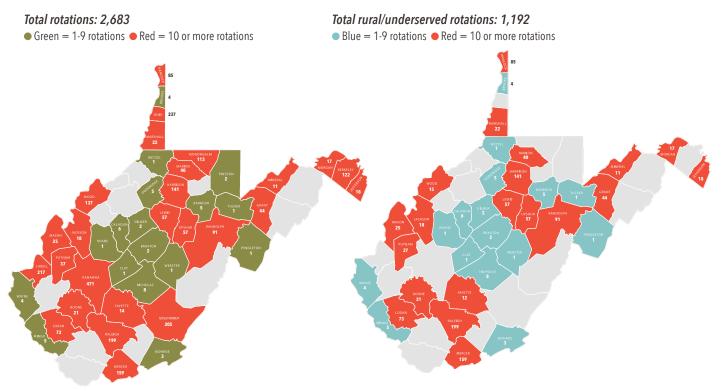
#### West Virginia School of Osteopathic Medicine

The Rural Health Initiative (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, which provides special training and enrichment opportunities to its students who express the strongest interest in rural practice.

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

**RHI Rural Practice Day 2018:** West Virginia School of Osteopathic Medicine hosted its 7th annual Rural Practice Day with 105 WVSOM students, spouses/significant others, pre-medicine students (undergraduate), faculty/employees, rural hospitals/clinics, and speakers on its campus on February 24, 2018. The workshops focused on telemedicine in rural areas, financial incentives, and a simulated case study that involved medical residents. A new wilderness medicine workshop this year was added for pre-medicine students. Nine rural West Virginia hospitals, clinics and vendors from across West Virginia participated and provided students an opportunity to learn more about specific practice opportunities.

**Rural or Underserved Rotations:** Third and fourth year students completed 1,192 rural or underserved rotations during state FY 2018 (academic year 2017-2018).



**Student Housing:** Out of 5,398 weeks of rural or underserved rotations in West Virginia, WVSOM students utilized shared housing for 554 weeks. Students utilized shared housing most often when rotating more than 50 miles from their statewide campus (SWC) base site.



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

**Residency Sign-On Incentive:** Four of the nine RHI program graduates from the class of 2018 each received a \$5,000.00 sign-on incentive for acceptance into primary care residencies at Cornerstone Care, Morgantown; United Hospital Center, Bridgeport; West Virginia University – Ruby Memorial, Morgantown; and Greenbrier Valley Medical Center, Ronceverte. This incentive is given to encourage program graduates to select of primary care residencies since we have a shortage of primary care providers in the state.

Mentor Program: During FY 2018, 62 RHI students received a rural practitioner mentor. The mentorship program goals for RHI students include:

- Participation in rotations that will enhance rural primary care training;
- Reinforcement of the students' interest in rural primary care through mentor interactions ; and,
- Exposure to the quality of life offered by rural communities.

A focus group meeting was held on January 27, 2018 with RHI stakeholders. The results of the focus group were three action items that will serve as goals in the upcoming year:

- 1. Discuss the benefits of being a mentor and methods that can encourage RHI program graduates in residency to serve as an RHI mentor.
- 2. Gather information about why RHI participants choose to go to residency out of state versus in West Virginia.

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

**High School Pipeline:** The WVSOM RHI Coordinator and RHI Program Assistant, along with the admissions and recruitment offices, SWC assistant deans and directors, and the anatomy lab conducted pipeline activities for 1,576 high school students to introduce them to rural medicine opportunities in West Virginia. This number includes 322 high school students who participated in a program called "CPR in Schools" where WVSOM students taught high school students CPR and promoted careers in health care.

**Green Coat Programs:** The WVSOM Green Coat program provides undergraduate students who are interested in medical school and/or a healthcare profession an opportunity to gain exposure to clinical responsibilities in a hospital environment. To be selected for the program, a student must have at least a 3.0 GPA and be majoring in a health-related field. The fifth cohort of University of Charleston students completed the program at Charleston Area Medical Center in Kanawha County on December 15, 2017 (four students) and May 15, 2018 (four students). The third cohort of students from Davis & Elkins College completed the program at Davis Health Systems in Randolph County on December 01, 2017 (three students), May 4, 2018 (two students) and July 30, 2018 (one student).

#### 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 statewide industries to understand environmental exposures that could cause injury or disease to rural patients. Four RHI industry activities occurred during FY 2017 including:

- Opioids in WV workshop at Camp Dawson, Kingwood, Preston County on October 17, 2017
- Coal mining, Beaver, Raleigh County, December 11, 2017
- Rural Health Workforce Day, Charleston, Kanawha County, on January 18, 2018
- Surface Mining, Anjean, Greenbrier County, June 22, 2018

#### West Virginia University Health Sciences Center

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

**A.H.E.C.:** The WV Area Health Education Centers Program (WV AHEC) developed by Congress in 1971, is a program to recruit, train and retain a health professions workforce committed to underserved populations. WV AHEC partners with WVU to manage statewide housing for health professions students and scheduling WVU medical student rotations.

**Rural Track:** The WVU Rural Track Program's goal is to increase the number of primary care physicians who enter and remain in practice in rural West Virginia. Rural track students are exposed to more time in rural areas during their primary clerkship and in their fourth year of medical school.

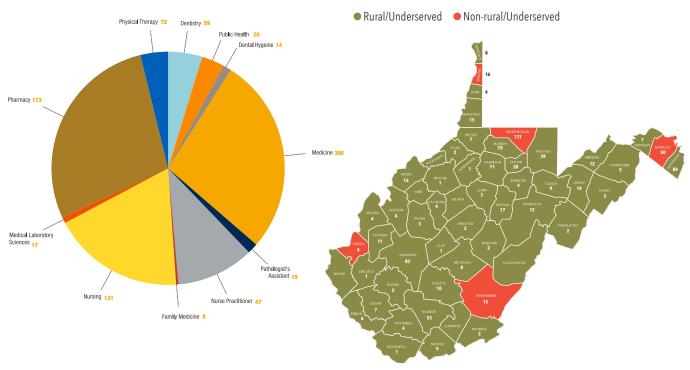
**Rural Immersions:** In-depth experiences for health professions students which allow them to learn about community health and disease processes while immersed in a rural community. In FY18, students participated in two immersions, one in the coalfields of Southern West Virginia and another focused on mock accidents involving winter conditions.

**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 FY18, six meetings and one workshop were held and topics covered included awareness about prescription drug overdose, smoking cessation and its effects on dental health, and patient-centered medical homes.

WVU collaborated with WV AHEC to hold 39 interprofessional team meetings that included students from medical laboratory science, medicine, nurse practitioner, and pharmacy programs. Students completed 12 clinical and community interventions around topics such as motivational interviewing, diabetes, harm reduction, vaccinations, suicidality, and opioid and heroin awareness toolkits for community-members.

#### WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES, BY DISCIPLINE 7/1/17 - 6/30/18

#### NUMBER AND LOCATION OF WVU STUDENT ROTATIONS IN COMMUNITY BASED CLINICAL ACTIVITIES 7/1/17 - 6/30/18



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

WVU partnered with WV AHEC to provide 22 continuing education opportunities for current healthcare professionals. Fifty-nine percent of opportunities took place in rural areas of WV.

In FY18, nine medical preceptors donated \$12,000 to a scholarship fund for students planning to work in rural areas of the state.

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

**H.S.T.A.:** The Health Sciences & Technology Academy is a one-of-a-kind mentoring program in WV that helps participating high school students enter and succeed in STEM-based undergraduate and graduate degree programs. In FY18, WVU collaborated with HSTA to provide funding for 39 clubs and 364 students to participate in educational and research activities.

**Rural Health Day:** An annual event that brings pre-health undergraduate students together to learn more through various speakers and handson activities about the medical school application process and health professions and health professions career opportunities in rural areas. In April 2018, 43 undergraduate students from WV, PA and MD participated.

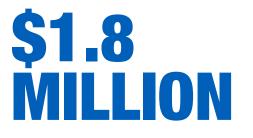
**R.U.S.H.:** The Rural Undergraduate Shadowing in Healthcare Program is designed to provide pre-medical participants with a unique experience that offers insight into what it is like to practice a health profession in rural WV. One student was placed in Preston County, one student was placed in Calhoun County, and two students were placed in Wyoming County for the 20-hour shadowing program. All four students reported the experience increased their interest in rural health.

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

**R.E.A.C.H.:** Project Rural Education Alliance for Community Health is a student-run outreach project which provides education and health information throughout the state. In FY18, students participated in five health education events that served 290 people from Preston, Hampshire and Monongalia counties.

**Newsletter:** Provides annual updates on WVU health profession students' educational and outreach activities to nearly 600 field faculty across the state.

#### MEDICAL AND DENTAL STUDENT SCHOLARSHIPS AWARDED 2011–2018



## WHERE OUR SCHOLARSHIP RECIPIENTS ARE TODAY

#### **19 DENTAL STUDENTS**

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17 PRACTICING IN WEST VIRGINIA

**17 MEDICAL STUDENTS 7 IN SCHOOL 6 RESIDENCY** 3 1 ARMED PRACTICING

SERVICES

IN WEST VERGINIA Page left intentionally blank

#### West Virginia Higher Education Policy Commission

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