

## Highlights in 2007

- 38.6% of West Virginia's recent medical school graduates are practicing in the state after completing residency training.
- If state medical school graduates do their residency training in West Virginia, retention is even higher 79% in primary care fields such as family practice.
- In the past 11 years, the greatest change has been in retention of medical graduates in primary care fields. Their numbers have increased from 168 to 280, a gain of 67%.
- Retention in other health sciences fields was 26 graduates (58%) in dentistry and 52 graduates (64%) in pharmacy.
- The Health Sciences & Technology Academy (HSTA), a health career pathway program, is active in 26 counties. The college-going rate for HSTA graduates is 97%. The majority of HSTA graduates are still in college, but 55 have gone on to graduate or professional school and 10 are currently in medical school.
- This year, the Rural Health Education Partnerships (RHEP) made a total of 71,487 contacts with rural West Virginians to provide health promotion and education on topics such as prenatal care, fitness and nutrition, drug interactions, and dental health.
- This year RHEP dental and dental hygiene students provided 13,935 clinical procedures and 263 outreach activities. RHEP dental sites, including dentists and students, provided over \$1 million in uncompensated care.
- The CARDIAC Project is providing screening and intervention programs to 5<sup>th</sup> graders in 54 counties. Since 1998, the program has screened over 45,000 5<sup>th</sup> graders. Since 2003, the program has screened over 2,600 kindergarten students, over 1,200 2<sup>nd</sup> graders, and over 1,000 9<sup>th</sup> graders.
- In 1991 West Virginia began developing rural training sites for health professions students. Since then, 967 graduates in health fields, including 264 physicians, began and continue to practice in rural West Virginia. Other fields include 104 nurse practitioners, 152 physician assistants, 89 dentists, and 183 pharmacists.
- State scholarships and loan repayment are helping to recruit rural providers 37% of the physicians, 40% of the nurse practitioners, and 32% of the physician assistants recruited since 1991 and still practicing in rural West Virginia.
- In the past 9 years, the number of physicians who participated in the RHEP program and are now in rural practice increased from 88 to 264, an increase of 200%, or an average annual rate of 14.7%.

### **Table of Contents**

MEDICAL SCHOOL ENROLLMENT	
West Virginia University School of Medicine	1
Marshall University School of Medicine	
West Virginia School of Osteopathic Medicine	
MEDICAL SCHOOL GRADUATES	~ (
Performance on Medical Licensure Exams	4
Primary Care Trends	
RETENTION	
West Virginia Medical School Graduates from 1997-2002	
Practicing in West Virginia	5
West Virginia Medical School Graduates, Ten Year Trend	
WV Medical Graduates, 1997-2002, In All Specialties	
WV Medical Graduates, 1997-2002, In Primary Care	
WV Medical Graduates, 1997-2002, In Non-Urban Areas	
WV Medical Graduates, Completing WV Primary Care Residencies	
WV Medical Graduates Completing Out-of-State Primary	
Care Residencies	10
Health Sciences Graduates, 2003-2007	
MEDICAL SCHOOL INDEBTEDNESS.	
SCHOLARSHIPS AND LOANS	
Health Sciences Scholarship Participants Practicing in Rural WV	13
Medical Student Loan Program	
HEALTH CAREER PATHWAY	
Health Sciences and Technology Academy	14
WEST VIRGINIA RURAL HEALTH EDUCATION PARTNERSHIPS	
TRAINING CONSORTIA INFRASTRUCTURE	
TRAINING CONSORTIA EXPENDITURES	
FIELD FACULTY AND TRAINING SITES	
STUDENT ROTATIONS	
Rotations by County: June 1, 2006 – May 31, 2007	21
RHEP Rotations by Year/Discipline	
RHEP Student Week by Year/Discipline	
Rotations by School/Discipline: June 1, 2006 – May 31, 2007	
COMMUNITY SERVICE CONTACTS	
Contacts by Consortium: June 1, 2006 – May 31, 2007	24
RECRUITMENT	
Health Professionals with RHEP Rotations Practicing in Rural Areas of the State	25
Recruitment Incentives for Rural Practice	
Physicians with RHEP Rotations Practicing in Rural Areas,	
Eight Year Trend	26
Physicians with RHEP Rotations Practicing in Rural Areas in 2007	27



### MEDICAL SCHOOL ENROLLMENT West Virginia University School of Medicine

	2002-03	2003-04	2004-05	2005-06	2006-07		
Applicants							
In-State	223	228	189	187	204		
Out-of-State	513	617	865	933	1,629		
Total	736	845	1,054	1,120	1,833		
Acceptances Issued							
In-State	108	116	90	88	94		
Out-of-State	22	48	73	79	84		
Total	130	164	163	167	178		
First Year New Enrollment							
In-State	87	82	66	43	62		
Out-of-State	12	28	35	55	48		
Total	99	110	101	98	110		
Entering Class Data							
Mean GPA	3.7	3.7	3.7	3.7	3.7		
Mean MCAT Scores							
Biology/Biological Sciences	8.8	9.4	9.2	9.6	9.8		
Physics/Physical Sciences	8.9	8.7	8.7	9.2	9.2		
Reading/Verbal Reasoning	9.4	9.1	8.9	9.0	9.0		
Median Writing Sample	N	0	N/A	0	0		
Total Medical Students	375	376	391	424	424		

Average scores for the Medical College Admission test (MCAT) are reported as "means" for the multiple-choice sections and "medians" for the Writing Sample. Test Scores on the multiple-choice are on a scale of 1-15 and on the Writing Sample, a scale of J-T. The national averages for students entering allopathic medical schools in 2006-07 were:

Biological Science: 10.5
Physical Sciences: 10.1
Verbal Reasoning: 9.8
Writing Sample: P

The national mean GPA was 3.57

Source: Association of American Medical Colleges.

### MEDICAL SCHOOL ENROLLMENT Marshall School of Medicine

	2002-03	2003-04	2004-05	2005-06	2006-07
Applicants					
In-State	197	209	180	167	198
Out-of-State	499	502	539	618	1,375
Total	696	711	719	785	1,573
Acceptances Issued					
In-State	93	85	80	83	96
Out-of-State	8	11	16	19	27
Total	101	96	96	102	123
First Year New Enrollment					
In-State	45	47	43	50	48
Out-of-State	3	6	9	10	16
Total	48	53	52	60	64
Entering Class Data					
Mean GPA	3.6	3.5	3.5	3.5	3.5
Mean MCAT Scores					
Biology/Biological Sciences	9.2	8.9	9.2	8.9	8.9
Physics/Physical Sciences	8.4	8.7	8.4	8.2	8.5
Reading/Verbal Reasoning	8.9	8.9	9.2	9.1	9.1
Median Writing Sample	Q	Ο	M	Ο	0
Total Medical Students	194	199	200	211	227

Average scores for the Medical College Admission test (MCAT) are reported as "means" for the multiple-choice sections and "medians" for the Writing Sample. Test Scores on the multiple-choice are on a scale of 1-15 and, on the Writing Sample, a scale of J-T. The national averages for students entering allopathic medical schools in 2006-07 were:

Biological Science: 10.5
Physical Sciences: 10.1
Verbal Reasoning: 9.8
Writing Sample: P
The national mean GPA was 3.57

Source: Association of American Medical Colleges.

## MEDICAL SCHOOL ENROLLMENT West Virginia School of Osteopathic Medicine

	2002-03	2003-04	2004-05	2005-06	2006-07		
				- 1			
Applicants							
In-State	146	156	138	123	151		
Out-of-State	1,226	1,276	1,362	1,512	2,170		
Total	1,372	1,432	1,500	1,635	2,321		
Acceptances Issued							
In-State	66	79	71	60	84		
Out-of-State	113	188	237	250	508		
Total	179	267	308	310	592		
First Year New Enrollment							
In-State	51	50	53	50	61		
Out-of-State	30	53	52	61	135		
Total	81	103	105	111	196		
Entering Class Data							
Mean GPA	3.5	3.4	3.4	3.4	3.5		
Mean MCAT Scores							
Biology/Biological Sciences	7.4	7.5	8.1	7.4	7.9		
Physics/Physical Sciences	6.8	7.0	6.9	7.1	7.1		
Reading/Verbal Reasoning	7.8	7.8	7.4	7.8	7.8		
Median Writing Sample	N/A	N/A	N/A	N/A	N/A		
<b>Total Medical Students</b>	306	336	363	397	503		

Average scores for the Medical College Admission test (MCAT) are reported as "means" for the multiple-choice sections and "medians" for the Writing Sample. Test Scores on the multiple-choice are on a scale of 1-15 and, on the Writing Sample, a scale of J-T. The national averages for students entering osteopathic medical schools in 2006-07 were:

Biological Science: 8.8
Physical Sciences: 8.1
Verbal Reasoning: 8.4
Writing Sample: 0

The national mean GPA was 3.45

Source: American Association of Colleges of Osteopathic Medcine.

#### MEDICAL SCHOOL GRADUATES

### Number of Examinees/Number Passing US Medical Licensing Exam, Step 3

	2002-03	2003-04	2004-05	2005-06	2006-07
West Virginia University	69/65 (94%)	71/68 (96%)	69/68 (99%)	81/79 (98%)	64/63 (98%)
Marshall University	39/33 (85%)	46/43 (93%)	41/35 (85%)	44/40 (91%)	38/36 (95%)

All data are for first-time test takers. Data for MD students are based on the US Medical Licensing Exam (USMLE), Step 3. Data for MD students become available two years after graduation, i.e., results for 2004 graduates are shown in 2006-07. The national average for this cohort was 97%.

#### Number of Examinees/Number Passing COMLEX-Level 3

	2002-03	2003-04	2004-05	2005-06	2006-07
WV School of Osteopathic Medicine	51/50 (98%)	73/67 (92%)	72/70 (97%)	68/58 (85%)	62/62 (100%)

All data are for first-time test takers. Data for DO students are based on the Comprehensive Osteopathic Medicine Licensing Examination (COMLEX), Level 3. Results are for year of graduation. The national average for the 2006-07 cohort was not available for this report.

#### **Medical School Graduates Choosing Primary Care Residencies\***

	2002-03	2003-04	2004-05	2005-06	2006-07**
West Virginia University	46 (48%)	32 (46%)	46 (61%)	55 (56%)	56 (53%)
Marshall University	32 (68%)	29 (73%)	29 (66%)	28 (62%)	33 (67%)
WV School of Osteopathic Medicine	48 (67%)	40 (56%)	36 (53%)	53 (68%)	N/A***
TOTAL	126	101	111	136	

<sup>\*</sup>Primary care includes family medicine, internal medicine, pediatrics, internal medicine/pediatrics, and obstetrics/gynecology.

<sup>\*\*</sup>In 2007, the national average for choice of primary care residencies was 47.9% for all allopathic graduates.

<sup>\*\*\*</sup>Osteopathic students enter a one-year rotating internship after graduation. Thus, their data lags one year behind the allopathic graduates. In 2007, 53 (68%) of WVSOM 2006 graduates chose primary care residencies. The national average is not available.

## RETENTION Medical School Graduates from 1997-2002 Practicing in West Virginia

		Graduates with Completed Training				
Institutions	Total Number of Graduates	Total Number	Number in Practice in WV	Number in Primary Care in WV*	Number in Practice in Non- Urban Areas in WV **	
West Virginia University	503	477	201 (42.1%)	112 (23.5%)	40 (8.4%)	
Marshall University	286	272	110 (40.4%)	73 (26.8%)	21 (7.7%)	
WV School of Osteopathic Medicine	379	379	124 (32.7%)	95 (25.1%)	56 (14.8%)	
TOTAL	1,168	1,128	435 (38.6%)	280 (24.8%)	117 (10.4%)	

Note: Excludes SREB contract students who have a contractual obligation to return to their home state following graduation.

A total of 1,128 graduates of the state's three medical schools between 1997 and 2002 have completed residency training. Of these graduates, 38.6% are practicing in West Virginia. Over 10% are practicing in rural areas. In tracking the retention of graduates, this report factors in the additional 3 to 5 years of residency training that physicians complete in their specialty before beginning practice.

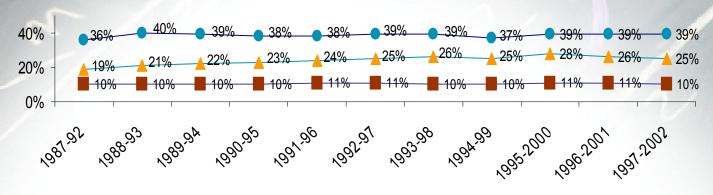
<sup>\*</sup> Primary Care is defined as family medicine, internal medicine, pediatrics, internal medicine/pediatrics, and obstetrics/gynecology.

<sup>\*\*</sup> Non-urban areas exclude graduates practicing in: Beckley, Charleston (including South Charleston, Dunbar, Nitro, Institute, etc.), Clarksburg, Fairmont, Huntington (including Barboursville), Hurricane, Martinsburg, Morgantown (including Star City and Westover), Parkersburg (including Vienna), Weirton, and Wheeling.

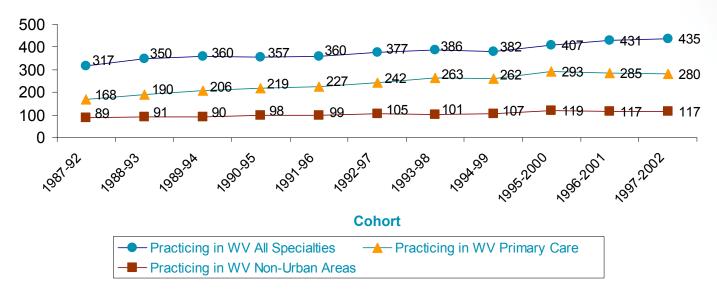
#### RETENTION

West Virginia Medical School Graduates Practicing in West Virginia

Percentage of Graduates Retained



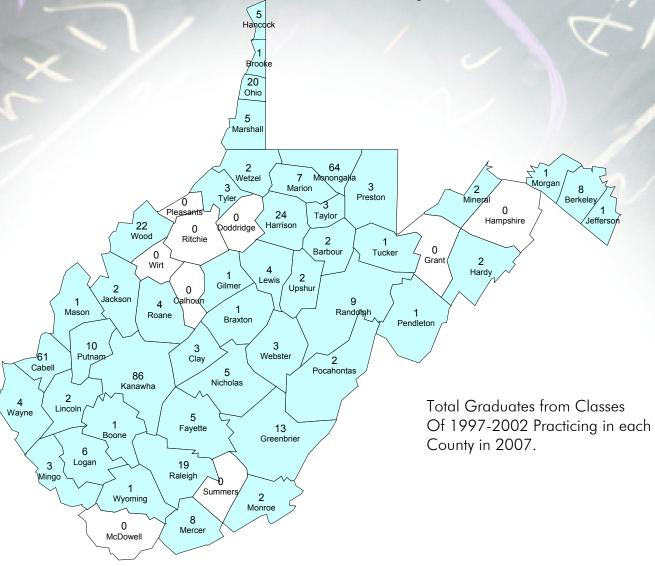
Cohort
Number of Graduates Retained



Retention is tracked annually for a 6-year cohort of medical school graduates who have completed residency training. The greatest change has been in retention of graduates in primary care fields. In the past 10 years, the number of graduates retained in primary care increased from 168 (19%) to 280 (25%) of the total medical school graduates retained.

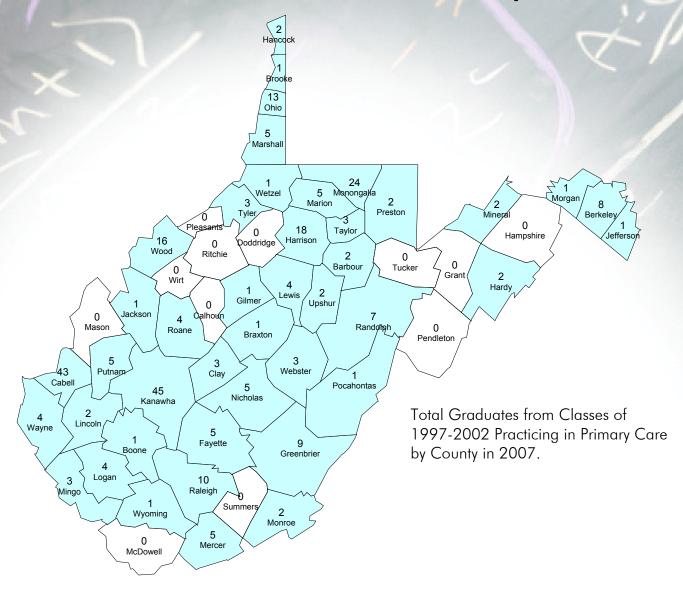
#### **RETENTION**





This map portrays retention of the most recent medical graduates who have completed residency training. A total of 435 graduates are dispersed to 46 of the state's 55 counties. Graduates from prior years are not shown.

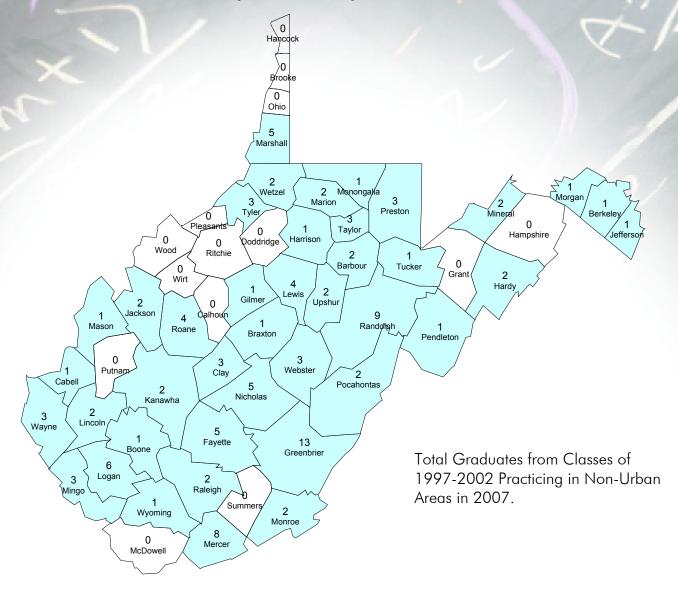
### RETENTION WV Medical School Graduates, 1997-2002, in Primary Care



This map portrays retention of the most recent medical graduates who have completed residency training in primary care fields. Primary Care is defined as family medicine, internal medicine, pediatrics, internal medicine/pediatrics, and obstetrics/gynecology. A total of 280 graduates in these fields are dispersed to 43 of the state's 55 counties.

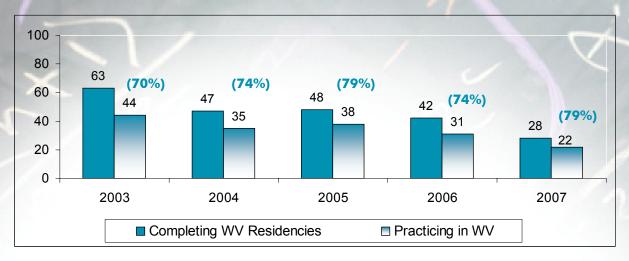
#### RETENTION

#### WV Medical Graduates, 1997-2002, in Non-Urban Areas

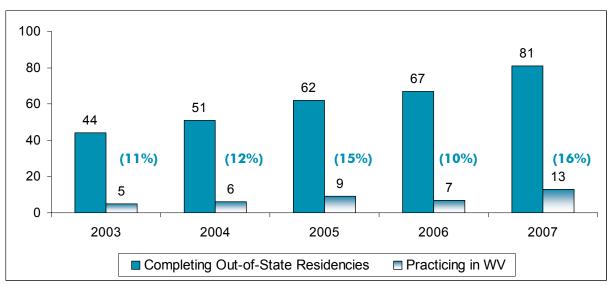


This map portrays retention of the most recent medical graduates who have completed residency training and are practicing in non-urban areas of the state. The "non-urban" definition excludes graduates practicing in Beckley, Charleston (Including South Charleston, Dunbar, Nitro, Institute, etc.), Clarksburg, Fairmont, Huntington (including Barboursville), Hurricane, Martinsburg, Morgantown (including Star City and Westover), Parkersburg (including Vienna), Weirton, and Wheeling. A total of 117 graduates are dispersed to 41 of the state's 55 counties.

### RETENTION WV Medical Graduates Completing WV Primary Care Residencies



### WV Medical Graduates Completing Out-of-State Primary Care Residencies



Medical school graduates begin practice after completing 3 to 5 years of residency training in a given specialty. Two factors are important in tracking their retention: (1) specialty choice, because primary care fields are most needed in rural West Virginia; and (2) location of the residency, because graduates who complete residencies in West Virginia are more likely to practice in the state. Consequently, the increasing number of medical graduates who leave the state for primary care residency training is a concern for the state's physician supply.

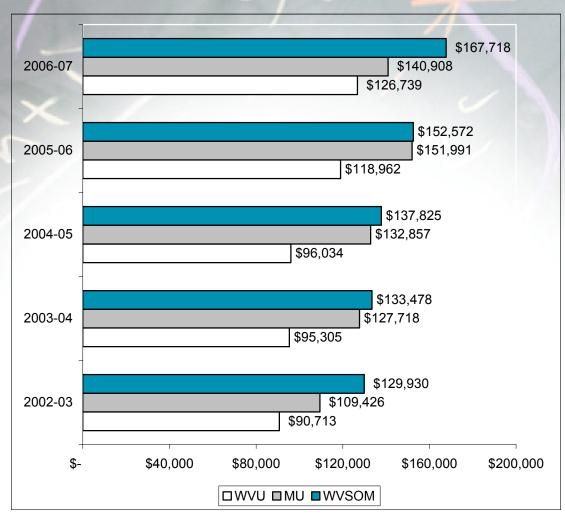
### RETENTION Health Sciences Graduates, 2003-07

	2003	2004	2005	2006	2007
West Virginia Univer	rsity				
Dental Practicing in WV	34	37	44	43	45
	23 (68%)	24 (65%)	23 (52%)	27 (63%)	26 (58%)
Pharmacy Practicing in WV	71	65	72	74	81
	48 (68%)	35 (54%)	48 (67%)	41 (55%)	52 (64%)
Nurse Practitioner	21	35	25	22	17
Practicing in WV	18 (86%)	30 (86%)	21 (84%)	19 (86%)	15 (88%)

#### Marshall University

Nurse Practitioner 11 11 14 16 20 Practicing in WV 7 (64%) 6 (55%) 9 (64%) 10 (63%) 13 (65%)

#### **MEDICAL SCHOOL INDEBTEDNESS**

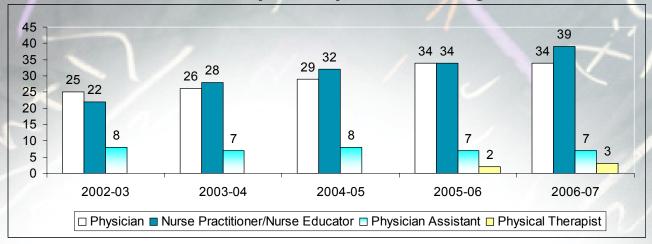


This chart shows the average indebtedness of graduating medical students. As a point of reference, the annual tuition and fees for the medical schools in 2006-07 are shown below:

	Resident	Non-Resident
West Virginia University	\$18,278	\$39,900
Marshall University	\$15,640	\$39,732
WV School of Osteopathic Medicine	\$18,886	\$46,736

The difference in graduate indebtedness may be attributed to difference among the schools in the proportion of students paying non-resident tuition and fees.

## SCHOLARSHIPS AND LOANS Health Sciences Scholarship Participants Practicing in Rural WV<sup>1</sup>



<sup>1.</sup> The Health Sciences Scholarship Program provides an incentive for students to practice in underserved areas of West Virginia. Medical students receive a \$20,000 award for a two-year service commitment. Other disciplines receive a \$10,000 award. Nurse educators became eligible in 2003. Physical therapists became eligible in 2005. The chart shows graduates who are fulfilling their service obligation

#### **Medical Student Loan Program<sup>2</sup>**

	2002-03	2003-04	2004-05	2005-06	2006-07
Loans Awarded	289	291	306	317	323
Total Amount Awarded	\$1,246,500	\$ 1,354,228	\$ 1,586,700	\$ 1,023,705	\$1,349,155
Amount of Unexpended Funds	\$ 2,039,706	\$ 2,296,022	\$ 2,609,608	\$ 3,157,511	\$3,525,991
Loan Forgiveness	13	21	21	15	12
Default Rate on Previous Awards	2.5%	2.5%	3.3%	3.0%	2.9%

<sup>2.</sup> The Medical Student Loan Program, a component of the Health Education Student Loan Program, is a need-based program to assist state medical students. It is funded from medical student fees, and borrowers may earn loan forgiveness for practicing in an underserved area or in a medical shortage field in West Virginia. The unexpended funds include loan repayments. In 2005 the Legislature approved a rule change to allow the schools to increase loans from \$5,000 to \$10,000 so that these funds will be utilized. During 2008, staff intends to work with the medical schools to examine the program.

#### **HEALTH CAREER PATHWAY**

#### **Health Sciences and Technology Academy**

Number of Students Currently Served	Number of Teachers Participating	Number of High School Graduates to Date, 1998-2007	Percentage of High School Graduates to Enter College	Percent to major in Health Sciences & Technology in College
700	76	982	97%	58%

#### **Program Outcomes**

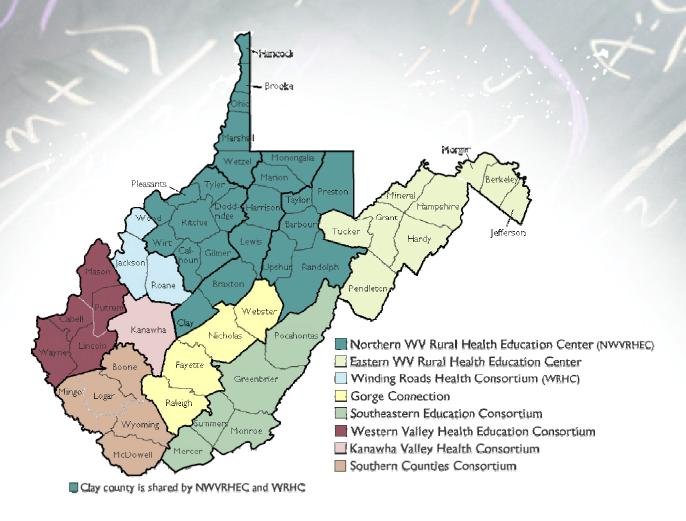
786 (80%) of the 982 HSTA graduates are still in college.

55 HSTA Scholars (23% of the first 4 cohorts) have gone on to graduate or professional school. Of that number, 27 HSTA Scholars (49%) have enrolled in health science graduate programs or professional schools.

Ten HSTA students are currently in medical school.

The Health Sciences and Technology Academy (HSTA) reaches out to minority and disadvantaged students in 26 counties and helps them prepare for higher education and health care careers. Students from the 9<sup>th</sup>-12<sup>th</sup> grade progress through four years of training with local teachers and campus-based faculty. Each summer, students attend a summer institute on campus for clinic, laboratory, and classroom activities.

### WEST VIRGINIA RURAL HEALTH EDUCATION PARTNERSHIPS



The West Virginia Rural Health Education Partnerships (RHEP) has completed mergers and consolidations resulting in 8 consortia, compared to 13 in 1995. These changes were designed to achieve greater efficiencies while maintaining the quality of educational experiences for trainees. The program has formed a partnership with the federally funded West Virginia Area Health Education Centers (AHEC) to provide community-based education and training in all counties of the state. The RHEP program focuses on rural underserved areas, while the AHEC serves all areas of the state.

#### TRAINING CONSORTIA INFRASTRUCTURE

Consortium Lead Agency and Sub-areas	Counties	Number of Training Sites	Number of	Field Faculty
Eastern WV Rural Health Education Consortium Martinsburg	Berkeley, Jefferson and Morgan	29	2 Dentistry 19 Medicine 9 Nursing 1 Nurse Practitioner	1 Occupational Therapy 12 Pharmacy 8 Physical Therapy
Petersburg	Grant, Hampshire, Hardy, Mineral, Pendleton and Tucker	51	1 Clinical Psychology 4 Dentistry 30 Medicine 2 Medical Technology 14 Nursing 5 Nurse Practitioner	1 Occupational Therapy 10 Pharmacy 6 Physician Assistant 5 Physical Therapy 1 Social Work 1 Nurse-Midwife
The Gorge Connection	Fayette, Raleigh, Nicholas and Webster	30	3 Dentistry 23 Medicine 1 Medical Technology 9 Nursing	4 Nurse Practitioner 10 Pharmacy 5 Physician Assistant 2 Physical Therapy 2 Social Work
Kanawha Valley Health Consortium Cabin Creek Health Center	Rural areas of Kanawha	19	3 Dentistry 7 Medicine 10 Nursing	5 Nurse Practitioner 2 Pharmacy 3 Physician Assistant
Northern WV Rural Health Education Center Region 1	Brooke, Hancock, Marshall, Ohio and Wetzel	30	20 Medicine 1 Medical Technology 15 Nursing	<ul><li>6 Pharmacy</li><li>5 Physical Therapy</li><li>1 Nurse Practitioner</li></ul>
Region 2	Calhoun, Doddridge, Gilmer, Pleasants, Ritchie, Tyler and Wirt	68	<ul><li>2 Dentistry</li><li>8 Medicine</li><li>3 Nursing</li><li>2 Medical Technology</li></ul>	8 Nurse Practitioner 8 Pharmacy 2 Physician Assistant 1 Physical Therapy
Region 3	Braxton, Harrison, Lewis, Marion and Monongalia	60	10 Dentistry 17 Medicine 1 Medical Technology 38 Nursing	3 Nurse Practitioner 9 Pharmacy 1 Physician Assistant 5 Physical Therapy 1 Nurse-Midwife
Region 4	Barbour, Preston, Randolph, Taylor and Upshur	63	<ul><li>2 Nurse-Midwife</li><li>1 Clinical Psychology</li><li>8 Dentistry</li><li>39 Medicine</li><li>6 Medical Technology</li></ul>	<ul><li>22 Nursing</li><li>2 Nurse Practitioner</li><li>14 Pharmacy</li><li>3 Physician Assistant</li><li>11 Physical Therapy</li></ul>

#### TRAINING CONSORTIA INFRASTRUCTURE

Consortium Lead Agency and Sub-areas	Counties	Number of Training Sites	Number of	Field Faculty
Southern Counties Consortium	Boone, Logan, McDowell, Mingo and Wyoming	30	3 Dentistry 32 Medicine 7 Nurse Practitioner 2 Nursing	5 Pharmacy 5 Physician Assistant 1 Physical Therapy
Southeastern Education Consortium	Greenbrier, Mercer, Monroe, Pocahontas, and Summers	41	4 Dentistry 47 Medicine 4 Nursing Nurse Practitioner 2 Medical Technology	8 Pharmacy 1 Physician Assistant 8 Physical Therapy 1 Social Work
Western Valley Health Education Consortium Ft Gay	Cabell, Wayne and Lincoln	14	2 Dentistry 12 Medicine 4 Nursing	<ul><li>2 Nurse Practitioner</li><li>1 Pharmacy</li><li>2 Physician Assistant</li></ul>
Point Pleasant	Cabell, Lincoln, Mason, Putnam and Wayne	43	4 Dentistry 34 Medicine 3 Nursing 2 Nurse Practitioner	5 Pharmacy 4 Physical Therapy 2 Physician Assistant 1 Speech Therapy 1 Social Work
Winding Roads Health Consortium Roane County Family Health Care	Clay, Roane and Jackson	20	3 Dentistry 20 Medicine 2 Medical Technology 2 Nursing 1 Nurse-Midwife	4 Nurse Practitioner 9 Pharmacy 3 Physical Therapy 1 Pharmacy Tech
Total	Training Sites 498	Field Faculty		y by Discipline
FY 2006-07 FY 2005-06	498 476	750 682	2 Clinical Psychology 48 Dentistry	<ul><li>2 Occupational Therapy</li><li>99 Pharmacy</li></ul>
			308 Medicine 17 Medical Technology 135 Nursing 5 Nurse-Midwife 44 Nurse Practitioner	30 Physician Assistant 53 Physical Therapy 5 Social Work 1 Pharmacy Tech. 1 Speech Therapy

The RHEP training infrastructure covers the most underserved areas of 54 counties. Training sites include rural hospitals, health centers, private physician offices, dental offices, pharmacies, public health departments, human service agencies, mental health centers, schools, and other heath care organizations (e.g., home health).

### **TRAINING CONSORTIA EXPENDITURES July 1, 2006 – June 30, 2007**

	EASTERN WVRHEC	GORGE CONNECTION	KANAWHA VALLEY	NORTHERN WVRHEC	SOUTHEASTERN EDUC	SOUTHERN COUNTIES
DIRECT SERVICE EXPENSES						
Student/Resident Housing	\$ 32,645	\$ 19,139	\$ 3,349	\$ 78,256	\$ 31,819	\$ 9,822
Student/Resident LRC	13,225	6,155	3,600	32,311	26,881	902
Student/Resident Rotation Coordination	123,980	94,058	48,031	243,063	85,676	130,733
IDS Prep & Presentation	9,630	5,885	4,117	33,621	500	2,900
Annual Honorarium - Preceptors	31,345	46,461	5,253	-	36,200	11,500
Graduate Medical Education	-	-	-	17,522	-	-
Recruitment & Retention	-	9,611	-	22,603	-	-
Community Service	11,715	2,932	15,909	56,016	16,988	711
On-Site Clinical Director	-	25,000	12,871	-	34,000	7,000
Faculty Development	-	2,787	5,079	34,693	-	2,561
Subtotal	222,540	212,028	98,209	518,085	232,064	166,129
	73%	76%	75%	75%	83%	66%
INDIRECT SERVICE EXPENSES*						
Subtotal	81,376	65,205	33,006	173,616	46,373	85,964
	27%	24%	25%	25%	17%	34%
TOTAL	\$303,916	\$ 277,233	\$ 131,215	\$ 691,701	\$ 278,437	\$ 252,093

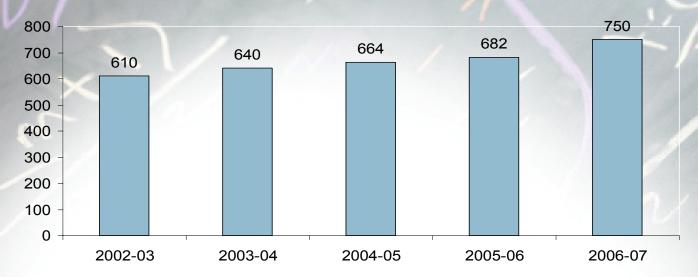
Note: The expenditures above reflect activity for the FY 07 state-funded grant for each consortium. The information was compiled from annual report submissions from each consortium and is unaudited.

<sup>\*</sup>Indirect service expenses include site administration, administrative travel, office expense, and fiscal management.

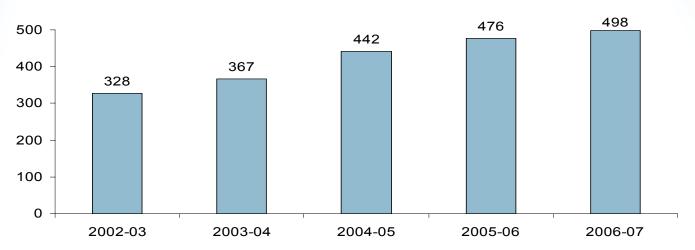
## **TRAINING CONSORTIA EXPENDITURES July 1, 2006 – June 30, 2007**

WESTERN FORT GAY	VALLEY POINT PLEASANT	WINDING ROADS	TOTALS
	1		
\$ 13,978	\$ 3,760	\$ 12,822	\$ 205,590
5,148	6,184	20,465	114,871
105,354	71,784	73,988	976,667
8,000	1,171	450	66,274
20,000	9,999	11,375	172,133
1,000	16,500	-	35,022
1,106	11,000	-	44,320
6,488	2,361	2,832	115,952
16,877	-	-	95,748
6,618	-	-	51,738
184,569	122,759	121,932	1,878,315
87%	76%	77%	76%
26,585	38,479	35,597	586,201
13%	24%	23%	24%
\$ 211,154	\$ 161,238	\$157,529	2,464,516

## FIELD FACULTY AND TRAINING SITES RHEP Field Faculty



#### **RHEP Training Sites**



West Virginia RHEP field faculty are active rural practitioners who also teach students. In 2007, the Faculty Development Conference was held jointly with Area Health Education Centers. The theme was "Defining and Assessing Clinical Competence." A total of 101 field faculty, institutional staff and others attended the day-long workshop, which was funded in part by the Benedum Foundation.

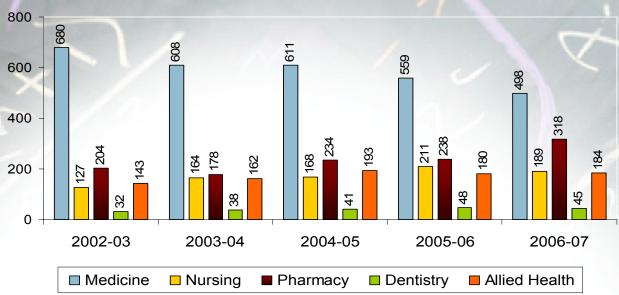
## STUDENT ROTATIONS Student Rotations by County

Rotations by County: June 1, 2006 - May 31, 2007

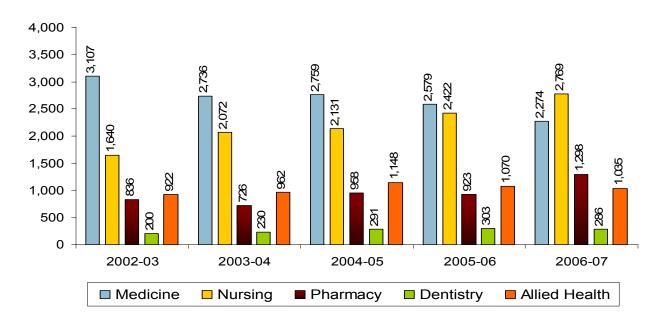
	RHEP		Other Run	al Sites		RH		Other Ru	ral Sites
	Student	Student	Student	Student		Student	Student	Student	Student
County	Rotation	Weeks	Rotation		County	Rotation	Weeks	Rotation	Weeks
Barbour	19	89	0	0	Mingo	10	57	2	18
Berkeley	53	298	2	8	Monongalia	35	461	12	60
Boone	31	206	1	4	Monroe	1	6	7	32
Braxton	18	135	2	8	Morgan	26	120	5	28
Brooke	10	63	0	0	Nicholas	29	151	14	26
Cabell	29	100	10	56	Ohio	8	129	1	15
Calhoun	10	78	0	0		2	8	0	0
Clay	2	21	1	16	Pleasants		12	0	0
Doddridge	8	55	0	-	Pocahontas	0	0	1	4
Fayette	44	253	8		Preston	51	448	0	0
Gilmer	5	46	0		Putnam	43	217	18	
Grant	56	300	12		Raleigh	30	147	86	339
Greenbrier	45	261	193	694	Randolph	46	222	4	20
Hampshire	11	53	1	2	Ritchie	10	59	0	0
Hancock	0	0	0	0	Roane	26	119		0
Hardy	11	46	0	0	Summers	9	47	8	30
Harrison	33	253	1	4	Taylor	47	359	2	30
Jackson	19	113	18	100	Tucker	15	64	0	0
Jefferson	43	184	3	12	Tyler	11	51	0	0
Kanawha	68	657	9	87	Upshur	39	199	11	50
Lewis	38	221	8	37	Wayne	38	198	32	103
Lincoln	10	42	7		Webster	17	86	1	4
Logan	18	105	19	96	Wetzel	4	22	0	0
Marion	22	160	4	22	Wirt	3	34	0	0
Marshall	32	166	1	8	Wood	3	20	0	0
Mason	23	198	7	71	Wyoming	11	47	3	23
McDowell	8	35	0	0					
Mercer	32	150	86		2006-2007 Total	1,234	7,662	603	2,722
Mineral	19	91	3	11	2005-2006 Total	1,235	7,287	634	2,643

Students in state-supported health sciences schools are required to complete three months of clinical rotations in rural or underserved communities. Dental students, because of unique curricular requirements, complete two months, and medical technology students complete one month. RHEP rotations may vary in length from four to twelve weeks. Some students, for example, may complete one 12-week rotation while other students complete three 4-week rotations. This year, students from nine disciplines completed over 1,200 rotations in RHEP sites. The nine disciplines include: dentistry, dental hygiene, medical technology, medicine, nursing, pharmacy, physician assistant, social work, and physical therapy.

# STUDENT ROTATIONS RHEP Rotations by Year/Discipline



#### **RHEP Student Weeks by Year/Discipline**



## STUDENT ROTATIONS Rotations by School/Discipline: June 1, 2006 - May 31, 2007

	RHE	D	Other Run	al Sitos
School/Discipline:			Student Rotations	
Alderson-Broaddus	Ottudent Notations	Cludent Weeks	Ottadent Notations	Otudent Weeks
Physician Assistant	58	227	3	7 / 11
Mountain State University		221		/ /
Physician Assistant	50	240	23	75
Nurse Practitioner	1	16	4	45
Other	0	0	1	20
Marshall University				
Health Administration	0	0	1	10
Medicine	98	393	35	87
Medical Resident	0	0.00	2	161
Nursing	15	208	13	144
Speech Pathology	0	0	2	22
Social Work	0	0	1	1
West Liberty				
Dental Hygiene	1	3	0	
WV School of Osteopathic Medicine				
Medicine	174	962	444	1,713
Medical Resident	4	16	25	89
West Virginia University	•		20	
Dental Hygiene	23	138	1	16
Dentistry	45	286	0	(
Medical Resident	2	9	3	12
Medical Technology	19	55	3	
Medicine	127	518	5	17
Medicine-Charleston	64	253	1	
Medicine-Eastern Panhandle	29	123	0	(
Nurse Practitioner	8	126	4	56
Nurse Practitioner-Charleston	9	142	8	120
Nursing	109	1572	0	(
Pharmacy	318	1298	21	86
Physical Therapy	32	336	2	12
Social Work	1	36	0	(
West Virginia University	-			
Institute of Technology				
Nursing	47	705	0	C
<del>-</del> - <del>-</del>				
Other In-State Medical Residency				
Medical Resident	0	0	1	3
2006-07 Total:	1,234	7,662	603	2,722
2005-06 Total:	1,235	7,287	634	2,643

## COMMUNITY SERVICE CONTACTS June 1, 2006 – May 31, 2007

Consortium	Prevention and Education for General Public	Prevention and Education for Adults	Prevention and Education for Children	Total
Eastern WV Rural Health Education Consortium				
Martinsburg	363	1,393	4,775	6,531
Petersburg	338	1,219	5,464	7,021
The Gorge Connection	120	2,119	4,077	6,316
Kanawha Valley Health Consortium	300	885	2,358	3,543
Northern WV Rural Health Education Center			and the same of th	
Region 1	160	890	3,201	4,251
Region 2	553	1,044	4,007	5,604
Region 3	1,086	1,517	5,835	8,438
Region 4	1,703	3,408	4,337	9,448
Southern Counties Consortium	548	638	990	2,176
Southeastern Education Consortium	976	1,076	2,468	4,520
Western Valley Health Education Consortium				1
Fort Gay	517	163	4,819	5,499
Point Pleasant	1,024	170	3,533	4,727
Winding Roads Health Consortium	29	787	2,597	3,413
FY 2006-2007 Total	7,717	15,309	48,461	71,487
FY 2005-2006 Total	10,852	16,414	47,040	74,326

RHEP provides community services and education on topics such as prenatal care, fitness and nutrition, drug interactions, dental health, poison prevention, and the kidney early evaluation program (KEEP). The program links its prevention and education programs to the Healthy People 2010 Objectives to ascertain where student efforts are being directed. RHEP strives to provide students with service-learning opportunities that are directly linked to their clinical and educational learning objectives.

The CARDIAC Project provides screening and intervention programs to 5th grade students in 54 counties. CARDIAC programs also serve kindergarten, 2nd grade, and 9th grade students in select counties. The overall objective of the program is to reduce morbidity and mortality from heart disease and diabetes. Since 1998, the program has screened over 45,000 5th graders. Since 2003, the program has screened 2,615 kindergarten students, 1,267 2nd graders, and 1,044 9th graders. Younger children receive height and weight screening, from which body mass index (BMI) is calculated. Older children receive fasting lipid profile and blood pressure screening and are observed for the presence of a diabetes marker, in addition to the BMI screen. CARDIAC screening has been helpful to families, health care and school professionals, and state policy makers by increasing awareness of children's heart disease risk factors, providing interventions, and changing health behaviors.

In 2006-07, RHEP dental and dental hygiene students provided 13,935 clinical procedures. Students and faculty participated in 263 outreach activities, serving 8,736 West Virginians. RHEP dental sites, including dentists and students, provided over \$1 million in uncompensated care.

## RECRUITMENT Health Professionals with RHEP Rotations Practicing in Rural Areas of the State

Discipline	Number in Rural Practice	Number who Received Financial Incentives
Physicians		
(1991-2004 graduates)	264	97 (37%)
Nurse Practitioners/Nurse Educators	104	42 (40%)
Nurse-Midwife	1	·   -
Physician Assistants	152	49 (32%)
Nurses	80	-
Dentists	89	2 (2%)
Dental Hygienists	22	
Pharmacists	183	-
Physical Therapists	60	3 (5%)
Occupational Therapists	2	-
Medical Technologists	8	-
Masters in Public Health	1	-
Social Workers	1	
TOTAL	967	193 (20%)

#### **Recruitment Incentives for Rural Practice**

#### West Virginia Higher Education Policy Commission

Health Sciences Scholarship Program - 86 awards

#### WV Rural Health Education Partnerships

SEARCH Training Stipends - 44 awards Community Scholarship Program - 5 awards

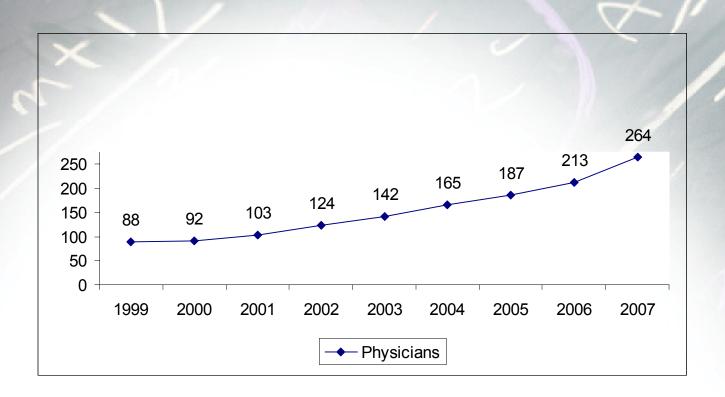
#### Bureau for Public Health, Division of Rural Health & Recruitment

Recruitment & Retention Community Project - 90 awards State Loan Repayment Program - 28 awards NHSC Loan Repayment Program - 14 awards

#### TOTAL 267 Awards

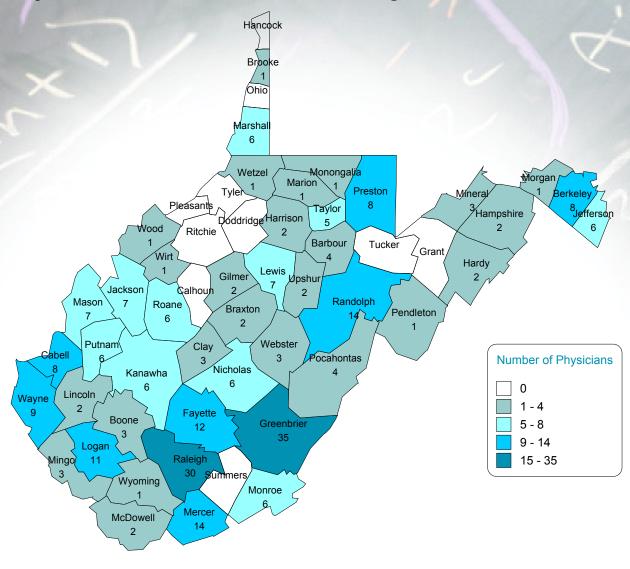
State scholarships and loan repayment are coordinated by the RHEP Recruitment and Retention Committee to target financial incentives to students and physician residents with rural training. Some practitioners have received awards from two or more programs. As of 2007, 193 rural practitioners have received a total of 267 awards. The agencies and programs shown above provided these awards. The National Health Service Corps (NHSC) Loan Repayment Program is included because the Bureau for Public Health assists physicians in applying to this program.

RECRUITMENT
Number of Physicians with RHEP Rotations Practicing in Rural
Areas of West Virginia



From 1999 to 2007, 264 physicians who did RHEP rural rotations were recruited to rural West Virginia and are currently practicing there. These numbers include physicians who did rural rotations under RHEP and the Area Health Education Program (AHEC), a federally funded partner program to RHEP. Each of the medical (DO & MD) graduates is re-verified annually so the count each year reflects the loss of some rural practitioners to urban and out-of-state practice. Despite this expected loss, the number of medical graduates in rural practice has increased 200% in the past 9 years at an average annual rate of 14.7%.

### RECRUITMENT Physicians with RHEP Rotations Practicing in Rural Areas in 2007



A total of 264 physicians with RHEP training were practicing in rural areas of the state in 2007. They include graduates from 1991-2004. A total of 97 (37%) of these physicians received state financial incentives. Placements are counted as rural if the physician is practicing in a location that qualifies as a site for an RHEP/AHEC rotation or if the site is a federally qualified health center (FQHC) or free clinic.

Recruitment data on pages 25 and 27 were provided by the WVDHHR, medical schools, and the RHEP, AHEC, and HEPC staff.

