

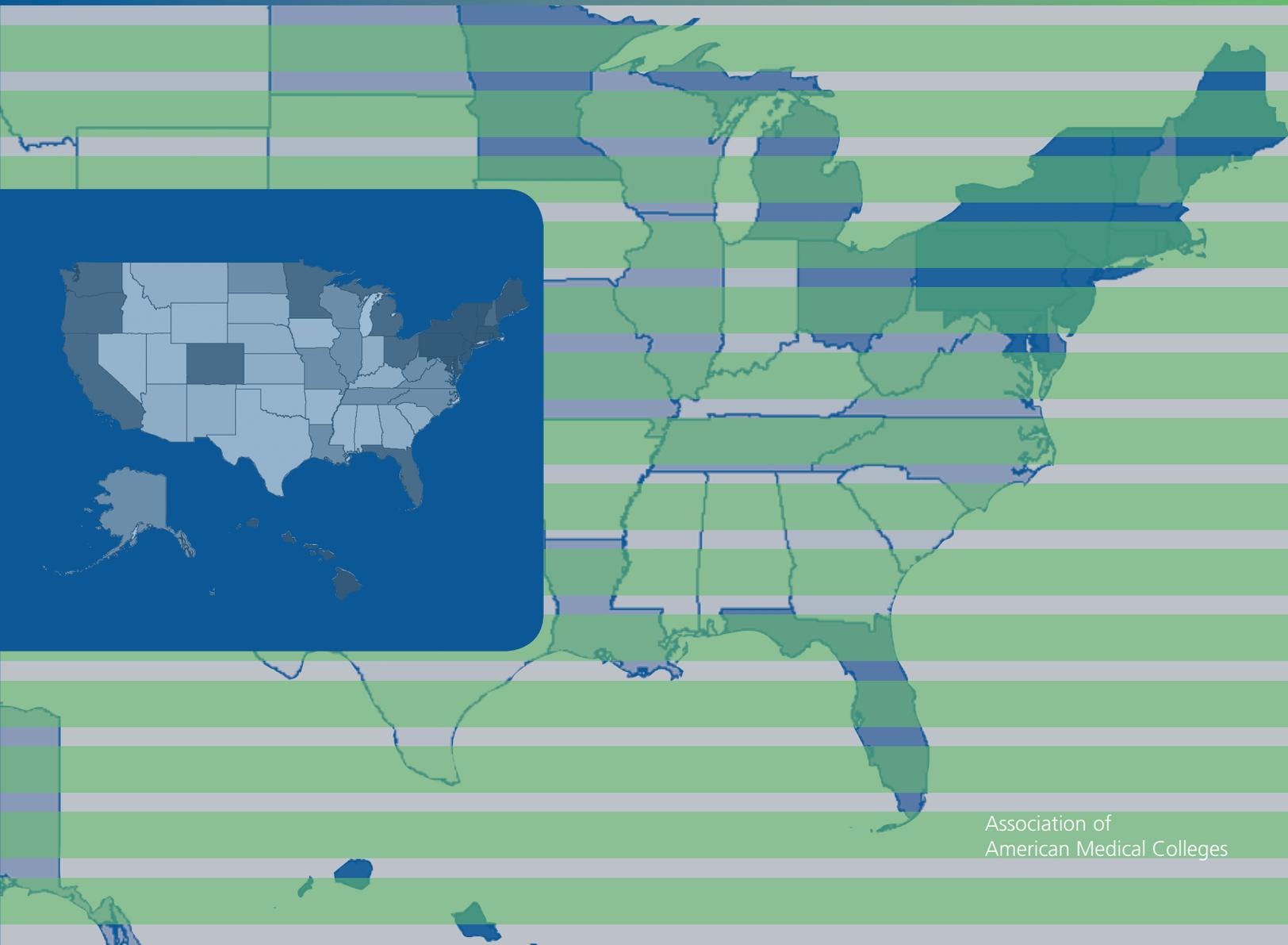


Tomorrow's Doctors, Tomorrow's Cures®

2013 State Physician Workforce Data Book

Center for Workforce Studies

November 2013



Association of
American Medical Colleges

Acknowledgments

The *2013 State Physician Workforce Data Book* was produced with the help of many people. The publication was produced under the direction of Karen Jones, with substantial assistance from Casey Tilton in assembling and reviewing the manuscript. Other AAMC staff who contributed to this report include Paul Jolly, Geoffrey Redden, and Brent Bledsoe. We are also grateful to Monica Whatley for her effort in checking the data presented here.

We also owe special thanks to the American Medical Association for making the Physician Masterfile available to the AAMC for research purposes, the AAMC Student and Applicant Studies staff for providing data on students enrolled in medical schools and physicians training in GME, the AAMC Data Warehouse staff without whom the data analysis would not be possible, and the AAMC Creative Services team.

The Center for Workforce Studies welcomes your comments and suggestions for future editions of this report. Suggestions by readers led to the inclusion of Puerto Rico in the report this year, and the addition of specialty-specific state level data in the [online supplement](#).

Please send comments, suggestions, or questions to:
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Table of Contents

Acknowledgments.....	i
Executive Summary	1
Interactive Maps	2
Key Definitions	2
Commonly Used Acronyms.....	3
Section 1 – Physician Supply	
Key Findings.....	4
Active Physicians per 100,000 Population by Degree Type, 2012	
Map 1.....	4
Figure 1.....	8
Table 1	9
Active Patient Care Physicians per 100,000 Population by Degree Type, 2012	
Figure 2.....	10
Table 2	11
Active Primary Care Physicians per 100,000 Population by Degree Type, 2012	
Map 2	5
Figure 3.....	12
Table 3	13
Active Patient Care Primary Care Physicians per 100,000 Population by Degree Type, 2012	
Figure 4.....	14
Table 4	15
Active Physicians Who Are Female, 2012	
Figure 5.....	16
Table 5	17
Active Physicians Who Are International Medical Graduates (IMGs), 2012	
Map 3.....	6
Figure 6.....	18
Table 6	19
Active Physicians by Selected Age Groups, 2012	
Figure 7.....	20
Table 7	21
Section 2 – Undergraduate Medical Education	
Key Findings	22
Students Enrolled in Medical or Osteopathic School for the 2012–2013 Academic Year per 100,000 Population	
Map 4	22
Figure 8	24
Table 8	25
Students Enrolled in Public Medical or Osteopathic School for the 2012–2013 Academic Year per 100,000 Population	
Map 5	23
Figure 9	26
Table 9	27
Change in Number of Students Enrolled in Medical or Osteopathic Schools, 2002–2012	
Figure 10	28
Table 10	29
In-State Matriculation to Medical School for the 2012–2013 Academic Year	
Figure 11	30
Table 11	31

Section 3 – Graduate Medical Education

Key Findings	32
Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Programs per 100,000 Population by Degree Type	
Map 6	32
Figure 12	36
Table 12	37
Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Primary Care Programs per 100,000 Population by Degree Type	
Map 7	33
Figure 13	38
Table 13	39
Residents and Fellows on Duty as December 31, 2011 in ACGME-Accredited Programs Who Are International Medical Graduates (IMGs)	
Figure 14	40
Table 14	41
Ratio of Graduate Medical Education (GME) to Undergraduate Medical Education (UME), Academic Year 2011–2012	
Figure 15	42
Table 15	43
Change in Number of Residents and Fellows in ACGME-Accredited Programs, 2001–2011	
Map 8	34
Map 9	35
Figure 16	44
Table 16	45

Section 4 – Retention

Key Findings	46
Physicians Retained from UME	
Map 10.....	46
Figure 17	48
Table 17	49
Physicians Retained from Public UME	
Figure 18	50
Table 18	51
Physicians Retained from GME	
Map 11	47
Figure 19	52
Table 19	53
Physicians Retained from UME and GME Combined	
Figure 20	54
Table 20	55

Summary

State Medians for Physician Supply, UME, GME, and In-State Retention, 2008, 2010, and 2012	
Table 21	56

Executive Summary

The *2013 State Physician Workforce Data Book* is a biennial report that examines current physician supply, medical school enrollment, and graduate medical education in the United States. The report provides the most current data available for each state, the District of Columbia, and Puerto Rico in a series of figures and corresponding tables.

Between 2008 and 2012, there were small increases in the state median number of active physicians and active patient care physicians, as well as in the state median percent female physicians and percent physicians age 60 or older. While the median number of students enrolled in undergraduate medical education has increased relative to the population, the number of students enrolled in graduate medical education per population has remained flat. There has also been little consistent change in the median percent of physicians who are retained in-state from either undergraduate or graduate medical education.

The *Data Book* is divided into four sections:

Section 1: Physician Supply. This section includes data on active physicians in each state, including physician-to-population ratios, percent female, age distribution, and type of medical education. Data by race and ethnicity were not available.

Section 2: Undergraduate Medical Education. This section provides information on enrollment for both medical and osteopathic schools, as well as data on in-state matriculation. Alaska, Delaware, Idaho, Montana, and Wyoming do not have medical schools, but four of those states (Alaska, Idaho, Montana, and Wyoming) have an agreement with the University of Washington to reserve slots for residents of those four states at the University of Washington School of Medicine. For the purposes of this report, all students at the University of Washington School of Medicine are counted in Washington and not in other states.

Section 3: Graduate Medical Education. This section presents data on physicians in residency and fellowship positions in each state, including physician-to-population ratios, degree type, and location of medical school. Data in this section include M.D.'s and D.O.'s in programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). Where possible, data for physicians in programs accredited by the American Osteopathic Association (AOA) also are included.

Section 4: In-State Retention. This section presents data on states' retention of the physicians they educate in medical or osteopathic schools and in graduate medical education (GME) programs.

The primary data sources for this report are:

- American Medical Association (AMA) Physician Masterfile (December 31, 2012)
- Population estimates from the U.S. Census Bureau
- AAMC Student Record System
- American Association of Colleges of Osteopathic Medicine
- National GME Census, which is conducted jointly by the AAMC and the AMA

Interactive Maps

Individual maps can be selected and printed from the Interactive Report for the 2013 State Physician Workforce Data Book, which is available online: <https://www.aamc.org/data/workforce/interactive/>

Summaries for each state, including counts for the top specialties, are also available through the interactive report.

Key Definitions

Active physicians: Physicians who report working in administration, direct patient care, medical research, medical teaching, or other non-patient care activities are considered active. Physicians whose major professional activity is unclassified also are considered active. Physicians who are classified as retired, semi-retired, temporarily not in practice, not active for other reasons, residents, or fellows are excluded.

These data refer to physicians who are active in the 50 states of the United States, the District of Columbia, and Puerto Rico—regardless of where they attended medical or osteopathic school. Physicians active in other U.S. territories are excluded. To determine whether or not an active physician is in the United States, the location of the physician’s office was used. In cases where the physician’s office location was missing, the state from the preferred mailing address was used. This substitution occurred for approximately nine percent of cases among all active physicians.

Active patient care physicians: This group is a subset of active physicians. It comprises only those physicians whose self-reported type of practice is direct patient care.

U.S.M.D.: Physicians who received their Doctor of Medicine (M.D.) degree from a medical school in the United States or Puerto Rico. Graduates of Canadian medical schools are not counted as U.S.M.D.’s.

D.O.: Physicians who received their Doctor of Osteopathy (D.O.) degree from a U.S. osteopathic school accredited by the American Osteopathic Association.

International medical graduate (IMG): An individual who graduated from a medical school outside of the United States, Puerto Rico, or Canada is considered an international medical graduate (IMG). This includes U.S. citizens who completed their medical education outside the United States, Puerto Rico, or Canada.

To be eligible for licensure and practice in the United States, all IMGs must be certified by the Educational Commission for Foreign Medical Graduates (ECFMG) and complete a residency training program in the United States. Graduates of Canadian medical schools are not considered IMGs because they do not have to be certified by the ECFMG to enter a residency training program in the United States. Please note that although graduates of Canadian medical schools who are practicing in the United States are not considered IMGs or U.S.M.D.’s, they are included in the total for active physicians.

Primary care physicians: Physicians are counted as primary care physicians if their self-designated primary specialty is one of the following: adolescent medicine, family medicine, general practice, geriatric medicine, internal medicine, internal medicine/pediatrics, or pediatrics. Residents and fellows are counted as primary care residents and fellows if they are in one of the following programs: adolescent medicine (pediatrics), family medicine, geriatric medicine (family medicine), geriatric medicine (internal medicine), geriatric medicine/family practice, geriatric medicine/internal medicine, internal medicine, internal medicine/family practice, internal medicine/pediatrics, or pediatrics. In the 2009

State Physician Workforce Data Book, the internal medicine/preventive medicine residency program was considered primary care, but is no longer. There were 29 residents in the internal medicine/preventive medicine program in 2010 and 28 in 2012.

Residents: Physicians who have completed undergraduate medical education and are at any level of training in an ACGME- or AOA-accredited training program.

Fellows: Physicians who have completed a residency and are pursuing further training in a subspecialty through a fellowship program accredited by the ACGME.

Medical school: A school that confers the Doctor of Medicine (M.D.) degree and is accredited by the Liaison Committee on Medical Education.

Osteopathic school: A school that confers the Doctor of Osteopathy (D.O.) degree and is accredited by the American Osteopathic Association.

Commonly Used Acronyms

AACOM Association of American Colleges of Osteopathic Medicine

AAMC Association of American Medical Colleges

ACGME Accreditation Council for Graduate Medical Education

AMA American Medical Association

AOA American Osteopathic Association

D.O. Doctor of Osteopathy

GME Graduate Medical Education

IMG International Medical Graduate

M.D. Doctor of Medicine

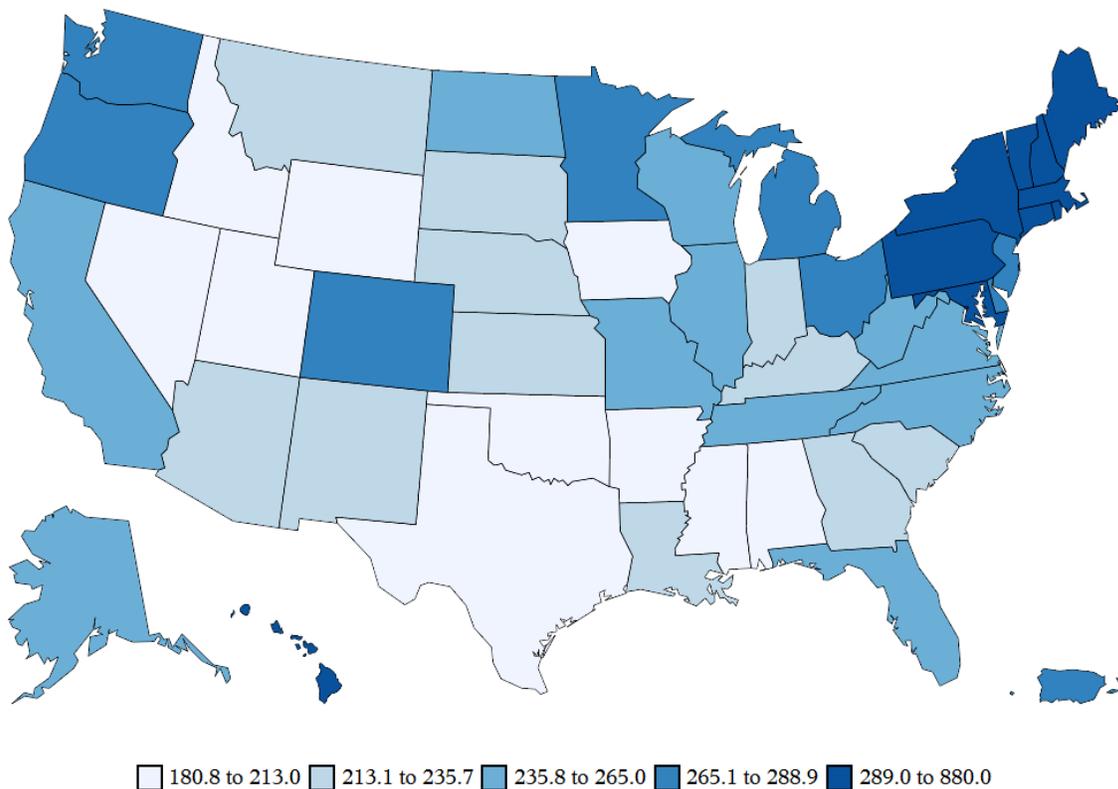
OGME Osteopathic Graduate Medical Education

UME Undergraduate Medical Education

Key Findings – Physician Supply

- In 2012, there were 260.5 active physicians per 100,000 population in the United States, ranging from a high of 421.5 in Massachusetts to a low of 180.8 in Mississippi. The states with the highest number of physicians per 100,000 population are concentrated in the Northeast (see Map 1, Figure 1, and Table 1).

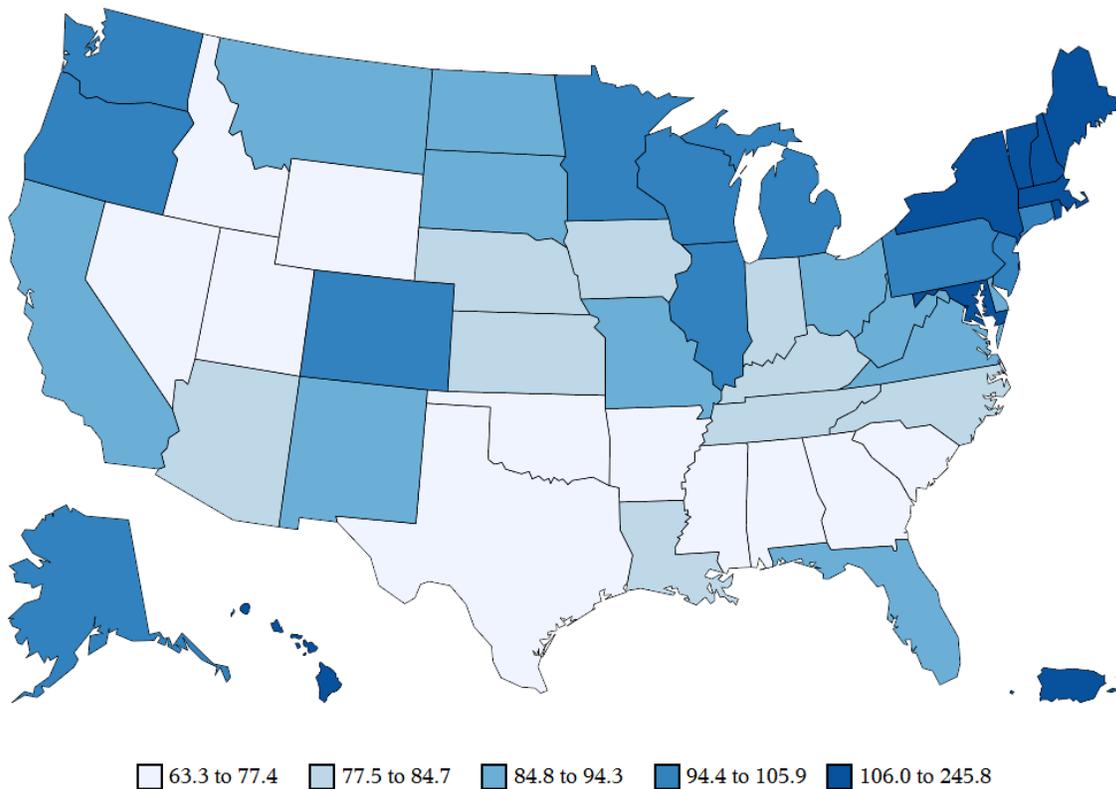
Map 1. Total Active Physicians per 100,000 Population, 2012



Source: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the AMA Physician Masterfile (December 31, 2012).

- Nationally in 2012, there were 225.6 physicians active in patient care² per 100,000 population. Massachusetts had the highest number of patient care physicians per 100,000 population (324.1), while Mississippi had the lowest (164.4) (see Figure 2 and Table 2).
- There were 90.1 primary care physicians per 100,000 population in the United States in 2012. Once again, Massachusetts was at the top with a value of 131.9, while Mississippi had the lowest number of primary care physicians per 100,000 population (63.4). The distribution of primary care physicians per 100,000 population is very similar to the distribution of all physicians per 100,000 population (see Map 2, Figure 3, and Table 3).

Map 2. Primary Care Physicians per 100,000 Population, 2012

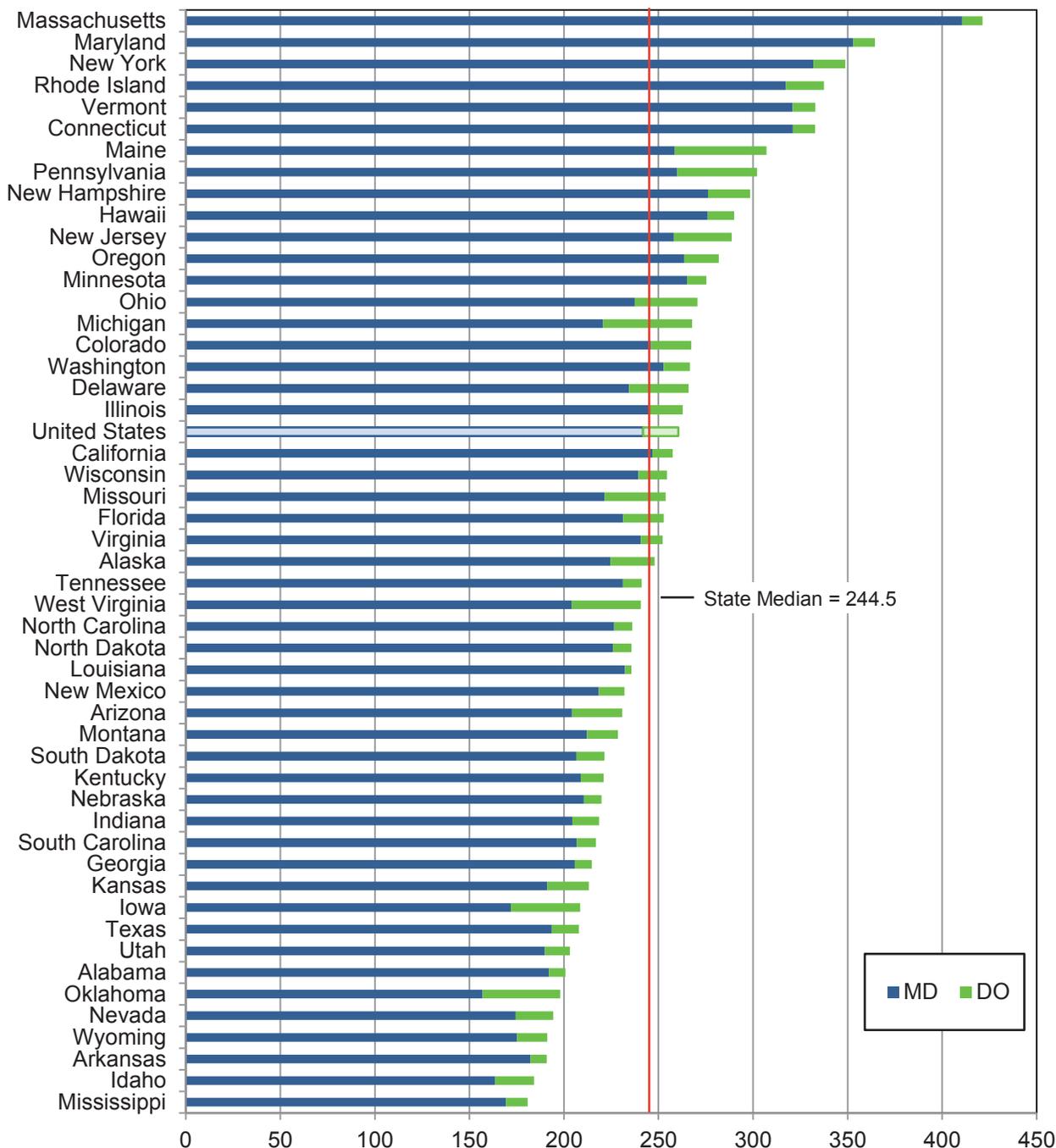


Source: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December, 2012). Physician data are from the AMA Physician Masterfile (December 31, 2012).

² This refers to physicians whose type of practice is categorized as patient care. Physicians whose type of practice is administration, medical research, medical teaching, or other non-patient care activities are not included here.

- Nationally, more than one-fourth (27.6 percent) of the active physician workforce was age 60 or older. There was some variation among the states in the percentage of physicians who were age 60 or older in 2012. New Mexico had the highest percentage (33.3), while North Carolina had the lowest percentage (22.6) (see Figure 7 and Table 7).

Figure 1. Active Physicians per 100,000 Population by Degree Type, 2012



Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012). Physicians whose medical school type was not available are excluded (n=214).

Table 1. Active Physicians per 100,000 Population by Degree Type, 2012

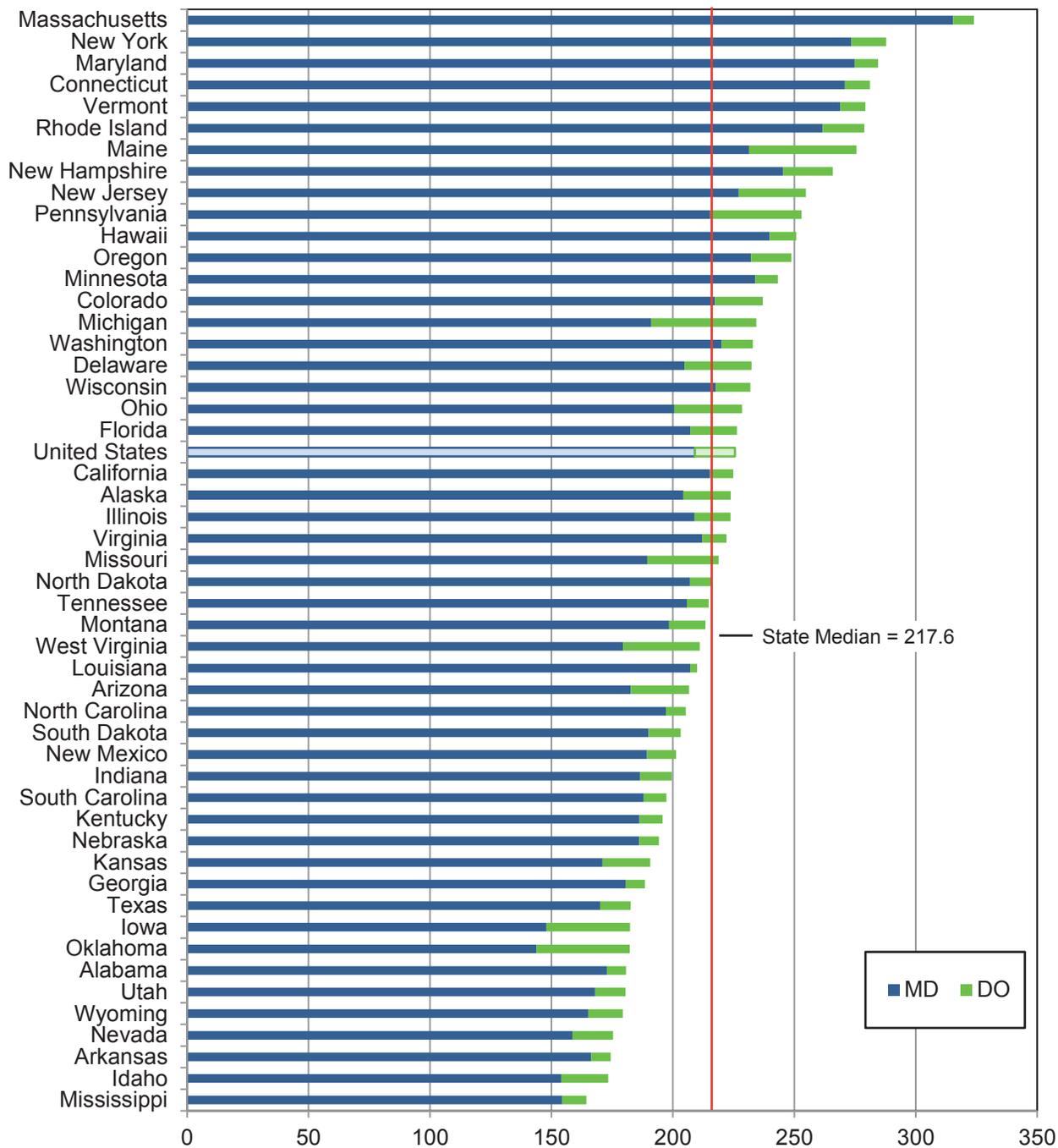
	Total Population	Total Active Physicians*			Active M.D.'s		Active D.O.'s	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	313,914,040	817,850	260.5	N.R.	759,227	241.9	58,409	18.6
Alabama	4,822,023	9,681	200.8	44	9,259	192.0	419	8.7
Alaska	731,449	1,813	247.9	25	1,642	224.5	171	23.4
Arizona	6,553,255	15,133	230.9	32	13,391	204.3	1,738	26.5
Arkansas	2,949,131	5,629	190.9	48	5,377	182.3	252	8.5
California	38,041,430	97,977	257.6	20	93,884	246.8	4,063	10.7
Colorado	5,187,582	13,869	267.3	16	12,767	246.1	1,098	21.2
Connecticut	3,590,347	11,949	332.8	6	11,527	321.1	420	11.7
Delaware	917,092	2,439	265.9	18	2,149	234.3	289	31.5
District of Columbia	632,323	5,559	879.1	N.R.	5,435	859.5	122	19.3
Florida	19,317,568	48,852	252.9	23	44,676	231.3	4,167	21.6
Georgia	9,919,945	21,300	214.7	39	20,402	205.7	893	9.0
Hawaii	1,392,313	4,037	289.9	10	3,843	276.0	194	13.9
Idaho	1,595,728	2,938	184.1	49	2,611	163.6	327	20.5
Illinois	12,875,255	33,874	263.1	19	31,629	245.7	2,234	17.4
Indiana	6,537,334	14,295	218.7	37	13,368	204.5	923	14.1
Iowa	3,074,186	6,414	208.6	41	5,283	171.9	1,131	36.8
Kansas	2,885,905	6,151	213.1	40	5,519	191.2	632	21.9
Kentucky	4,380,415	9,678	220.9	35	9,151	208.9	526	12.0
Louisiana	4,601,893	10,846	235.7	30	10,691	232.3	153	3.3
Maine	1,329,192	4,084	307.3	7	3,438	258.7	645	48.5
Maryland	5,884,563	21,455	364.6	2	20,769	352.9	681	11.6
Massachusetts	6,646,144	28,016	421.5	1	27,294	410.7	708	10.7
Michigan	9,883,360	26,476	267.9	15	21,816	220.7	4,654	47.1
Minnesota	5,379,139	14,814	275.4	13	14,260	265.1	551	10.2
Mississippi	2,984,926	5,396	180.8	50	5,053	169.3	342	11.5
Missouri	6,021,988	15,282	253.8	22	13,330	221.4	1,951	32.4
Montana	1,005,141	2,297	228.5	33	2,132	212.1	165	16.4
Nebraska	1,855,525	4,080	219.9	36	3,907	210.6	172	9.3
Nevada	2,758,931	5,361	194.3	46	4,813	174.5	548	19.9
New Hampshire	1,320,718	3,942	298.5	9	3,648	276.2	294	22.3
New Jersey	8,864,590	25,604	288.8	11	22,891	258.2	2,706	30.5
New Mexico	2,085,538	4,839	232.0	31	4,554	218.4	284	13.6
New York	19,570,261	68,273	348.9	3	64,956	331.9	3,291	16.8
North Carolina	9,752,073	23,034	236.2	28	22,088	226.5	942	9.7
North Dakota	699,628	1,651	236.0	29	1,580	225.8	69	9.9
Ohio	11,544,225	31,248	270.7	14	27,400	237.3	3,836	33.2
Oklahoma	3,814,820	7,552	198.0	45	5,985	156.9	1,567	41.1
Oregon	3,899,353	10,995	282.0	12	10,282	263.7	711	18.2
Pennsylvania	12,763,536	38,565	302.1	8	33,169	259.9	5,385	42.2
Puerto Rico	3,667,084	9,919	270.5	N.R.	9,919	270.5	0	0.0
Rhode Island	1,050,292	3,548	337.8	4	3,334	317.4	210	20.0
South Carolina	4,723,723	10,250	217.0	38	9,767	206.8	479	10.1
South Dakota	833,354	1,846	221.5	34	1,721	206.5	124	14.9
Tennessee	6,456,243	15,568	241.1	26	14,925	231.2	640	9.9
Texas	26,059,203	54,167	207.9	42	50,458	193.6	3,697	14.2
Utah	2,855,287	5,801	203.2	43	5,421	189.9	380	13.3
Vermont	626,011	2,084	332.9	5	2,009	320.9	75	12.0
Virginia	8,185,867	20,647	252.2	24	19,697	240.6	948	11.6
Washington	6,897,012	18,395	266.7	17	17,423	252.6	964	14.0
West Virginia	1,855,413	4,466	240.7	27	3,786	204.1	679	36.6
Wisconsin	5,726,398	14,578	254.6	21	13,707	239.4	867	15.1
Wyoming	576,412	1,102	191.2	47	1,010	175.2	92	16.0

Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012).

N.R. = Not Ranked

* Physicians whose medical school type was unavailable (n=214) are included in the total.

Figure 2. Active Patient Care Physicians per 100,000 Population by Degree Type, 2012



Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012). Physicians whose medical school type was not available are excluded (n=151).

Table 2. Active Patient Care Physicians per 100,000 Population by Degree Type, 2012

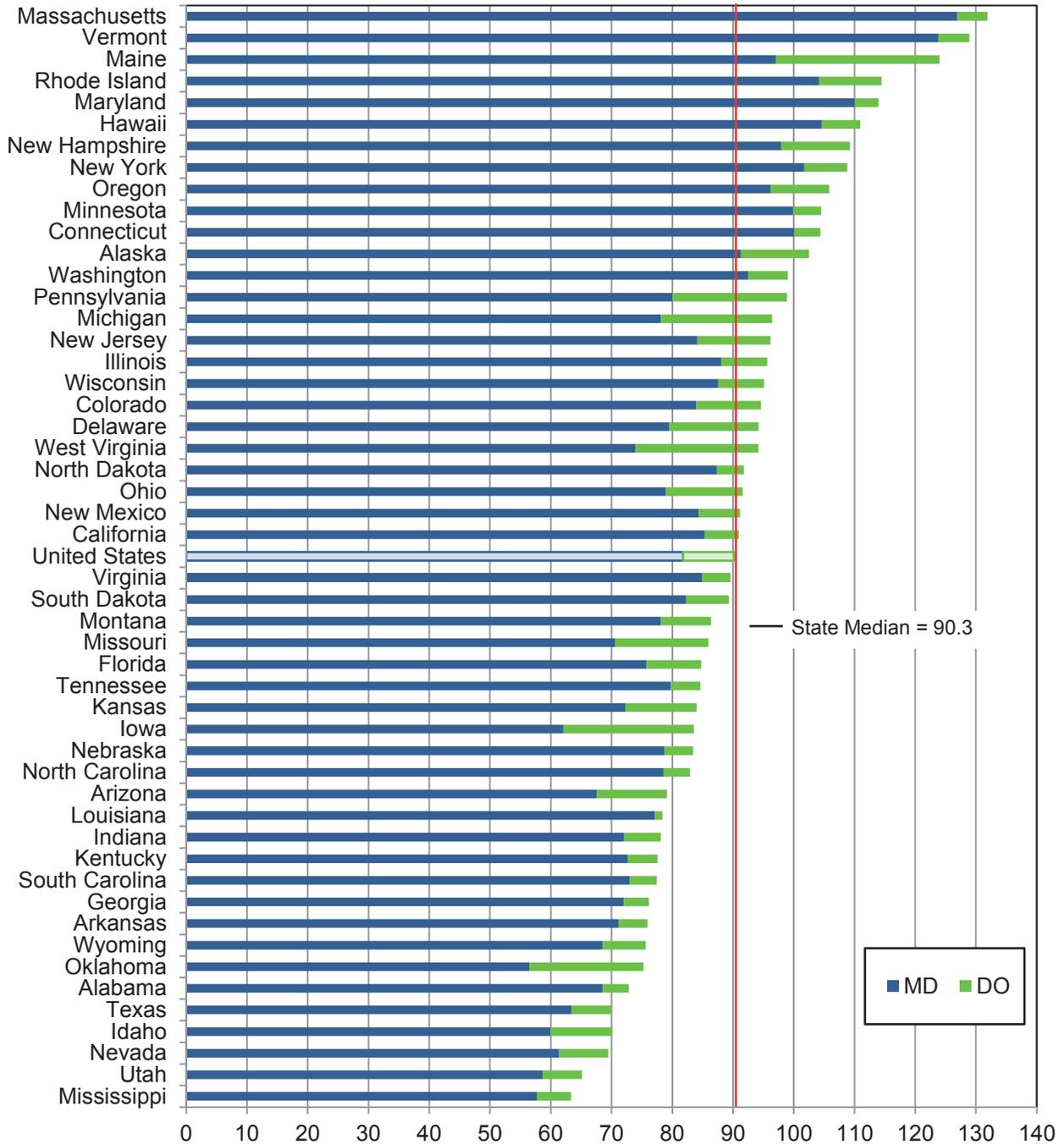
	Total Population	Total Active Patient Care Physicians*			Active Patient Care M.D.'s		Active Patient Care D.O.'s	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	313,914,040	708,170	225.6	N.R.	656,252	209.1	51,767	16.5
Alabama	4,822,023	8,716	180.8	44	8,332	172.8	381	7.9
Alaska	731,449	1,637	223.8	22	1,494	204.3	143	19.6
Arizona	6,553,255	13,542	206.6	31	11,969	182.6	1,570	24.0
Arkansas	2,949,131	5,142	174.4	48	4,907	166.4	235	8.0
California	38,041,430	85,542	224.9	21	81,918	215.3	3,602	9.5
Colorado	5,187,582	12,297	237.0	14	11,274	217.3	1,020	19.7
Connecticut	3,590,347	10,098	281.3	4	9,723	270.8	373	10.4
Delaware	917,092	2,131	232.4	17	1,878	204.8	253	27.6
District of Columbia	632,323	3,997	632.1	N.R.	3,916	619.3	80	12.7
Florida	19,317,568	43,736	226.4	20	40,052	207.3	3,676	19.0
Georgia	9,919,945	18,699	188.5	40	17,925	180.7	772	7.8
Hawaii	1,392,313	3,492	250.8	11	3,339	239.8	153	11.0
Idaho	1,595,728	2,766	173.3	49	2,459	154.1	307	19.2
Illinois	12,875,255	28,811	223.8	23	26,889	208.8	1,915	14.9
Indiana	6,537,334	13,050	199.6	35	12,197	186.6	849	13.0
Iowa	3,074,186	5,606	182.4	42	4,546	147.9	1,060	34.5
Kansas	2,885,905	5,503	190.7	39	4,936	171.0	567	19.6
Kentucky	4,380,415	8,578	195.8	37	8,158	186.2	419	9.6
Louisiana	4,601,893	9,662	210.0	30	9,534	207.2	128	2.8
Maine	1,329,192	3,665	275.7	7	3,075	231.3	589	44.3
Maryland	5,884,563	16,747	284.6	3	16,180	275.0	563	9.6
Massachusetts	6,646,144	21,542	324.1	1	20,966	315.5	568	8.5
Michigan	9,883,360	23,166	234.4	15	18,888	191.1	4,275	43.3
Minnesota	5,379,139	13,083	243.2	13	12,582	233.9	499	9.3
Mississippi	2,984,926	4,908	164.4	50	4,608	154.4	299	10.0
Missouri	6,021,988	13,180	218.9	25	11,411	189.5	1,768	29.4
Montana	1,005,141	2,145	213.4	28	1,994	198.4	151	15.0
Nebraska	1,855,525	3,604	194.2	38	3,454	186.1	149	8.0
Nevada	2,758,931	4,838	175.4	47	4,377	158.6	461	16.7
New Hampshire	1,320,718	3,511	265.8	8	3,241	245.4	270	20.4
New Jersey	8,864,590	22,588	254.8	9	20,135	227.1	2,446	27.6
New Mexico	2,085,538	4,199	201.3	34	3,948	189.3	251	12.0
New York	19,570,261	56,345	287.9	2	53,519	273.5	2,809	14.4
North Carolina	9,752,073	20,023	205.3	32	19,218	197.1	801	8.2
North Dakota	699,628	1,513	216.3	26	1,449	207.1	62	8.9
Ohio	11,544,225	26,381	228.5	19	23,147	200.5	3,226	27.9
Oklahoma	3,814,820	6,952	182.2	43	5,489	143.9	1,463	38.4
Oregon	3,899,353	9,700	248.8	12	9,057	232.3	642	16.5
Pennsylvania	12,763,536	32,294	253.0	10	27,492	215.4	4,793	37.6
Puerto Rico	3,667,084	8,310	226.6	N.R.	8,310	226.6	0	0.0
Rhode Island	1,050,292	2,931	279.1	6	2,748	261.6	180	17.1
South Carolina	4,723,723	9,322	197.3	36	8,880	188.0	440	9.3
South Dakota	833,354	1,694	203.3	33	1,583	190.0	110	13.2
Tennessee	6,456,243	13,863	214.7	27	13,281	205.7	580	9.0
Texas	26,059,203	47,588	182.6	41	44,316	170.1	3,265	12.5
Utah	2,855,287	5,152	180.4	45	4,795	167.9	357	12.5
Vermont	626,011	1,748	279.2	5	1,684	269.0	64	10.2
Virginia	8,185,867	18,177	222.1	24	17,359	212.1	818	10.0
Washington	6,897,012	16,072	233.0	16	15,181	220.1	883	12.8
West Virginia	1,855,413	3,917	211.1	29	3,329	179.4	587	31.6
Wisconsin	5,726,398	13,283	232.0	18	12,468	217.7	813	14.2
Wyoming	576,412	1,034	179.4	46	952	165.2	82	14.2

Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012).

N.R. = Not Ranked

* Physicians whose medical school type was unavailable (n=151) are included in the total.

Figure 3. Active *Primary Care* Physicians per 100,000 Population by Degree Type, 2012



Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012). Physicians whose medical school type was unavailable are excluded (n=67).

Table 3. Active Primary Care Physicians per 100,000 Population by Degree Type, 2012

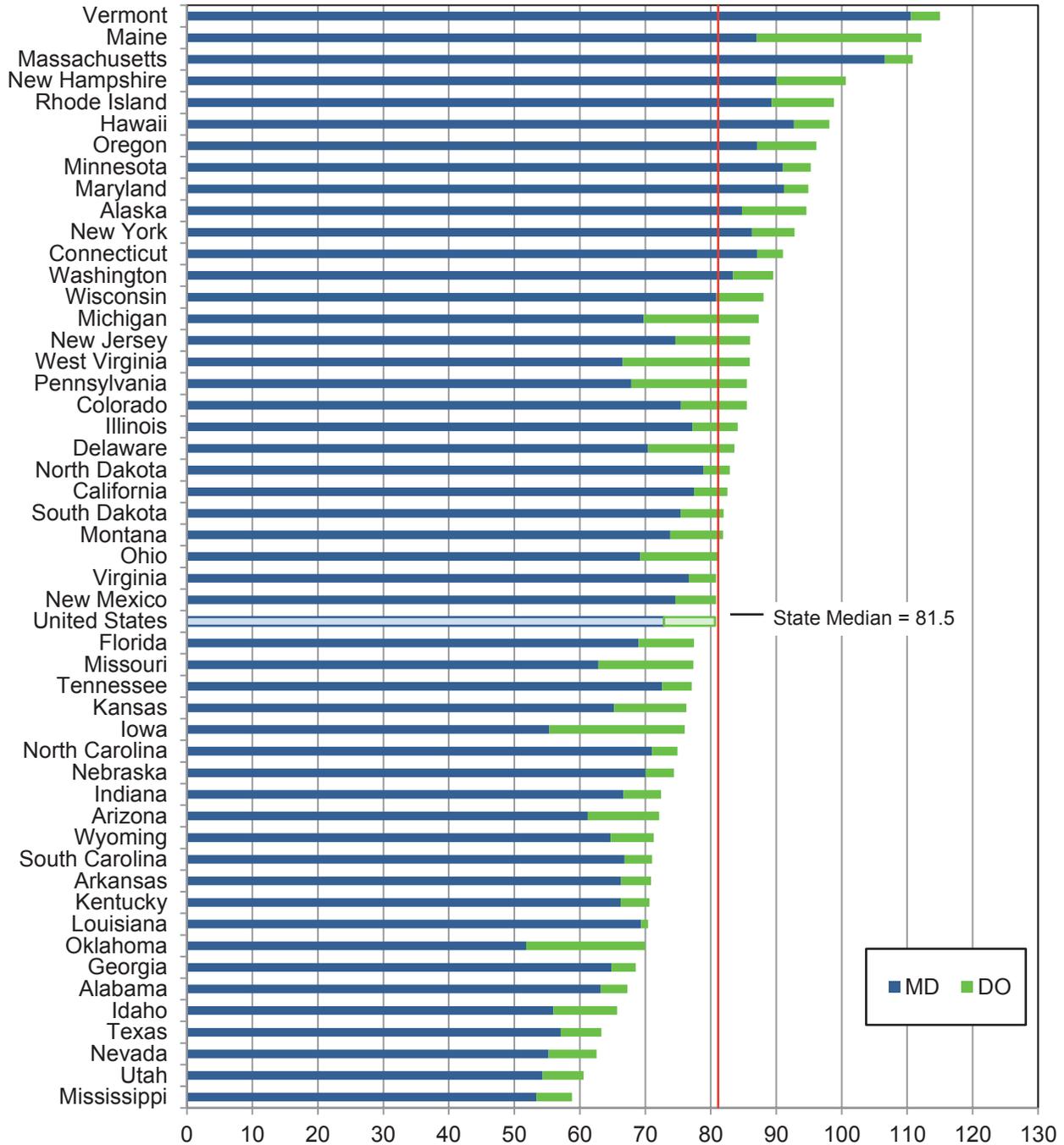
	Total Population	Total Active Primary Care Physicians*			Active Primary Care M.D.'s		Active Primary Care D.O.'s	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	313,914,040	282,969	90.1	N.R.	256,754	81.8	26,148	8.3
Alabama	4,822,023	3,512	72.8	45	3,307	68.6	204	4.2
Alaska	731,449	750	102.5	12	668	91.3	82	11.2
Arizona	6,553,255	5,187	79.2	36	4,426	67.5	761	11.6
Arkansas	2,949,131	2,239	75.9	42	2,099	71.2	140	4.7
California	38,041,430	34,604	91.0	25	32,488	85.4	2,105	5.5
Colorado	5,187,582	4,908	94.6	19	4,357	84.0	549	10.6
Connecticut	3,590,347	3,747	104.4	11	3,593	100.1	154	4.3
Delaware	917,092	865	94.3	20	729	79.5	135	14.7
District of Columbia	632,323	1,554	245.8	N.R.	1,512	239.1	42	6.6
Florida	19,317,568	16,381	84.8	30	14,633	75.7	1,745	9.0
Georgia	9,919,945	7,554	76.1	41	7,144	72.0	410	4.1
Hawaii	1,392,313	1,545	111.0	6	1,457	104.6	88	6.3
Idaho	1,595,728	1,118	70.1	47	957	60.0	161	10.1
Illinois	12,875,255	12,317	95.7	17	11,339	88.1	973	7.6
Indiana	6,537,334	5,108	78.1	38	4,712	72.1	394	6.0
Iowa	3,074,186	2,569	83.6	33	1,909	62.1	660	21.5
Kansas	2,885,905	2,424	84.0	32	2,085	72.2	339	11.7
Kentucky	4,380,415	3,398	77.6	39	3,183	72.7	215	4.9
Louisiana	4,601,893	3,606	78.4	37	3,550	77.1	56	1.2
Maine	1,329,192	1,648	124.0	3	1,290	97.1	358	26.9
Maryland	5,884,563	6,709	114.0	5	6,476	110.1	231	3.9
Massachusetts	6,646,144	8,769	131.9	1	8,438	127.0	327	4.9
Michigan	9,883,360	9,532	96.4	15	7,724	78.2	1,806	18.3
Minnesota	5,379,139	5,621	104.5	10	5,373	99.9	248	4.6
Mississippi	2,984,926	1,891	63.4	50	1,722	57.7	169	5.7
Missouri	6,021,988	5,177	86.0	29	4,256	70.7	921	15.3
Montana	1,005,141	868	86.4	28	785	78.1	83	8.3
Nebraska	1,855,525	1,549	83.5	34	1,461	78.7	87	4.7
Nevada	2,758,931	1,916	69.4	48	1,694	61.4	222	8.0
New Hampshire	1,320,718	1,443	109.3	7	1,293	97.9	150	11.4
New Jersey	8,864,590	8,527	96.2	16	7,460	84.2	1,064	12.0
New Mexico	2,085,538	1,901	91.2	24	1,759	84.3	142	6.8
New York	19,570,261	21,304	108.9	8	19,913	101.8	1,382	7.1
North Carolina	9,752,073	8,087	82.9	35	7,663	78.6	422	4.3
North Dakota	699,628	643	91.9	22	611	87.3	31	4.4
Ohio	11,544,225	10,577	91.6	23	9,113	78.9	1,462	12.7
Oklahoma	3,814,820	2,871	75.3	44	2,154	56.5	717	18.8
Oregon	3,899,353	4,128	105.9	9	3,751	96.2	376	9.6
Pennsylvania	12,763,536	12,626	98.9	14	10,213	80.0	2,409	18.9
Puerto Rico	3,667,084	4,047	110.4	N.R.	4,047	110.4	0	0.0
Rhode Island	1,050,292	1,202	114.4	4	1,094	104.2	108	10.3
South Carolina	4,723,723	3,660	77.5	40	3,448	73.0	211	4.5
South Dakota	833,354	744	89.3	27	686	82.3	58	7.0
Tennessee	6,456,243	5,464	84.6	31	5,151	79.8	312	4.8
Texas	26,059,203	18,259	70.1	46	16,514	63.4	1,740	6.7
Utah	2,855,287	1,861	65.2	49	1,676	58.7	185	6.5
Vermont	626,011	807	128.9	2	775	123.8	32	5.1
Virginia	8,185,867	7,336	89.6	26	6,951	84.9	385	4.7
Washington	6,897,012	6,833	99.1	13	6,379	92.5	450	6.5
West Virginia	1,855,413	1,747	94.2	21	1,372	73.9	375	20.2
Wisconsin	5,726,398	5,447	95.1	18	5,016	87.6	431	7.5
Wyoming	576,412	436	75.6	43	395	68.5	41	7.1

Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012).

N.R. = Not Ranked

* Physicians whose medical school type was unavailable (n=67) are included in the total.

Figure 4. Active Patient Care Primary Care Physicians per 100,000 Population by Degree Type, 2012



Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012). Physicians whose medical school type was unavailable are excluded (n=52).

Table 4. Active Patient Care Primary Care Physicians per 100,000 Population by Degree Type, 2012

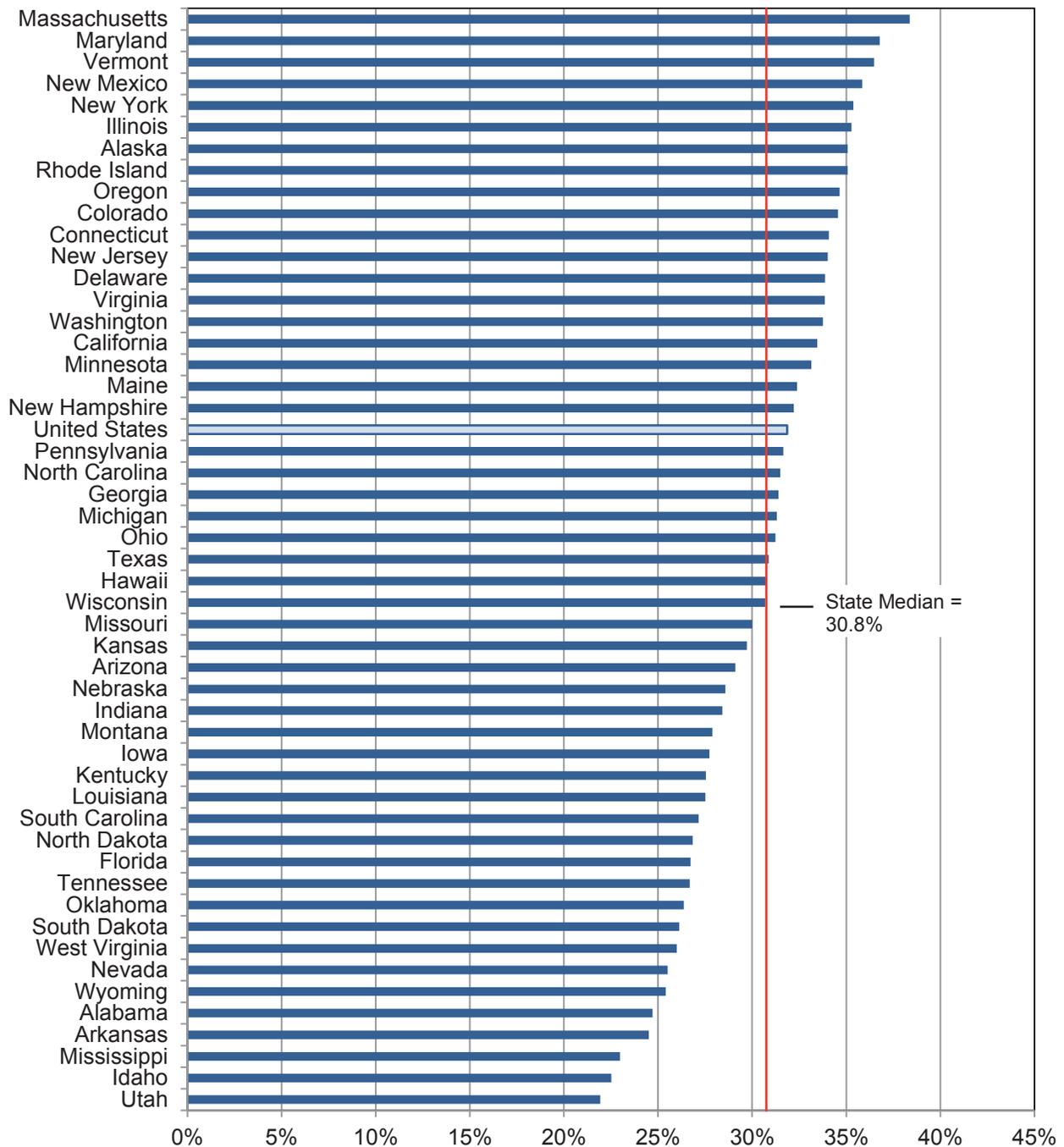
	Total Population	Total Active Patient Care Primary Care Physicians*			Active Patient Care Primary Care M.D.'s		Active Patient Care Primary Care D.O.'s	
		Number	Rate per 100,000		Number	Rate per 100,000	Number	Rate per 100,000
			Rank					
United States	313,914,040	253,205	80.7	N.R.	228,709	72.9	24,444	7.8
Alabama	4,822,023	3,244	67.3	45	3,049	63.2	194	4.0
Alaska	731,449	692	94.6	10	620	84.8	72	9.8
Arizona	6,553,255	4,725	72.1	37	4,010	61.2	715	10.9
Arkansas	2,949,131	2,090	70.9	40	1,956	66.3	134	4.5
California	38,041,430	31,411	82.6	23	29,457	77.4	1,944	5.1
Colorado	5,187,582	4,436	85.5	19	3,914	75.4	521	10.0
Connecticut	3,590,347	3,269	91.0	12	3,126	87.1	143	4.0
Delaware	917,092	767	83.6	21	646	70.4	121	13.2
District of Columbia	632,323	1,163	183.9	N.R.	1,133	179.2	30	4.7
Florida	19,317,568	14,960	77.4	29	13,326	69.0	1,631	8.4
Georgia	9,919,945	6,799	68.5	44	6,430	64.8	369	3.7
Hawaii	1,392,313	1,366	98.1	6	1,291	92.7	75	5.4
Idaho	1,595,728	1,048	65.7	46	893	56.0	155	9.7
Illinois	12,875,255	10,830	84.1	20	9,940	77.2	887	6.9
Indiana	6,537,334	4,736	72.4	36	4,358	66.7	376	5.8
Iowa	3,074,186	2,337	76.0	33	1,702	55.4	635	20.7
Kansas	2,885,905	2,201	76.3	32	1,883	65.2	318	11.0
Kentucky	4,380,415	3,095	70.7	41	2,901	66.2	194	4.4
Louisiana	4,601,893	3,242	70.4	42	3,192	69.4	50	1.1
Maine	1,329,192	1,491	112.2	2	1,157	87.0	334	25.1
Maryland	5,884,563	5,586	94.9	9	5,367	91.2	217	3.7
Massachusetts	6,646,144	7,369	110.9	3	7,086	106.6	280	4.2
Michigan	9,883,360	8,631	87.3	15	6,893	69.7	1,737	17.6
Minnesota	5,379,139	5,126	95.3	8	4,896	91.0	230	4.3
Mississippi	2,984,926	1,755	58.8	50	1,595	53.4	160	5.4
Missouri	6,021,988	4,658	77.3	30	3,786	62.9	872	14.5
Montana	1,005,141	823	81.9	25	742	73.8	81	8.1
Nebraska	1,855,525	1,381	74.4	35	1,300	70.1	80	4.3
Nevada	2,758,931	1,726	62.6	48	1,524	55.2	202	7.3
New Hampshire	1,320,718	1,329	100.6	4	1,189	90.0	140	10.6
New Jersey	8,864,590	7,628	86.1	16	6,613	74.6	1,012	11.4
New Mexico	2,085,538	1,685	80.8	28	1,556	74.6	129	6.2
New York	19,570,261	18,167	92.8	11	16,884	86.3	1,277	6.5
North Carolina	9,752,073	7,309	74.9	34	6,925	71.0	382	3.9
North Dakota	699,628	581	83.0	22	552	78.9	28	4.0
Ohio	11,544,225	9,361	81.1	26	7,991	69.2	1,369	11.9
Oklahoma	3,814,820	2,669	70.0	43	1,977	51.8	692	18.1
Oregon	3,899,353	3,750	96.2	7	3,396	87.1	353	9.1
Pennsylvania	12,763,536	10,916	85.5	18	8,664	67.9	2,249	17.6
Puerto Rico	3,667,084	3,643	99.3	N.R.	3,643	99.3	0	0.0
Rhode Island	1,050,292	1,038	98.8	5	938	89.3	100	9.5
South Carolina	4,723,723	3,357	71.1	39	3,157	66.8	199	4.2
South Dakota	833,354	683	82.0	24	628	75.4	55	6.6
Tennessee	6,456,243	4,979	77.1	31	4,686	72.6	292	4.5
Texas	26,059,203	16,501	63.3	47	14,872	57.1	1,627	6.2
Utah	2,855,287	1,730	60.6	49	1,551	54.3	179	6.3
Vermont	626,011	720	115.0	1	692	110.5	28	4.5
Virginia	8,185,867	6,616	80.8	27	6,275	76.7	341	4.2
Washington	6,897,012	6,180	89.6	13	5,753	83.4	423	6.1
West Virginia	1,855,413	1,595	86.0	17	1,235	66.6	360	19.4
Wisconsin	5,726,398	5,043	88.1	14	4,629	80.8	414	7.2
Wyoming	576,412	411	71.3	38	373	64.7	38	6.6

Sources: July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physician data are from the 2013 AMA Physician Masterfile (December 31, 2012).

N.R. = Not Ranked

* Physicians whose medical school type was unavailable (n=52) are included in the total.

Figure 5. Percentage of Active Physicians Who Are Female, 2012



Source: AMA Physician Masterfile (December 31, 2012). Physicians whose sex was unavailable (n=1,097) are excluded.

Table 5. Active Female Physicians, 2012

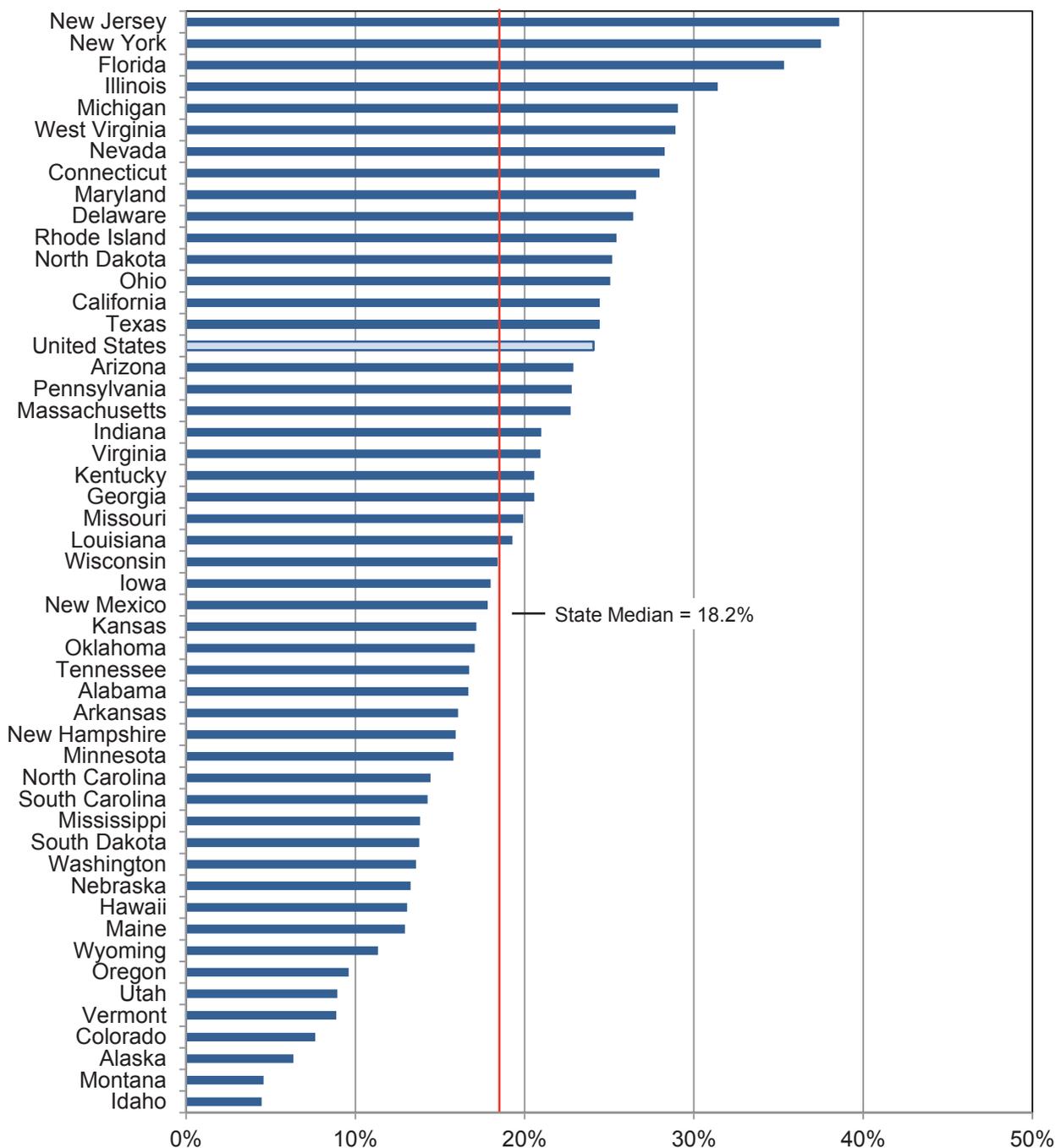
	Total Active Physicians*	Active Female Physicians		
		Number	Percent	Rank
United States	816,753	260,221	31.9%	N.R.
Alabama	9,674	2,390	24.7%	46
Alaska	1,810	635	35.1%	7
Arizona	15,104	4,395	29.1%	30
Arkansas	5,624	1,378	24.5%	47
California	97,788	32,718	33.5%	16
Colorado	13,855	4,789	34.6%	10
Connecticut	11,940	4,068	34.1%	11
Delaware	2,438	826	33.9%	13
District of Columbia	5,553	2,334	42.0%	N.R.
Florida	48,788	13,040	26.7%	39
Georgia	21,283	6,682	31.4%	22
Hawaii	4,032	1,240	30.8%	26
Idaho	2,935	661	22.5%	49
Illinois	33,825	11,933	35.3%	6
Indiana	14,278	4,058	28.4%	32
Iowa	6,402	1,775	27.7%	34
Kansas	6,146	1,827	29.7%	29
Kentucky	9,670	2,664	27.5%	35
Louisiana	10,840	2,982	27.5%	36
Maine	4,080	1,321	32.4%	18
Maryland	21,428	7,881	36.8%	2
Massachusetts	27,982	10,735	38.4%	1
Michigan	26,429	8,274	31.3%	23
Minnesota	14,798	4,904	33.1%	17
Mississippi	5,391	1,239	23.0%	48
Missouri	15,269	4,582	30.0%	28
Montana	2,295	640	27.9%	33
Nebraska	4,077	1,165	28.6%	31
Nevada	5,350	1,365	25.5%	44
New Hampshire	3,940	1,269	32.2%	19
New Jersey	25,551	8,691	34.0%	12
New Mexico	4,834	1,733	35.9%	4
New York	68,152	24,112	35.4%	5
North Carolina	23,020	7,250	31.5%	21
North Dakota	1,650	443	26.8%	38
Ohio	31,206	9,747	31.2%	24
Oklahoma	7,537	1,987	26.4%	41
Oregon	10,982	3,805	34.6%	9
Pennsylvania	38,520	12,195	31.7%	20
Puerto Rico	9,890	3,528	35.7%	N.R.
Rhode Island	3,546	1,244	35.1%	8
South Carolina	10,239	2,781	27.2%	37
South Dakota	1,845	482	26.1%	42
Tennessee	15,562	4,153	26.7%	40
Texas	54,081	16,700	30.9%	25
Utah	5,795	1,271	21.9%	50
Vermont	2,083	760	36.5%	3
Virginia	20,622	6,983	33.9%	14
Washington	18,375	6,203	33.8%	15
West Virginia	4,458	1,159	26.0%	43
Wisconsin	14,569	4,472	30.7%	27
Wyoming	1,102	280	25.4%	45

Source: AMA Physician Masterfile (December 31, 2012)

N.R. = Not Ranked

* Physicians whose sex was missing (n=1,097) are excluded.

Figure 6. Percentage of Active Physicians Who Are International Medical Graduates (IMGs), 2012



Source: AMA Physician Masterfile (December 31, 2012). Physicians whose medical school type was unavailable are excluded (n=214). Physicians who are graduates of Canadian medical schools are not included (n=9,495).

Table 6. Active Physicians by Medical School Type, 2012

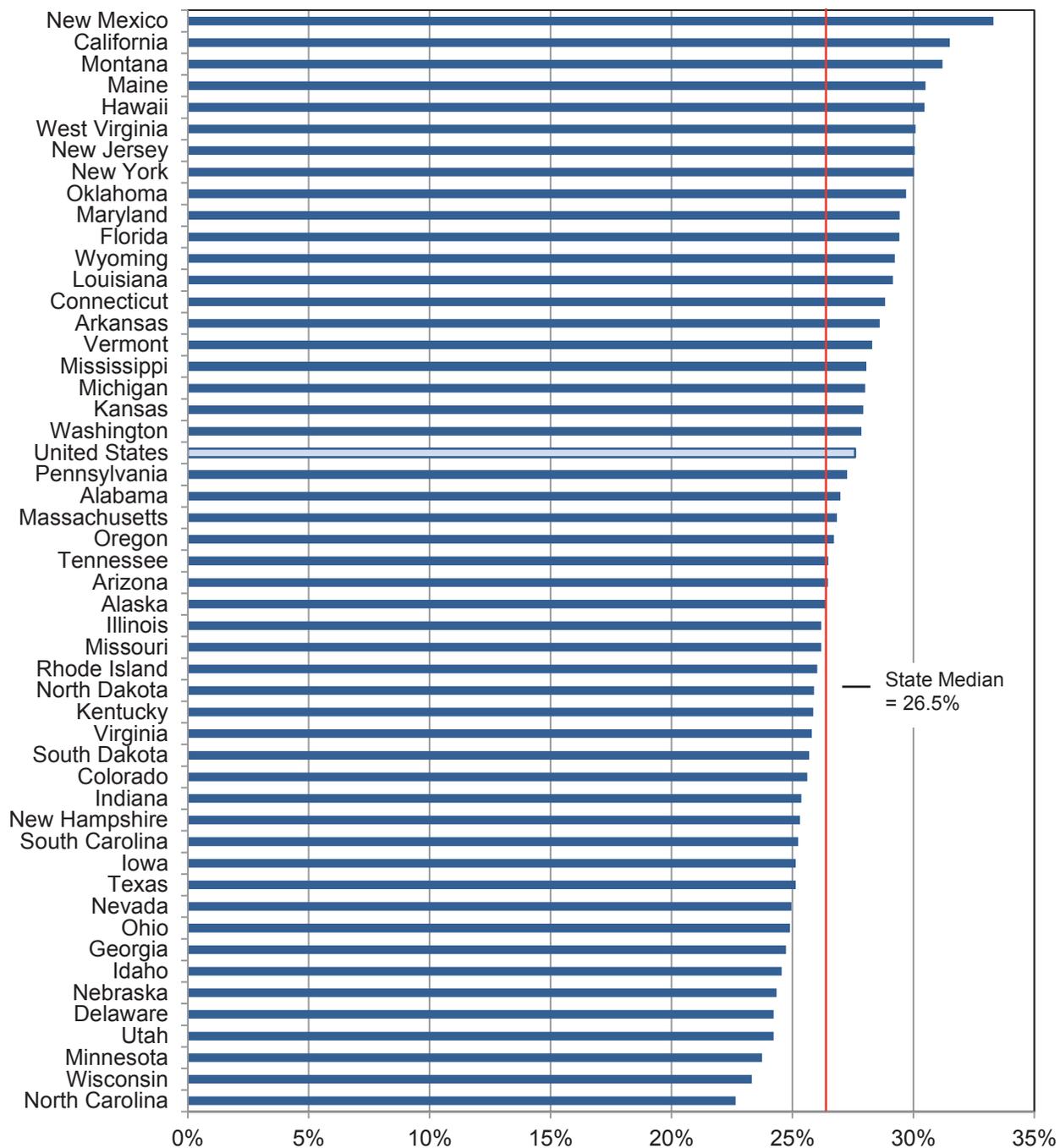
	Total Active Physicians*		U.S.M.D.		D.O.		IMG		
	Number		Number	Percent	Number	Percent	Number	Percent	Rank
United States	817,636		552,925	67.6%	58,409	7.1%	196,807	24.1%	N.R.
Alabama	9,678		7,543	77.9%	419	4.3%	1,613	16.7%	31
Alaska	1,813		1,513	83.5%	171	9.4%	115	6.3%	48
Arizona	15,129		9,662	63.9%	1,738	11.5%	3,461	22.9%	16
Arkansas	5,629		4,434	78.8%	252	4.5%	904	16.1%	32
California	97,947		68,510	69.9%	4,063	4.1%	23,937	24.4%	14
Colorado	13,865		11,557	83.4%	1,098	7.9%	1,059	7.6%	47
Connecticut	11,947		8,069	67.5%	420	3.5%	3,341	28.0%	8
Delaware	2,438		1,488	61.0%	289	11.9%	644	26.4%	10
District of Columbia	5,557		4,160	74.9%	122	2.2%	1,222	22.0%	N.R.
Florida	48,843		26,985	55.2%	4,167	8.5%	17,253	35.3%	3
Georgia	21,295		15,839	74.4%	893	4.2%	4,381	20.6%	22
Hawaii	4,037		3,258	80.7%	194	4.8%	527	13.1%	41
Idaho	2,938		2,441	83.1%	327	11.1%	131	4.5%	50
Illinois	33,863		20,722	61.2%	2,234	6.6%	10,637	31.4%	4
Indiana	14,291		10,220	71.5%	923	6.5%	2,998	21.0%	19
Iowa	6,414		4,056	63.2%	1,131	17.6%	1,154	18.0%	26
Kansas	6,151		4,419	71.8%	632	10.3%	1,055	17.2%	28
Kentucky	9,677		7,048	72.8%	526	5.4%	1,991	20.6%	21
Louisiana	10,844		8,529	78.7%	153	1.4%	2,091	19.3%	24
Maine	4,083		2,812	68.9%	645	15.8%	528	12.9%	42
Maryland	21,450		14,855	69.3%	681	3.2%	5,703	26.6%	9
Massachusetts	28,002		20,215	72.2%	708	2.5%	6,362	22.7%	18
Michigan	26,470		13,860	52.4%	4,654	17.6%	7,691	29.1%	5
Minnesota	14,811		11,548	78.0%	551	3.7%	2,340	15.8%	34
Mississippi	5,395		4,276	79.3%	342	6.3%	746	13.8%	37
Missouri	15,281		10,196	66.7%	1,951	12.8%	3,043	19.9%	23
Montana	2,297		2,011	87.5%	165	7.2%	105	4.6%	49
Nebraska	4,079		3,331	81.7%	172	4.2%	541	13.3%	40
Nevada	5,361		3,244	60.5%	548	10.2%	1,516	28.3%	7
New Hampshire	3,942		2,899	73.5%	294	7.5%	628	15.9%	33
New Jersey	25,597		12,900	50.4%	2,706	10.6%	9,878	38.6%	1
New Mexico	4,838		3,649	75.4%	284	5.9%	862	17.8%	27
New York	68,247		38,548	56.5%	3,291	4.8%	25,595	37.5%	2
North Carolina	23,030		18,540	80.5%	942	4.1%	3,327	14.4%	35
North Dakota	1,649		1,099	66.6%	69	4.2%	415	25.2%	12
Ohio	31,236		19,210	61.5%	3,836	12.3%	7,829	25.1%	13
Oklahoma	7,552		4,653	61.6%	1,567	20.7%	1,288	17.1%	29
Oregon	10,993		9,036	82.2%	711	6.5%	1,055	9.6%	44
Pennsylvania	38,554		24,073	62.4%	5,385	14.0%	8,783	22.8%	17
Puerto Rico	9,919		4,683	47.2%	0	0.0%	5,236	52.8%	N.R.
Rhode Island	3,544		2,379	67.1%	210	5.9%	901	25.4%	11
South Carolina	10,246		8,258	80.6%	479	4.7%	1,462	14.3%	36
South Dakota	1,845		1,457	79.0%	124	6.7%	254	13.8%	38
Tennessee	15,565		12,171	78.2%	640	4.1%	2,602	16.7%	30
Texas	54,155		36,702	67.8%	3,697	6.8%	13,216	24.4%	15
Utah	5,801		4,845	83.5%	380	6.6%	518	8.9%	45
Vermont	2,084		1,743	83.6%	75	3.6%	185	8.9%	46
Virginia	20,645		15,209	73.7%	948	4.6%	4,323	20.9%	20
Washington	18,387		14,496	78.8%	964	5.2%	2,499	13.6%	39
West Virginia	4,465		2,468	55.3%	679	15.2%	1,291	28.9%	6
Wisconsin	14,574		10,909	74.9%	867	5.9%	2,682	18.4%	25
Wyoming	1,102		880	79.9%	92	8.3%	125	11.3%	43

Source: AMA Physician Masterfile (December 31, 2012)

N.R. = Not Ranked

* The total excludes active physicians whose medical school type was unavailable (n=214). Physicians who are graduates of Canadian medical schools are included in the total (n=9,495).

Figure 7. Percentage of Active Physicians Who are Age 60 or Older, 2012



Source: AMA Physician Masterfile (December 31, 2012). Physicians whose age was unavailable are excluded (n=1,417).

Table 7. Active Physicians by Selected Age Groups, 2012

	Total Active Physicians*	Under Age 40		Age 60 or Older		
	Number	Number	Percent	Number	Percent	Rank
United States	816,433	140,084	17.2%	225,221	27.6%	N.R.
Alabama	9,679	1,522	15.7%	2,612	27.0%	22
Alaska	1,806	266	14.7%	477	26.4%	27
Arizona	15,065	2,362	15.7%	3,988	26.5%	26
Arkansas	5,625	917	16.3%	1,609	28.6%	15
California	97,884	15,767	16.1%	30,835	31.5%	2
Colorado	13,855	2,246	16.2%	3,548	25.6%	35
Connecticut	11,939	1,966	16.5%	3,442	28.8%	14
Delaware	2,436	411	16.9%	590	24.2%	46
District of Columbia	5,558	1,328	23.9%	1,653	29.7%	N.R.
Florida	48,673	6,538	13.4%	14,318	29.4%	11
Georgia	21,290	3,568	16.8%	5,266	24.7%	43
Hawaii	4,036	640	15.9%	1,229	30.5%	5
Idaho	2,936	414	14.1%	721	24.6%	44
Illinois	33,844	6,653	19.7%	8,865	26.2%	28
Indiana	14,290	2,405	16.8%	3,625	25.4%	36
Iowa	6,398	1,203	18.8%	1,608	25.1%	39
Kansas	6,144	1,160	18.9%	1,716	27.9%	19
Kentucky	9,664	1,775	18.4%	2,499	25.9%	32
Louisiana	10,843	1,995	18.4%	3,161	29.2%	13
Maine	4,076	528	13.0%	1,243	30.5%	4
Maryland	21,428	3,639	17.0%	6,307	29.4%	10
Massachusetts	28,006	5,338	19.1%	7,516	26.8%	23
Michigan	26,247	4,638	17.7%	7,352	28.0%	18
Minnesota	14,808	2,705	18.3%	3,516	23.7%	48
Mississippi	5,391	842	15.6%	1,511	28.0%	17
Missouri	15,259	2,978	19.5%	3,996	26.2%	29
Montana	2,295	260	11.3%	716	31.2%	3
Nebraska	4,072	808	19.8%	991	24.3%	45
Nevada	5,337	751	14.1%	1,332	25.0%	41
New Hampshire	3,939	565	14.3%	997	25.3%	37
New Jersey	25,557	3,712	14.5%	7,682	30.1%	7
New Mexico	4,834	663	13.7%	1,610	33.3%	1
New York	68,200	11,985	17.6%	20,474	30.0%	8
North Carolina	23,027	4,166	18.1%	5,214	22.6%	50
North Dakota	1,649	342	20.7%	427	25.9%	31
Ohio	31,097	5,981	19.2%	7,742	24.9%	42
Oklahoma	7,531	1,251	16.6%	2,237	29.7%	9
Oregon	10,977	1,818	16.6%	2,932	26.7%	24
Pennsylvania	38,438	7,125	18.5%	10,478	27.3%	21
Puerto Rico	9,889	1,581	16.0%	2,976	30.1%	N.R.
Rhode Island	3,547	644	18.2%	923	26.0%	30
South Carolina	10,248	1,753	17.1%	2,586	25.2%	38
South Dakota	1,841	341	18.5%	473	25.7%	34
Tennessee	15,556	2,463	15.8%	4,119	26.5%	25
Texas	54,117	10,464	19.3%	13,599	25.1%	40
Utah	5,794	1,032	17.8%	1,403	24.2%	47
Vermont	2,082	273	13.1%	589	28.3%	16
Virginia	20,628	3,478	16.9%	5,322	25.8%	33
Washington	18,384	2,929	15.9%	5,119	27.8%	20
West Virginia	4,444	796	17.9%	1,337	30.1%	6
Wisconsin	14,561	2,521	17.3%	3,395	23.3%	49
Wyoming	1,098	159	14.5%	321	29.2%	12

Source: AMA Physician Masterfile (December 31, 2012)

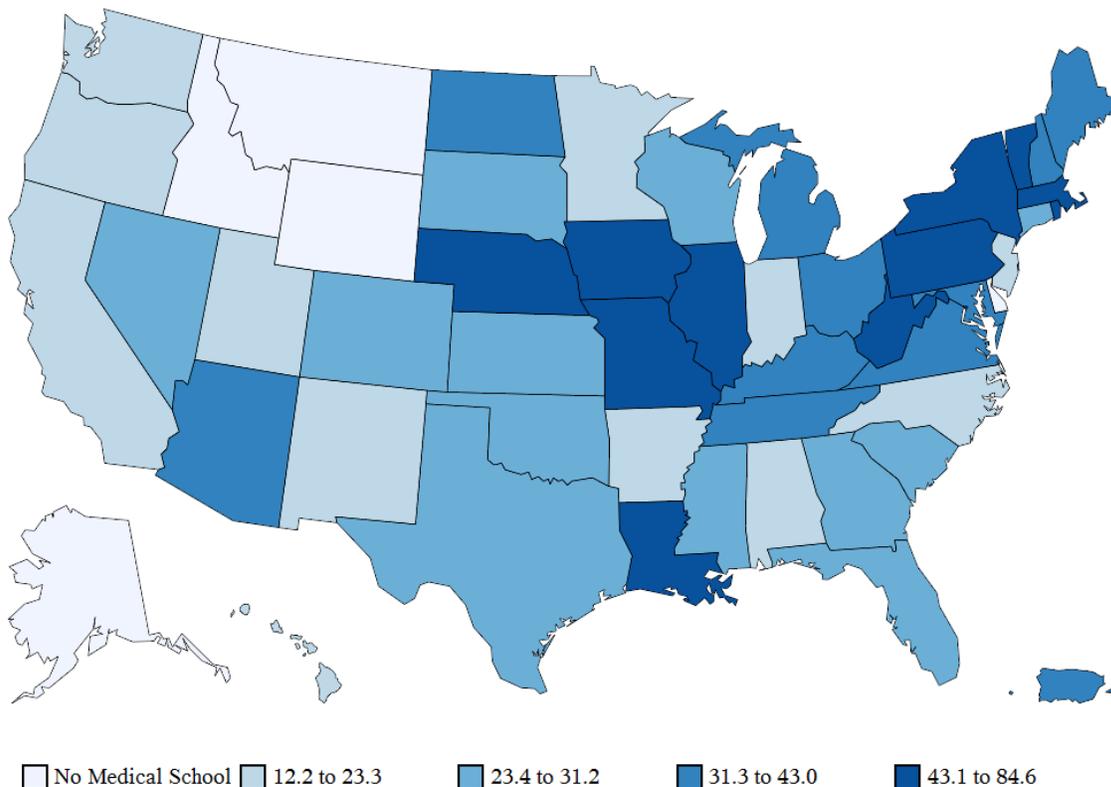
N.R. = Not Ranked

* Physicians whose age was missing (n=1,417) are excluded.

Key Findings – Undergraduate Medical Education

- During the 2012–2013 academic year, there were 32.7 students per 100,000 population enrolled in medical and osteopathic schools¹ in the United States. The states with the highest student-to-population ratio were concentrated in the Northeast and the Midwest (see Map 4, Figure 8, and Table 8).

Map 4. Medical and Osteopathic Students per 100,000 Population, 2012–2013 Academic Year

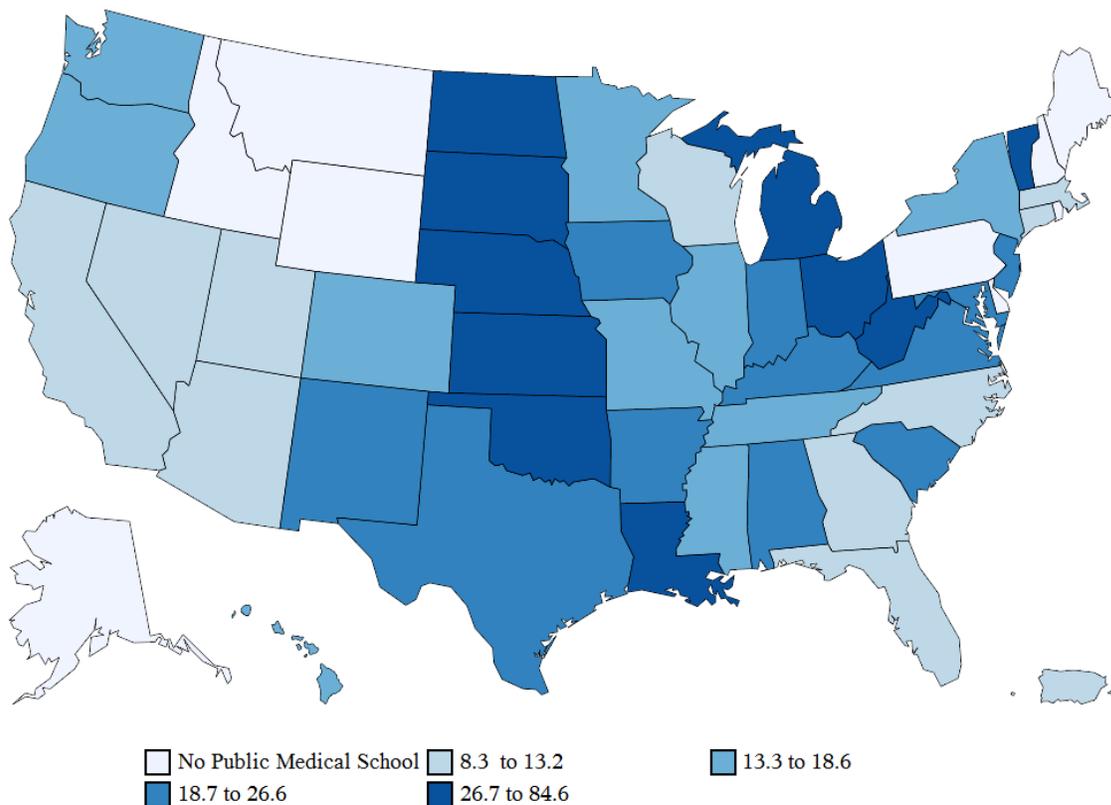


Sources: Medical enrollment data are from the AAMC Data Warehouse, accessed online Aug. 13, 2013, at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM Web site: <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed Aug. 14, 2013). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

- More than half (60.2 percent) of the students enrolled in medical schools in the United States were enrolled in public schools, while only one-fifth of students enrolled in osteopathic schools (20.4 percent) were enrolled in public schools. The rate of students enrolled in public medical or osteopathic schools per 100,000 population varied widely across states where a public school exists, from a low of 8.5 in Massachusetts to a high of 84.6 in West Virginia (see Map 5, Figure 9, and Table 9). In the United States overall, there were 16.9 students per 100,000 population enrolled in public medical and osteopathic schools.

¹ Alaska, Delaware, Idaho, Montana, and Wyoming do not have medical or osteopathic schools.

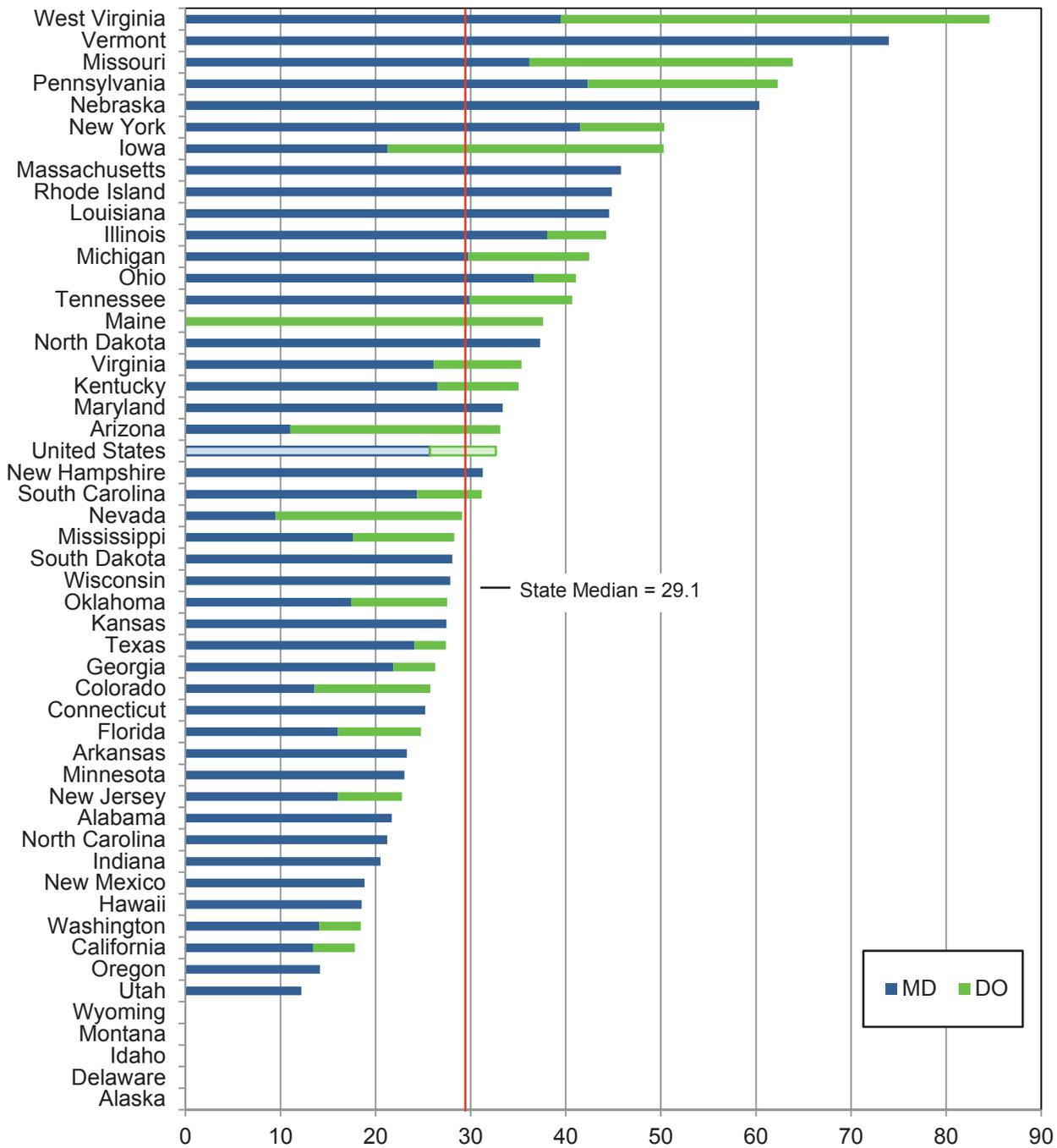
Map 5. Public Medical and Osteopathic Students per 100,000 Population, 2012–2013 Academic Year



Sources: Medical enrollment data are from the AAMC Data Warehouse, accessed online Aug. 13, 2013, at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM Web site: <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed Aug. 14, 2013). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

- Between the 2002–2003 and 2012–2013 academic years, the total number of students enrolled in medical or osteopathic schools increased by 27.8 percent in the United States. The growth was driven by a somewhat greater increase in the total number of students enrolled in medical schools (12,009) compared to osteopathic schools (10,309). This represents a 17.5 percent increase in M.D. enrollment and a 90.2 percent increase in D.O. enrollment during the 10-year period. Every state experienced an increase in enrollment, except Utah, which had an 18.3 percent decrease in enrollment. Twenty-one states and Puerto Rico had enrollment increases of 20 percent or more (see Figure 10 and Table 10).
- For the 2012–2013 academic year, 61.3 percent of first-year students in M.D. schools matriculated in their home state. West Virginia had the highest in-state matriculation rate—93.3 percent of the new medical students from West Virginia matriculated to a school in West Virginia. In contrast, New Hampshire had the lowest rate of states with a medical school—only 15.2 percent of the new medical students from New Hampshire matriculated in-state (see Figure 11 and Table 11).

Figure 8. Students Enrolled in Medical or Osteopathic School for the 2012-2013 Academic Year per 100,000 Population



Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

Table 8. Students Enrolled in Medical or Osteopathic Schools for the 2012-2013 Academic Year

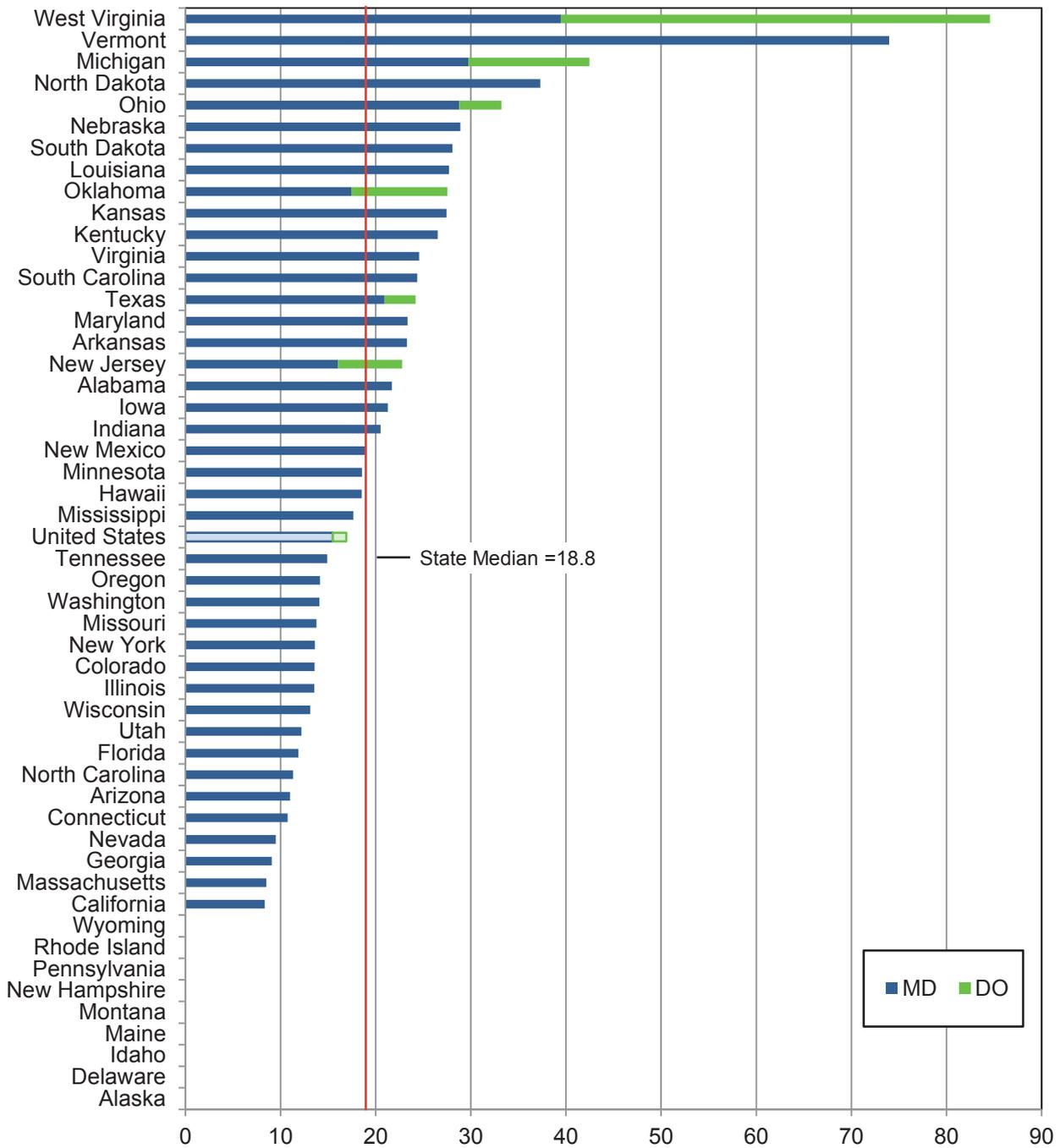
	Total Population	Total Students Enrolled in Medical or Osteopathic Schools			Students Enrolled in Medical Schools		Students Enrolled in Osteopathic Schools	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	313,914,040	102,498	32.7	N.R.	80,757	25.7	21,741	6.9
Alabama	4,822,023	1,046	21.7	37	1,046	21.7	---	---
Alaska	731,449	---	---	---	---	---	---	---
Arizona	6,553,255	2,170	33.1	20	721	11.0	1,449	22.1
Arkansas	2,949,131	687	23.3	34	687	23.3	---	---
California	38,041,430	6,780	17.8	43	5,111	13.4	1,669	4
Colorado	5,187,582	1,336	25.8	31	705	13.6	631	12.2
Connecticut	3,590,347	905	25.2	32	905	25.2	---	---
Delaware	917,092	---	---	---	---	---	---	---
District of Columbia	632,323	2,038	322.3	N.R.	2,038	322.3	---	---
Florida	19,317,568	4,781	24.7	33	3,097	16.0	1,684	8.7
Georgia	9,919,945	2,604	26.3	30	2,169	21.9	435	4.4
Hawaii	1,392,313	258	18.5	41	258	18.5	---	---
Idaho	1,595,728	---	---	---	---	---	---	---
Illinois	12,875,255	5,696	44.2	11	4,899	38.0	797	6.2
Indiana	6,537,334	1,341	20.5	39	1,341	20.5	---	---
Iowa	3,074,186	1,546	50.3	7	654	21.3	892	29.0
Kansas	2,885,905	792	27.4	28	792	27.4	---	---
Kentucky	4,380,415	1,535	35.0	18	1,162	26.5	373	8.5
Louisiana	4,601,893	2,050	44.5	10	2,050	44.5	---	---
Maine	1,329,192	500	37.6	15	---	---	500	37.6
Maryland	5,884,563	1,964	33.4	19	1,964	33.4	---	---
Massachusetts	6,646,144	3,043	45.8	8	3,043	45.8	---	---
Michigan	9,883,360	4,197	42.5	12	2,941	29.8	1,256	12.7
Minnesota	5,379,139	1,239	23.0	35	1,239	23.0	---	---
Mississippi	2,984,926	844	28.3	24	527	17.7	317	11
Missouri	6,021,988	3,846	63.9	3	2,179	36.2	1,667	27.7
Montana	1,005,141	---	---	---	---	---	---	---
Nebraska	1,855,525	1,120	60.4	5	1,120	60.4	---	---
Nevada	2,758,931	803	29.1	23	262	9.5	541	20
New Hampshire	1,320,718	413	31.3	21	413	31.3	---	---
New Jersey	8,864,590	2,020	22.8	36	1,423	16.1	597	6.7
New Mexico	2,085,538	393	18.8	40	393	18.8	---	---
New York	19,570,261	9,853	50.3	6	8,126	41.5	1,727	9
North Carolina	9,752,073	2,070	21.2	38	2,070	21.2	---	---
North Dakota	699,628	261	37.3	16	261	37.3	---	---
Ohio	11,544,225	4,740	41.1	13	4,227	36.6	513	4.4
Oklahoma	3,814,820	1,050	27.5	27	665	17.4	385	10
Oregon	3,899,353	551	14.1	44	551	14.1	---	---
Pennsylvania	12,763,536	7,949	62.3	4	5,401	42.3	2,548	20.0
Puerto Rico	3,667,084	1,310	35.7	N.R.	1,310	35.7	---	---
Rhode Island	1,050,292	471	44.8	9	471	44.8	---	---
South Carolina	4,723,723	1,472	31.2	22	1,151	24.4	321	6.8
South Dakota	833,354	234	28.1	25	234	28.1	---	---
Tennessee	6,456,243	2,626	40.7	14	1,929	29.9	697	10.8
Texas	26,059,203	7,135	27.4	29	6,286	24.1	849.0	3.3
Utah	2,855,287	348	12.2	45	348	12.2	---	---
Vermont	626,011	463	74.0	2	463	74.0	---	---
Virginia	8,185,867	2,893	35.3	17	2,137	26.1	756	9.2
Washington	6,897,012	1,272	18.4	42	972	14.1	300	4
West Virginia	1,855,413	1,569	84.6	1	732	39.5	837	45.1
Wisconsin	5,726,398	1,594	27.8	26	1,594	27.8	---	---
Wyoming	576,412	---	---	---	---	---	---	---

Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a medical or osteopathic school.

Figure 9. Students Enrolled in *Public* Medical or Osteopathic School for the 2012-2013 Academic Year per 100,000 Population



Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

Table 9. Students Enrolled in Public Medical or Osteopathic Schools for the 2012-2013 Academic Year

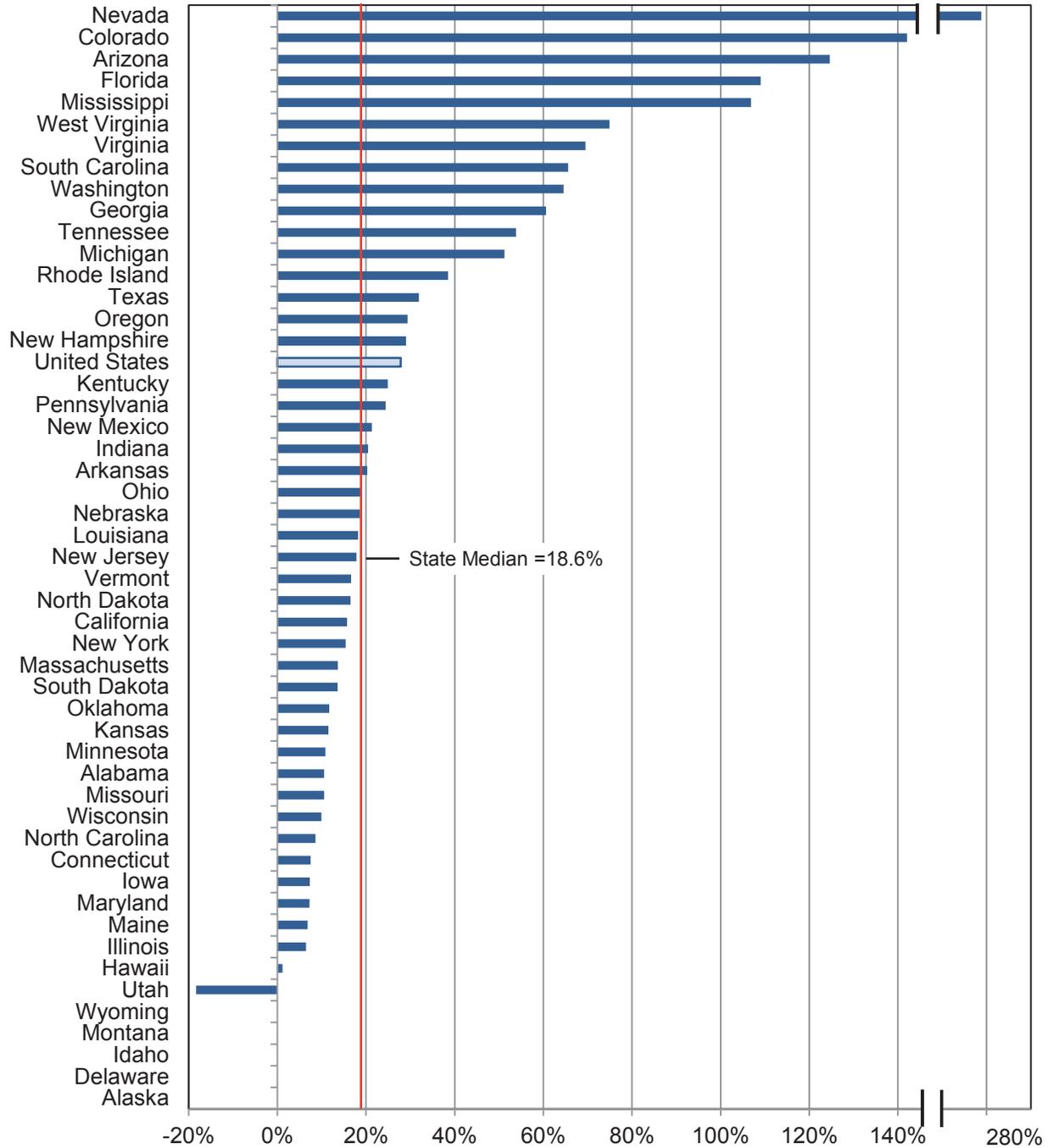
	Total Population	Total Students Enrolled in Public Medical or Osteopathic Schools			Students Enrolled in Public Medical Schools		Students Enrolled in Public Osteopathic Schools	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	313,914,040	53,079	16.9	N.R.	48,642	15.5	4,437	1.4
Alabama	4,822,023	1,046	21.7	18	1,046	21.7	---	---
Alaska	731,449	---	---	---	---	---	---	---
Arizona	6,553,255	721	11.0	36	721	11.0	---	---
Arkansas	2,949,131	687	23.3	16	687	23.3	---	---
California	38,041,430	3,175	8.3	41	3,175	8.3	---	---
Colorado	5,187,582	705	13.6	30	705	13.6	---	---
Connecticut	3,590,347	386	10.8	37	386	10.8	---	---
Delaware	917,092	---	---	---	---	---	---	---
District of Columbia	632,323	---	---	N.R.	---	---	---	---
Florida	19,317,568	2,296	11.9	34	2,296	11.9	---	---
Georgia	9,919,945	899	9.1	39	899	9.1	---	---
Hawaii	1,392,313	258	18.5	23	258	18.5	---	---
Idaho	1,595,728	---	---	---	---	---	---	---
Illinois	12,875,255	1,744	13.5	31	1,744	13.5	---	---
Indiana	6,537,334	1,341	20.5	20	1,341	20.5	---	---
Iowa	3,074,186	654	21.3	19	654	21.3	---	---
Kansas	2,885,905	792	27.4	10	792	27.4	---	---
Kentucky	4,380,415	1,162	26.5	11	1,162	26.5	---	---
Louisiana	4,601,893	1,275	27.7	8	1,275	27.7	---	---
Maine	1,329,192	---	---	---	---	---	---	---
Maryland	5,884,563	1,373	23.3	15	1,373	23.3	---	---
Massachusetts	6,646,144	565	8.5	40	565	8.5	---	---
Michigan	9,883,360	4,197	42.5	3	2,941	29.8	1,256	12.7
Minnesota	5,379,139	999	18.6	22	999	18.6	---	---
Mississippi	2,984,926	527	17.7	24	527	17.7	---	---
Missouri	6,021,988	830	13.8	28	830	13.8	---	---
Montana	1,005,141	---	---	---	---	---	---	---
Nebraska	1,855,525	536	28.9	6	536	28.9	---	---
Nevada	2,758,931	262	9.5	38	262	9.5	---	---
New Hampshire	1,320,718	---	---	---	---	---	---	---
New Jersey	8,864,590	2,020	22.8	17	1,423	16.1	597	6.7
New Mexico	2,085,538	393	18.8	21	393	18.8	---	---
New York	19,570,261	2,665	13.6	29	2,665	13.6	---	---
North Carolina	9,752,073	1,103	11.3	35	1,103	11.3	---	---
North Dakota	699,628	261	37.3	4	261	37.3	---	---
Ohio	11,544,225	3,835	33.2	5	3,322	28.8	513	4.4
Oklahoma	3,814,820	1,050	27.5	9	665	17.4	385	10
Oregon	3,899,353	551	14.1	26	551	14.1	---	---
Pennsylvania	12,763,536	---	---	---	---	---	---	---
Puerto Rico	3,667,084	469	12.8	N.R.	469	12.8	---	---
Rhode Island	1,050,292	---	---	---	---	---	---	---
South Carolina	4,723,723	1,151	24.4	13	1,151	24.4	---	---
South Dakota	833,354	234	28.1	7	234	28.1	---	---
Tennessee	6,456,243	963	14.9	25	963	14.9	---	---
Texas	26,059,203	6,308	24.2	14	5,459	20.9	849	3.3
Utah	2,855,287	348	12.2	33	348	12.2	---	---
Vermont	626,011	463	74.0	2	463	74.0	---	---
Virginia	8,185,867	2,011	24.6	12	2,011	24.6	---	---
Washington	6,897,012	972	14.1	27	972	14.1	---	---
West Virginia	1,855,413	1,569	84.6	1	732	39.5	837	45.1
Wisconsin	5,726,398	752	13.1	32	752	13.1	---	---
Wyoming	576,412	---	---	---	---	---	---	---

Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). July 1, 2012 population estimates are from the U.S. Census Bureau (Release date: December 2012).

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a public medical or osteopathic school.

Figure 10. Percentage Change in Students Enrolled in Medical or Osteopathic Schools, 2002-2012



Sources: 2011 Medical enrollment data are from the AAMC Data Warehouse accessed online on 8/21/13 at <https://www.aamc.org/data/facts>. 2001 Medical enrollment data retrieved from the AAMC Data Warehouse STUDENT file as of 8/21/13. 2001 and 2011 Osteopathic enrollment data are from the AACOM website at <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13).

Table 10. Change in Number of Students Enrolled in Medical or Osteopathic Schools, 2002-2012

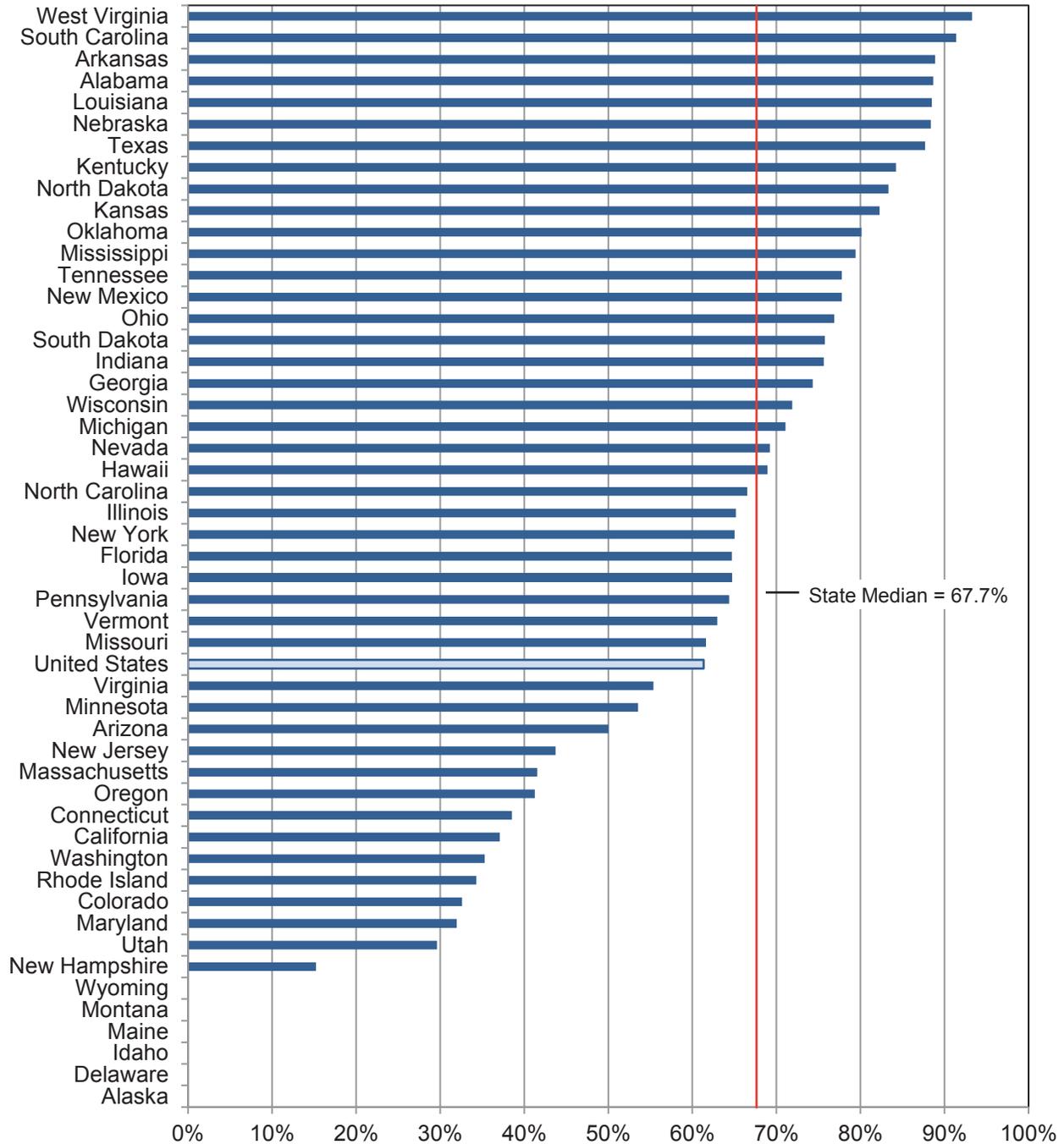
	Total Students Enrolled in UME				Students Enrolled in Medical School		Students Enrolled in Osteopathic School	
	2002	2012	Percent Change	Rank	2002	2012	2002	2012
United States	80,180	102,498	27.8%	N.R.	68,748	80,757	11,432	21,741
Alabama	946	1,046	10.6%	35	946	1,046	---	---
Alaska	---	---	---	---	---	---	---	---
Arizona	966	2,170	124.6%	3	420	721	546	1,449
Arkansas	571	687	20.3%	21	571	687	---	---
California	5,858	6,780	15.7%	28	4,713	5,111	1,145	1,669
Colorado	552	1,336	142.0%	2	552	705	0	631
Connecticut	842	905	7.5%	39	842	905	---	---
Delaware	---	---	---	---	---	---	---	---
District of Columbia	1,828	2,038	11.5%	N.R.	1,828	2,038	---	---
Florida	2,287	4,781	109.1%	4	1,530	3,097	757	1,684
Georgia	1,621	2,604	60.6%	10	1,621	2,169	0	435
Hawaii	255	258	1.2%	44	255	258	---	---
Idaho	---	---	---	---	---	---	---	---
Illinois	5,350	5,696	6.5%	43	4,707	4,899	643	797
Indiana	1,113	1,341	20.5%	20	1,113	1,341	---	---
Iowa	1,441	1,546	7.3%	40	639	654	802	892
Kansas	710	792	11.5%	33	710	792	---	---
Kentucky	1,229	1,535	24.9%	17	978	1,162	251	373
Louisiana	1,734	2,050	18.2%	24	1,734	2,050	---	---
Maine	468	500	6.8%	42	---	---	468	500
Maryland	1,831	1,964	7.3%	41	1,831	1,964	---	---
Massachusetts	2,678	3,043	13.6%	30	2,678	3,043	---	---
Michigan	2,775	4,197	51.2%	12	2,248	2,941	527	1,256
Minnesota	1,118	1,239	10.8%	34	1,118	1,239	---	---
Mississippi	408	844	106.9%	5	408	527	0	317
Missouri	3,479	3,846	10.5%	36	1,961	2,179	1,518	1,667
Montana	---	---	---	---	---	---	---	---
Nebraska	944	1,120	18.6%	23	944	1,120	---	---
Nevada	212	803	278.8%	1	212	262	0	541
New Hampshire	320	413	29.1%	16	320	413	---	---
New Jersey	1,714	2,020	17.9%	25	1,387	1,423	327	597
New Mexico	324	393	21.3%	19	324	393	---	---
New York	8,536	9,853	15.4%	29	7,389	8,126	1,147	1,727
North Carolina	1,906	2,070	8.6%	38	1,906	2,070	---	---
North Dakota	224	261	16.5%	27	224	261	---	---
Ohio	3,986	4,740	18.9%	22	3,554	4,227	432	513
Oklahoma	940	1,050	11.7%	32	592	665	348	385
Oregon	426	551	29.3%	15	426	551	---	---
Pennsylvania	6,388	7,949	24.4%	18	4,654	5,401	1,734	2,548
Puerto Rico	969	1,310	35.2%	N.R.	969	1,310	---	---
Rhode Island	340	471	38.5%	13	340	471	---	---
South Carolina	889	1,472	65.6%	8	889	1,151	0	321
South Dakota	206	234	13.6%	31	206	234	---	---
Tennessee	1,707	2,626	53.8%	11	1,707	1,929	0	697
Texas	5,408	7,135	31.9%	14	4,929	6,286	479	849
Utah	426	348	-18.3%	45	426	348	---	---
Vermont	397	463	16.6%	26	397	463	---	---
Virginia	1,707	2,893	69.5%	7	1,707	2,137	0	756
Washington	773	1,272	64.6%	9	773	972	0	300
West Virginia	897	1,569	74.9%	6	589	732	308	837
Wisconsin	1,450	1,594	9.9%	37	1,450	1,594	---	---
Wyoming	---	---	---	---	---	---	---	---

Sources: 2011 Medical enrollment data are from the AAMC Data Warehouse accessed online on 8/21/13 at <https://www.aamc.org/data/facts>. 2001 Medical enrollment data retrieved from the AAMC Data Warehouse STUDENT file as of 8/21/13. 2001 and 2011 Osteopathic enrollment data are from the AACOM website at <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13).

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a medical or osteopathic school.

Figure 11. In-State Matriculation to Medical School for the 2012-2013 Academic Year



Source: AAMC Data Warehouse Applicant Matriculant File, accessed online at <http://www.aamc.org/data/facts> (August 16, 2013).

Table 11. In-State Matriculation to Medical School for the 2012-2013 Academic Year

	Matriculants to Medical School by State of Legal Residence	First-Year Medical Students Who Matriculated to a Medical School in Their Legal State of Residence		
	Number	Number	Percent	Rank
United States	19,059	11,691	61.3%	N.R.
Alabama	247	219	88.7%	4
Alaska	37	---	---	---
Arizona	282	141	50.0%	33
Arkansas	162	144	88.9%	3
California	2,268	841	37.1%	38
Colorado	276	90	32.6%	41
Connecticut	218	84	38.5%	37
Delaware	32	---	---	---
District of Columbia	41	13	31.7%	N.R.
Florida	1,088	704	64.7%	26
Georgia	549	408	74.3%	18
Hawaii	74	51	68.9%	22
Idaho	65	---	---	---
Illinois	893	582	65.2%	24
Indiana	357	270	75.6%	17
Iowa	150	97	64.7%	27
Kansas	220	181	82.3%	10
Kentucky	241	203	84.2%	8
Louisiana	348	308	88.5%	5
Maine	47	---	---	---
Maryland	504	161	31.9%	42
Massachusetts	573	238	41.5%	35
Michigan	726	516	71.1%	20
Minnesota	368	197	53.5%	32
Mississippi	170	135	79.4%	12
Missouri	331	204	61.6%	30
Montana	55	---	---	---
Nebraska	129	114	88.4%	6
Nevada	78	54	69.2%	21
New Hampshire	46	7	15.2%	44
New Jersey	757	331	43.7%	34
New Mexico	126	98	77.8%	14
New York	1,443	938	65.0%	25
North Carolina	445	296	66.5%	23
North Dakota	60	50	83.3%	9
Ohio	748	575	76.9%	15
Oklahoma	176	141	80.1%	11
Oregon	206	85	41.3%	36
Pennsylvania	730	470	64.4%	28
Puerto Rico	257	246	95.7%	N.R.
Rhode Island	35	12	34.3%	40
South Carolina	290	265	91.4%	2
South Dakota	66	50	75.8%	16
Tennessee	315	245	77.8%	14
Texas	1,560	1,368	87.7%	7
Utah	206	61	29.6%	43
Vermont	54	34	63.0%	29
Virginia	475	263	55.4%	31
Washington	340	120	35.3%	39
West Virginia	104	97	93.3%	1
Wisconsin	320	230	71.9%	19
Wyoming	28	---	---	---

Source: AAMC Data Warehouse Applicant Matriculant File, accessed online at <http://www.aamc.org/data/facts> (August 16, 2013).

N.R. = Not Ranked

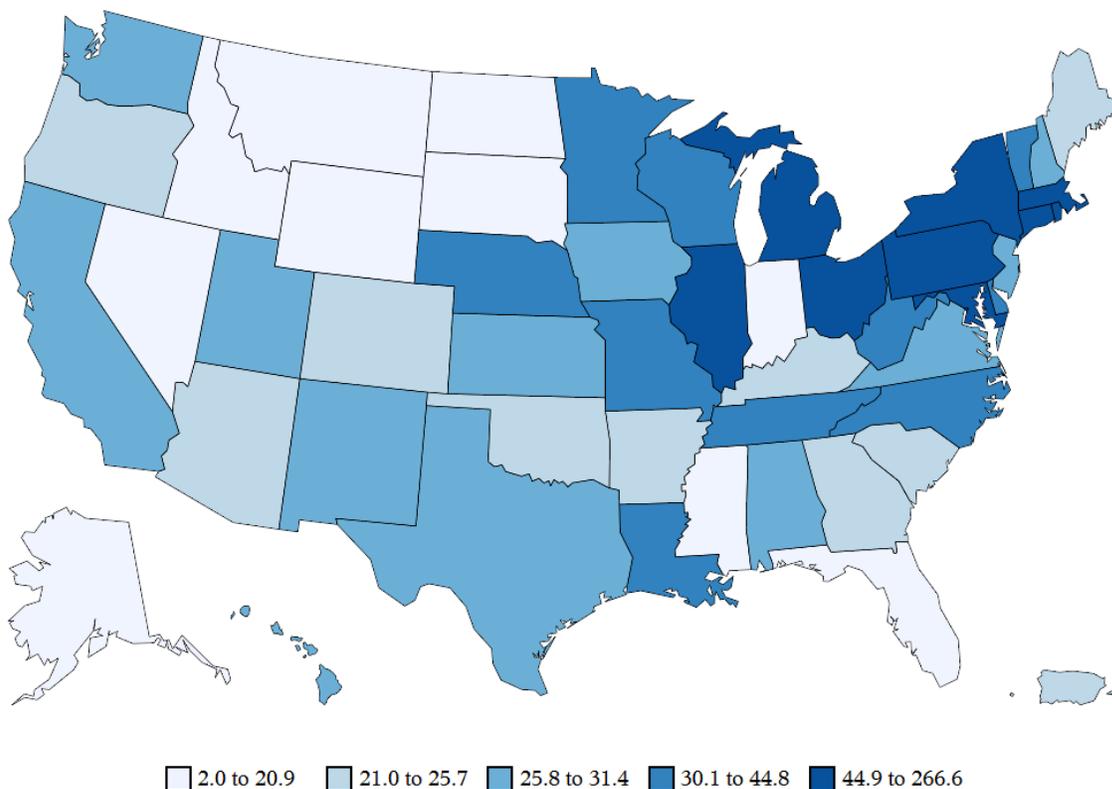
--- Indicates that the data are not applicable, as those states do not have a medical school.

* The data shown here are for students in medical schools only. Students attending osteopathic schools are excluded.

Key Findings – Graduate Medical Education

- In 2011, every state in the United States had at least one ACGME-accredited graduate medical education (GME) program. The number of residents and fellows in ACGME-accredited training programs per 100,000 population varied widely across the United States, from a low of 2.0 in Montana to a high of 83.7 in Massachusetts (see Map 6, Figure 12, and Table 12). The national average was 36.6 residents and fellows per 100,000 population.

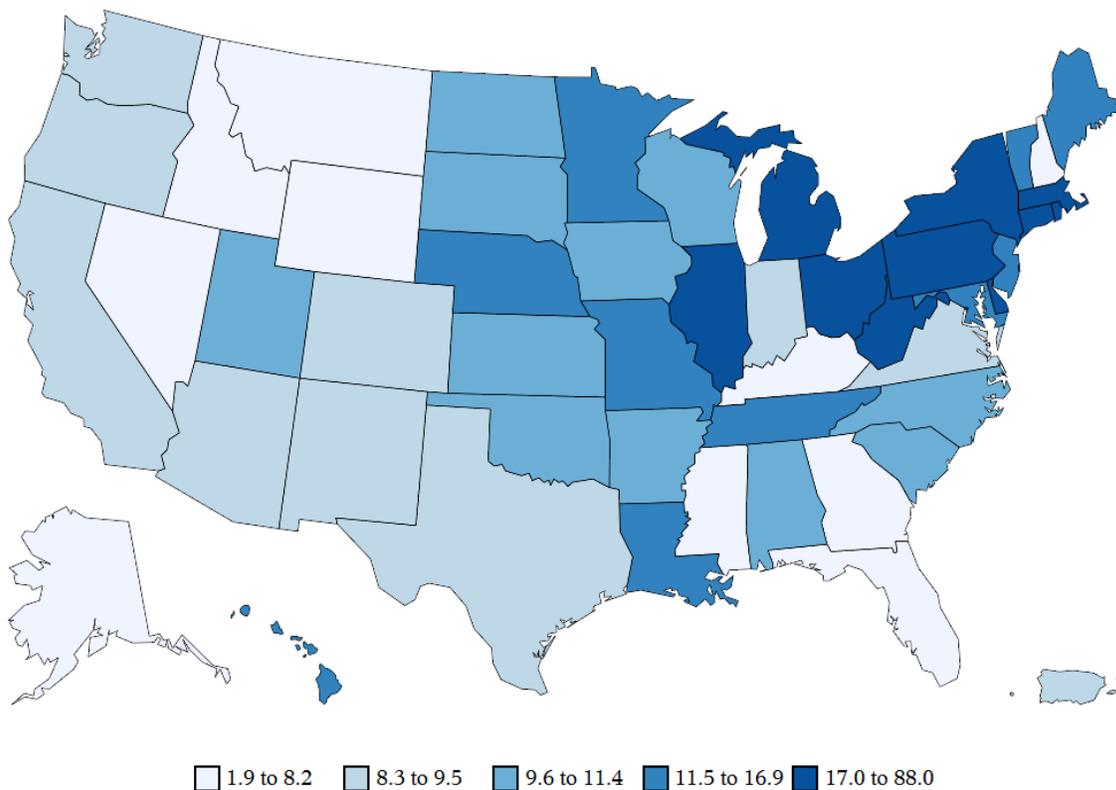
Map 6. Residents and Fellows in ACGME-Accredited Training Programs per 100,000 Population, 2011



Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physicians in ACGME-accredited programs are from the 2011 AAMC/AMA National GME Census.

- There were 13.6 residents and fellows in primary care programs¹ accredited by the ACGME per 100,000 population in the United States in 2011. There was a wide range among the states; the highest number of residents and fellows in primary care GME programs per 100,000 population were primarily in the Northeast (see Map 7, Figure 13, and Table 13).

Map 7. Residents and Fellows in Primary Care Programs per 100,000 Population, 2011

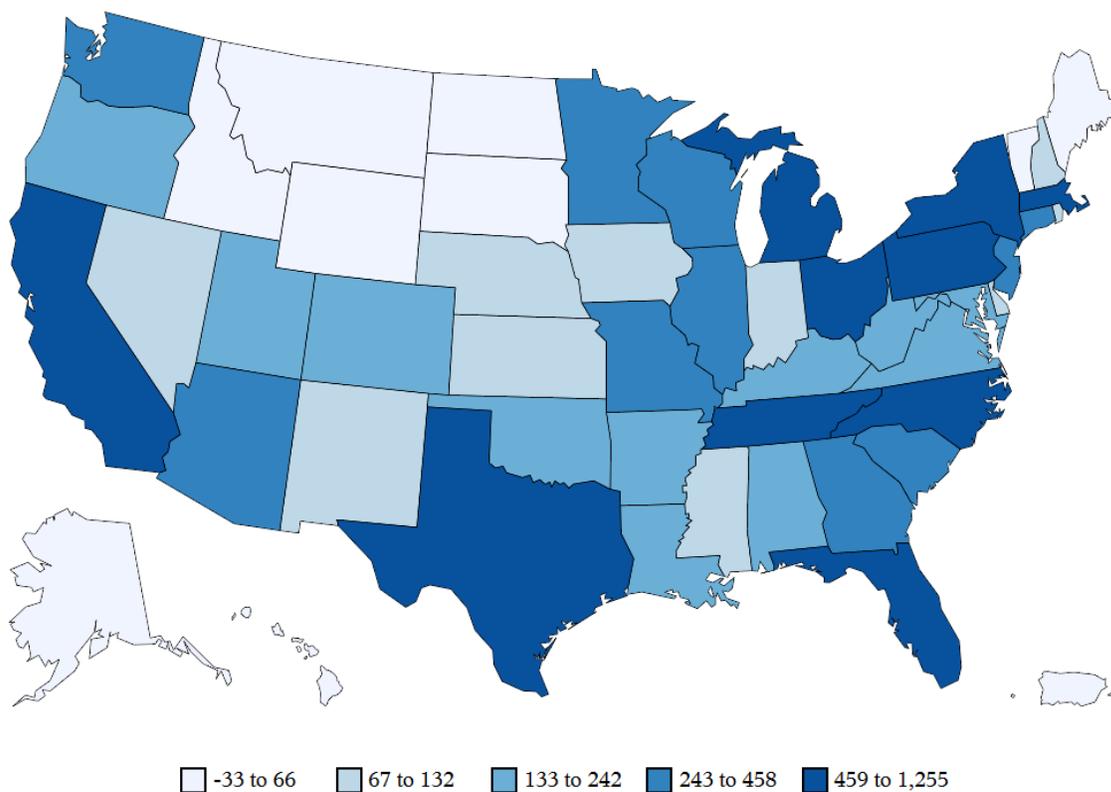


Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physicians in ACGME-accredited primary care programs are from the 2011 AAMC/AMA National GME Census.

¹ See **Key Definitions** for a list of specialties counted as primary care.

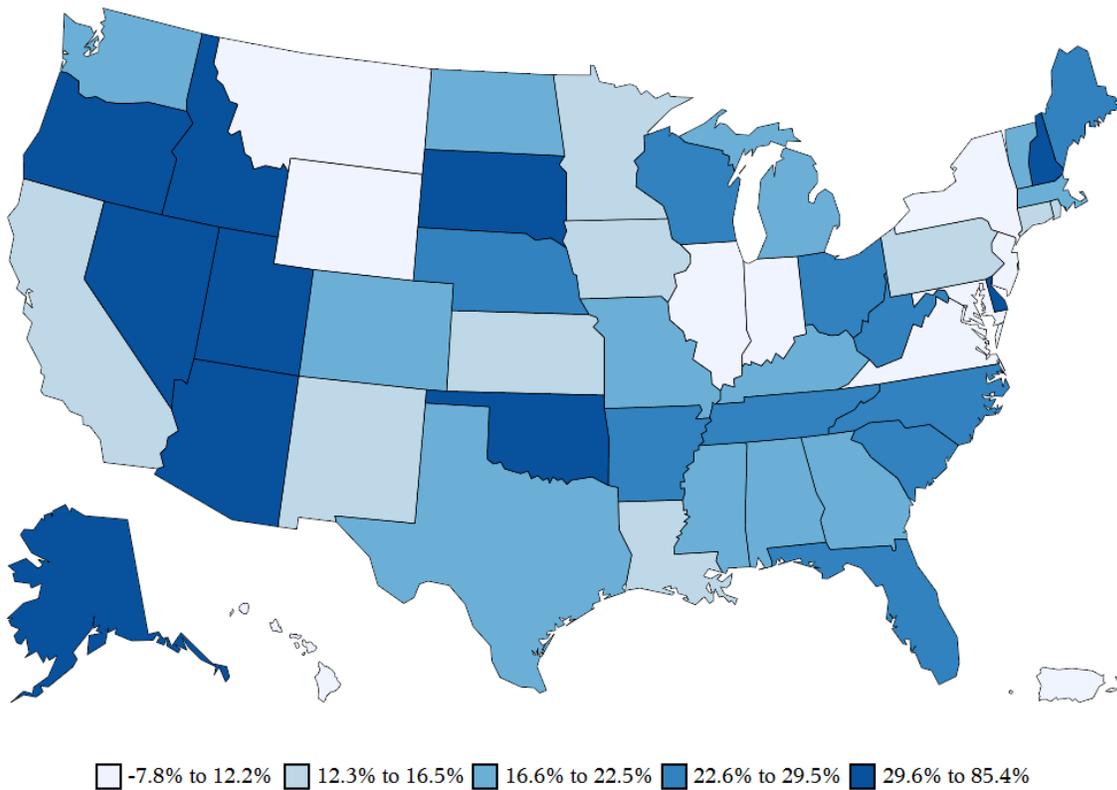
- Nationally, more than one-quarter (27.0 percent) of the residents and fellows in ACGME training programs were IMGs in 2011. The percentage varied widely across the states. In Idaho, only 1.3 percent of the residents and fellows were IMGs. At the other end of the spectrum, in Wyoming nearly two-thirds (63.4 percent) were IMGs (see Figure 14 and Table 14).
- In 2011, there were more residents and fellows in ACGME and OGME programs than there were students in medical and osteopathic schools in the United States, due in part to the inflow of IMGs to GME. The ratio of total GME to total undergraduate medical education (UME) was 1.21. However, many states that had medical and osteopathic schools had fewer residents and fellows than students. Nevada had the lowest ratio of GME to UME (0.45) (see Figure 15 and Table 15).
- Between 2001 and 2011, the number of residents and fellows in ACGME programs increased by 15,975 (16.3 percent). All states except for Hawaii, which lost 33 residents and fellows (-7.8 percent), saw an increase over that time period in the number of residents and fellows (see Map 8, Figure 16, and Table 16). The rate of change varied widely by state, as can be seen in Map 9, Figure 16, and Table 16.

Map 8. Change in Number of Residents and Fellows in ACGME Programs, 2001–2011



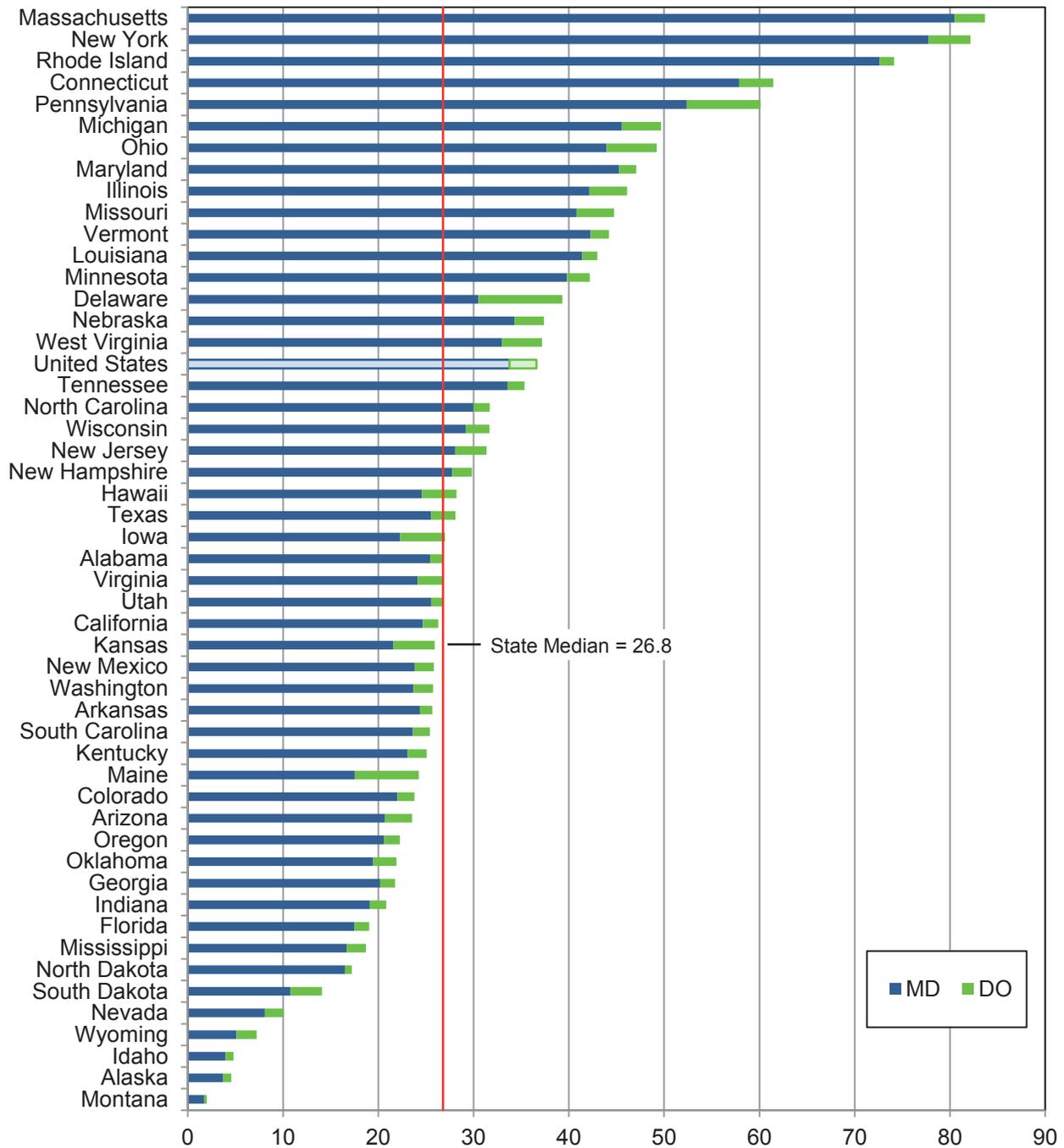
Source: Residents on duty in ACGME programs are from the 2001 and 2011 AAMC/AMA National GME Census.

Map 9. Percent Change in Residents and Fellows in ACGME Programs, 2001–2011



Source: Residents on duty in ACGME programs are from the 2001 and 2011 AAMC/AMA National GME Census.

Figure 12. Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Programs per 100,000 Population by Degree Type



Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 2012). Physicians in ACGME-accredited programs are from the 2011 AAMC/AMA National GME Census.

Table 12. Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Programs per 100,000 Population by Degree Type

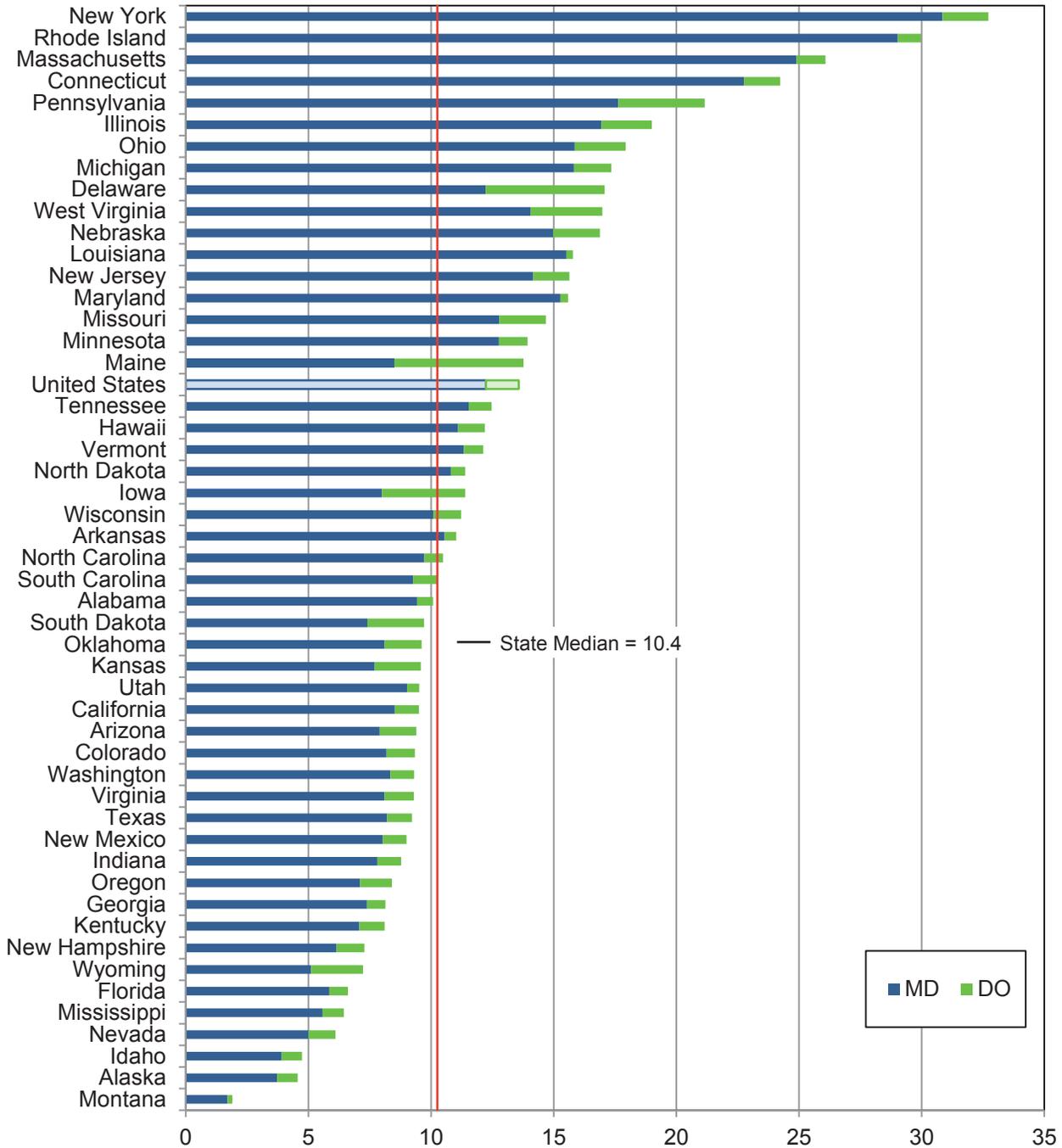
	Total Population	Total Residents/Fellows in ACGME Programs			M.D.'s in ACGME Programs*		D.O.'s in ACGME Programs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	311,587,816	114,048	36.6	N.R.	105,243	33.8	8,805	2.8
Alabama	4,803,689	1,286	26.8	25	1,222	25.4	64	1.3
Alaska	723,860	33	4.6	49	27	3.7	6	0.8
Arizona	6,467,315	1,523	23.5	37	1,339	20.7	184	2.8
Arkansas	2,938,582	754	25.7	32	716	24.4	38	1.3
California	37,683,933	9,904	26.3	28	9,303	24.7	601	1.6
Colorado	5,116,302	1,217	23.8	36	1,127	22.0	90	1.8
Connecticut	3,586,717	2,204	61.4	4	2,076	57.9	128	3.6
Delaware	908,137	357	39.3	14	277	30.5	80	8.8
District of Columbia	619,020	1,650	266.6	N.R.	1,598	258.1	52	8.4
Florida	19,082,262	3,632	19.0	42	3,342	17.5	290	1.5
Georgia	9,812,460	2,136	21.8	40	1,981	20.2	155	1.6
Hawaii	1,378,129	389	28.2	22	339	24.6	50	3.6
Idaho	1,583,744	76	4.8	48	63	4.0	13	0.8
Illinois	12,859,752	5,930	46.1	9	5,419	42.1	511	4.0
Indiana	6,516,353	1,357	20.8	41	1,247	19.1	110	1.7
Iowa	3,064,097	827	27.0	24	683	22.3	144	4.7
Kansas	2,870,386	744	25.9	29	620	21.6	124	4.3
Kentucky	4,366,814	1,095	25.1	34	1,008	23.1	87	2.0
Louisiana	4,574,766	1,967	43.0	12	1,894	41.4	73	1.6
Maine	1,328,544	322	24.2	35	233	17.5	89	6.7
Maryland	5,839,572	2,749	47.1	8	2,645	45.3	104	1.8
Massachusetts	6,607,003	5,530	83.7	1	5,318	80.5	212	3.2
Michigan	9,876,801	4,907	49.7	6	4,500	45.6	407	4.1
Minnesota	5,347,299	2,256	42.2	13	2,128	39.8	128	2.4
Mississippi	2,977,457	557	18.7	43	497	16.7	60	2.0
Missouri	6,008,984	2,689	44.7	10	2,453	40.8	236	3.9
Montana	997,667	20	2.0	50	17	1.7	3	0.3
Nebraska	1,842,234	689	37.4	15	632	34.3	57	3.1
Nevada	2,720,028	274	10.1	46	220	8.1	54	2.0
New Hampshire	1,317,807	393	29.8	21	366	27.8	27	2.0
New Jersey	8,834,773	2,770	31.4	20	2,481	28.1	289	3.3
New Mexico	2,078,674	537	25.8	30	495	23.8	42	2.0
New York	19,501,616	16,022	82.2	2	15,159	77.7	863	4.4
North Carolina	9,651,103	3,059	31.7	18	2,896	30.0	163	1.7
North Dakota	684,740	118	17.2	44	113	16.5	5	0.7
Ohio	11,541,007	5,682	49.2	7	5,074	44.0	608	5.3
Oklahoma	3,784,163	829	21.9	39	737	19.5	92	2.4
Oregon	3,868,229	861	22.3	38	796	20.6	65	1.7
Pennsylvania	12,743,948	7,661	60.1	5	6,678	52.4	983	7.7
Puerto Rico	3,694,093	782	21.2	N.R.	782	21.2	0	0.0
Rhode Island	1,050,646	779	74.1	3	763	72.6	16	1.5
South Carolina	4,673,348	1,187	25.4	33	1,104	23.6	83	1.8
South Dakota	823,593	116	14.1	45	89	10.8	27	3.3
Tennessee	6,399,787	2,263	35.4	17	2,148	33.6	115	1.8
Texas	25,631,778	7,204	28.1	23	6,553	25.6	651	2.5
Utah	2,814,347	751	26.7	27	720	25.6	31	1.1
Vermont	626,592	277	44.2	11	265	42.3	12	1.9
Virginia	8,104,384	2,169	26.8	26	1,957	24.1	212	2.6
Washington	6,823,267	1,757	25.8	31	1,617	23.7	140	2.1
West Virginia	1,854,908	690	37.2	16	612	33.0	78	4.2
Wisconsin	5,709,843	1,808	31.7	19	1,667	29.2	141	2.5
Wyoming	567,356	41	7.2	47	29	5.1	12	2.1

Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 31, 2012). Physicians in ACGME-accredited programs are from the 2011 AAMC/AMA National GME Census.

N.R. = Not Ranked

* Includes M.D.'s from international medical schools.

Figure 13. Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Primary Care Programs per 100,000 Population by Degree Type



Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 31, 2012). Physicians in ACGME-accredited programs are from the 2011 AAMC/AMA National GME Census.

Table 13. Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Primary Care Programs per 100,000 Population by Degree Type

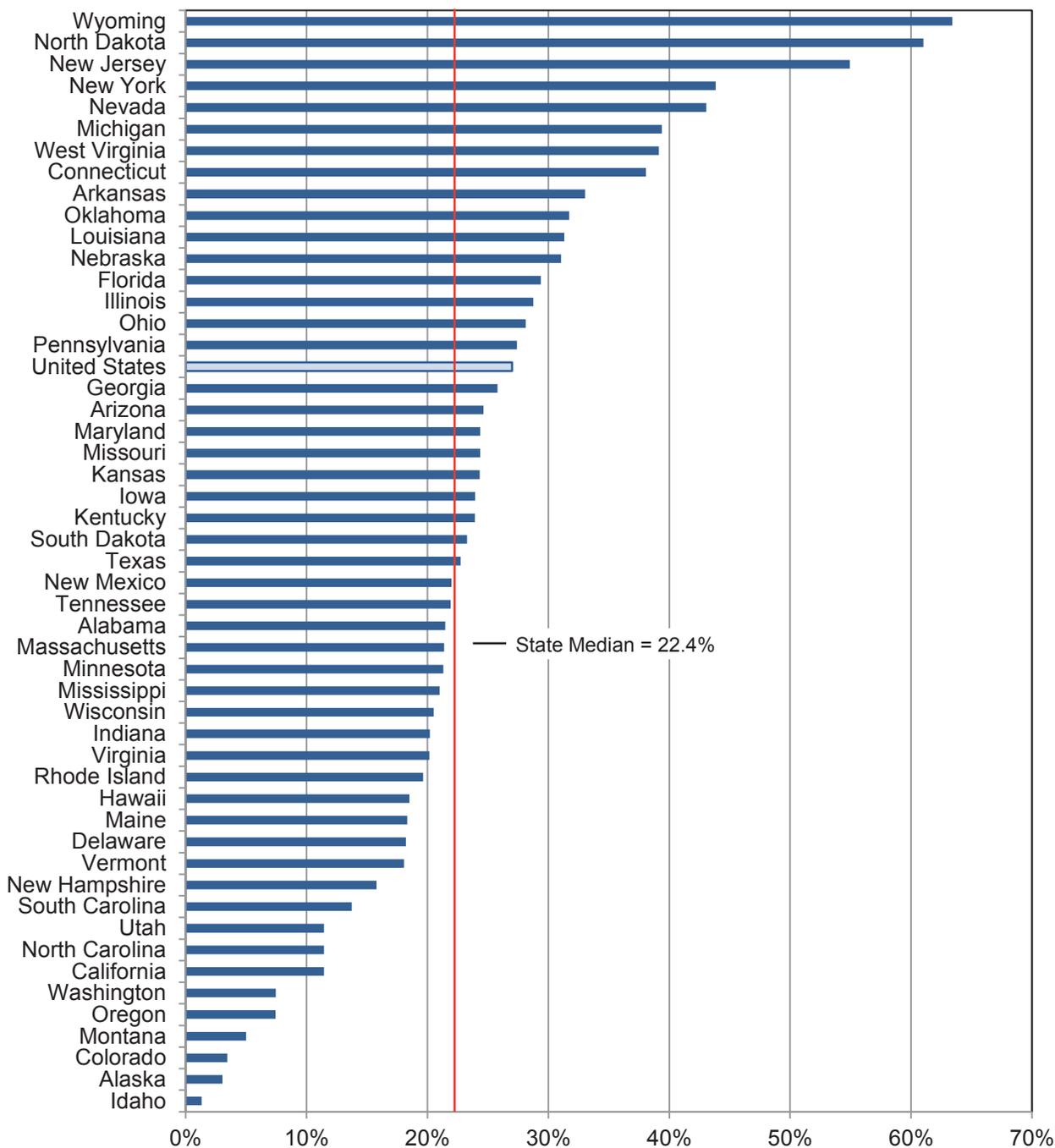
	Total Population	Total Residents in Primary Care ACGME Programs			M.D.'s in Primary Care ACGME Programs*		D.O.'s in Primary Care ACGME Programs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	311,587,816	42,301	13.6	N.R.	38,128	12.2	4,173	1.3
Alabama	4,803,689	484	10.1	27	453	9.4	31	0.6
Alaska	723,860	33	4.6	49	27	3.7	6	0.8
Arizona	6,467,315	608	9.4	33	512	7.9	96	1.5
Arkansas	2,938,582	324	11.0	24	310	10.5	14	0.5
California	37,683,933	3,581	9.5	32	3,212	8.5	369	1.0
Colorado	5,116,302	478	9.3	34	419	8.2	59	1.2
Connecticut	3,586,717	869	24.2	4	816	22.8	53	1.5
Delaware	908,137	155	17.1	9	111	12.2	44	4.8
District of Columbia	619,020	545	88.0	N.R.	537	86.8	8	1.3
Florida	19,082,262	1,262	6.6	45	1,116	5.8	146	0.8
Georgia	9,812,460	799	8.1	41	726	7.4	73	0.7
Hawaii	1,378,129	168	12.2	19	153	11.1	15	1.1
Idaho	1,583,744	75	4.7	48	62	3.9	13	0.8
Illinois	12,859,752	2,444	19.0	6	2,178	16.9	266	2.1
Indiana	6,516,353	572	8.8	39	509	7.8	63	1.0
Iowa	3,064,097	349	11.4	22	245	8.0	104	3.4
Kansas	2,870,386	275	9.6	30	221	7.7	54	1.9
Kentucky	4,366,814	354	8.1	42	309	7.1	45	1.0
Louisiana	4,574,766	722	15.8	12	710	15.5	12	0.3
Maine	1,328,544	183	13.8	17	113	8.5	70	5.3
Maryland	5,839,572	910	15.6	14	892	15.3	18	0.3
Massachusetts	6,607,003	1,723	26.1	3	1,645	24.9	78	1.2
Michigan	9,876,801	1,713	17.3	8	1,563	15.8	150	1.5
Minnesota	5,347,299	745	13.9	16	683	12.8	62	1.2
Mississippi	2,977,457	192	6.4	46	166	5.6	26	0.9
Missouri	6,008,984	882	14.7	15	768	12.8	114	1.9
Montana	997,667	19	1.9	50	17	1.7	2	0.2
Nebraska	1,842,234	311	16.9	11	276	15.0	35	1.9
Nevada	2,720,028	166	6.1	47	136	5.0	30	1.1
New Hampshire	1,317,807	96	7.3	43	81	6.1	15	1.1
New Jersey	8,834,773	1,382	15.6	13	1,252	14.2	130	1.5
New Mexico	2,078,674	187	9.0	38	167	8.0	20	1.0
New York	19,501,616	6,382	32.7	1	6,015	30.8	367	1.9
North Carolina	9,651,103	1,012	10.5	25	939	9.7	73	0.8
North Dakota	684,740	78	11.4	21	74	10.8	4	0.6
Ohio	11,541,007	2,069	17.9	7	1,830	15.9	239	2.1
Oklahoma	3,784,163	364	9.6	29	307	8.1	57	1.5
Oregon	3,868,229	325	8.4	40	275	7.1	50	1.3
Pennsylvania	12,743,948	2,696	21.2	5	2,247	17.6	449	3.5
Puerto Rico	3,694,093	348	9.4	N.R.	348	9.4	0	0.0
Rhode Island	1,050,646	315	30.0	2	305	29.0	10	1.0
South Carolina	4,673,348	481	10.3	26	433	9.3	48	1.0
South Dakota	823,593	80	9.7	28	61	7.4	19	2.3
Tennessee	6,399,787	798	12.5	18	738	11.5	60	0.9
Texas	25,631,778	2,365	9.2	37	2,103	8.2	262	1.0
Utah	2,814,347	268	9.5	31	254	9.0	14	0.5
Vermont	626,592	76	12.1	20	71	11.3	5	0.8
Virginia	8,104,384	754	9.3	36	656	8.1	98	1.2
Washington	6,823,267	635	9.3	35	569	8.3	66	1.0
West Virginia	1,854,908	315	17.0	10	261	14.1	54	2.9
Wisconsin	5,709,843	641	11.2	23	576	10.1	65	1.1
Wyoming	567,356	41	7.2	44	29	5.1	12	2.1

Sources: July 1, 2011 population estimates are from the U.S. Census Bureau (Release date: December 31, 2012). Physicians in ACGME-accredited primary care programs are from the 2011 AAMC/AMA National GME Census.

N.R. = Not Ranked

* Includes M.D.'s from international medical schools.

Figure 14. Percentage of Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Programs Who Are International Medical Graduates (IMGs)



Source: 2011 AAMC/AMA National GME Census.

Table 14. Residents and Fellows on Duty as of December 31, 2011 in ACGME-Accredited Programs by Medical School Type

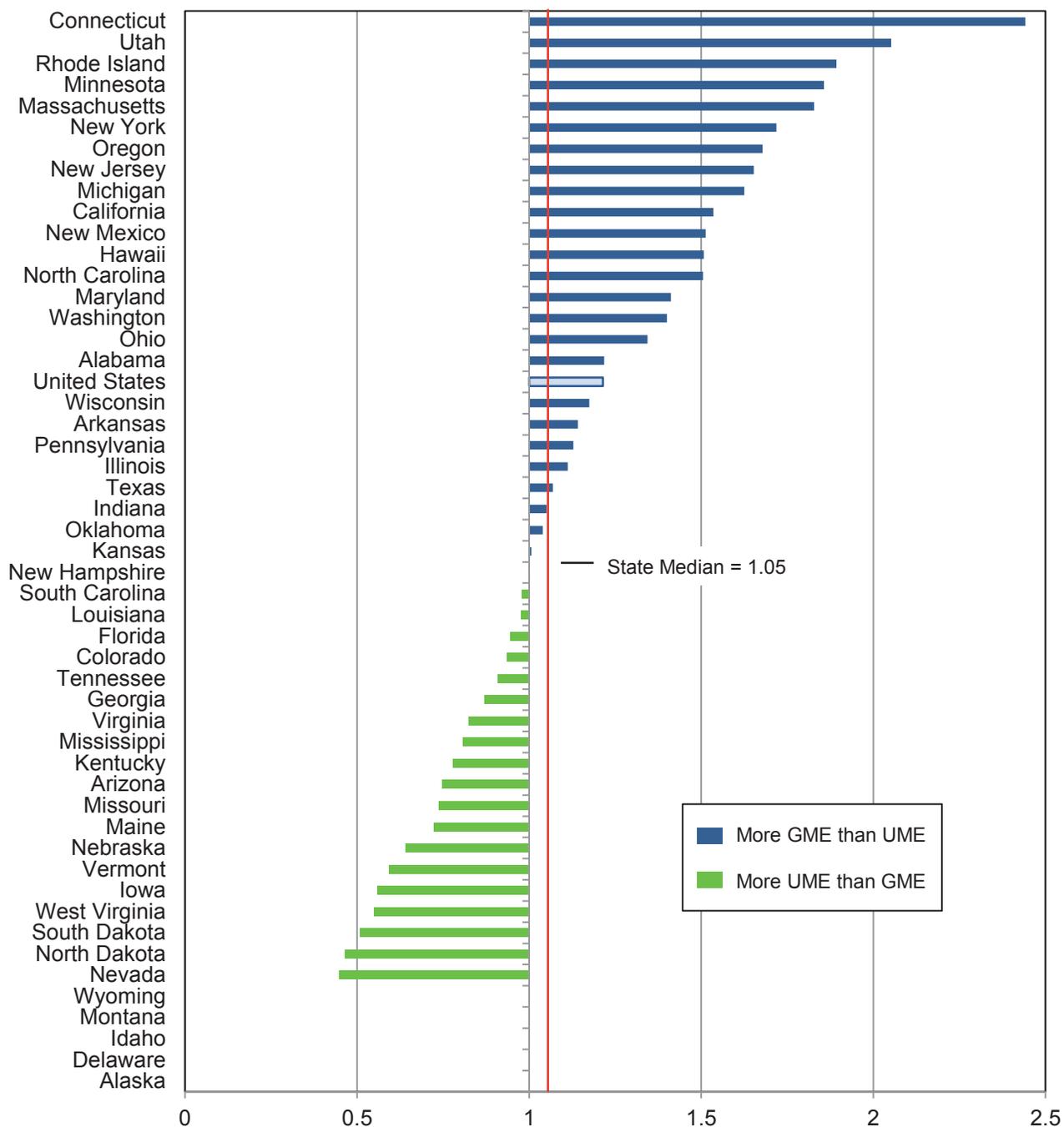
	Total Residents/ Fellows*	U.S.M.D.		D.O.		IMG		
		Number	Percent	Number	Percent	Number	Percent	Rank
United States	114,048	74,267	65.1%	8,805	7.7%	30,788	27.0%	N.R.
Alabama	1,286	945	73.5%	64	5.0%	276	21.5%	28
Alaska	33	26	78.8%	6	18.2%	1	3.0%	49
Arizona	1,523	961	63.1%	184	12.1%	375	24.6%	18
Arkansas	754	467	61.9%	38	5.0%	249	33.0%	9
California	9,904	8,150	82.3%	601	6.1%	1,133	11.4%	44
Colorado	1,217	1,083	89.0%	90	7.4%	42	3.5%	48
Connecticut	2,204	1,231	55.9%	128	5.8%	839	38.1%	8
Delaware	357	212	59.4%	80	22.4%	65	18.2%	38
District of Columbia	1,650	1,167	70.7%	52	3.2%	430	26.1%	N.R.
Florida	3,632	2,269	62.5%	290	8.0%	1,067	29.4%	13
Georgia	2,136	1,429	66.9%	155	7.3%	551	25.8%	17
Hawaii	389	267	68.6%	50	12.9%	72	18.5%	36
Idaho	76	62	81.6%	13	17.1%	1	1.3%	50
Illinois	5,930	3,704	62.5%	511	8.6%	1,705	28.8%	14
Indiana	1,357	972	71.6%	110	8.1%	274	20.2%	33
Iowa	827	484	58.5%	144	17.4%	198	23.9%	22
Kansas	744	439	59.0%	124	16.7%	181	24.3%	21
Kentucky	1,095	746	68.1%	87	7.9%	262	23.9%	23
Louisiana	1,967	1,278	65.0%	73	3.7%	616	31.3%	11
Maine	322	173	53.7%	89	27.6%	59	18.3%	37
Maryland	2,749	1,972	71.7%	104	3.8%	670	24.4%	19
Massachusetts	5,530	4,097	74.1%	212	3.8%	1,182	21.4%	29
Michigan	4,907	2,565	52.3%	407	8.3%	1,933	39.4%	6
Minnesota	2,256	1,637	72.6%	128	5.7%	481	21.3%	30
Mississippi	557	380	68.2%	60	10.8%	117	21.0%	31
Missouri	2,689	1,793	66.7%	236	8.8%	655	24.4%	20
Montana	20	16	80.0%	3	15.0%	1	5.0%	47
Nebraska	689	418	60.7%	57	8.3%	214	31.1%	12
Nevada	274	102	37.2%	54	19.7%	118	43.1%	5
New Hampshire	393	304	77.4%	27	6.9%	62	15.8%	40
New Jersey	2,770	957	34.5%	289	10.4%	1,522	54.9%	3
New Mexico	537	376	70.0%	42	7.8%	118	22.0%	26
New York	16,022	8,106	50.6%	863	5.4%	7,025	43.8%	4
North Carolina	3,059	2,543	83.1%	163	5.3%	350	11.4%	43
North Dakota	118	41	34.7%	5	4.2%	72	61.0%	2
Ohio	5,682	3,468	61.0%	608	10.7%	1,599	28.1%	15
Oklahoma	829	474	57.2%	92	11.1%	263	31.7%	10
Oregon	861	731	84.9%	65	7.5%	64	7.4%	46
Pennsylvania	7,661	4,566	59.6%	983	12.8%	2,098	27.4%	16
Puerto Rico	782	520	66.5%			262	33.5%	N.R.
Rhode Island	779	608	78.0%	16	2.1%	153	19.6%	35
South Carolina	1,187	940	79.2%	83	7.0%	163	13.7%	41
South Dakota	116	62	53.4%	27	23.3%	27	23.3%	24
Tennessee	2,263	1,651	73.0%	115	5.1%	496	21.9%	27
Texas	7,204	4,909	68.1%	651	9.0%	1,638	22.7%	25
Utah	751	632	84.2%	31	4.1%	86	11.5%	42
Vermont	277	214	77.3%	12	4.3%	50	18.1%	39
Virginia	2,169	1,519	70.0%	212	9.8%	437	20.1%	34
Washington	1,757	1,482	84.3%	140	8.0%	131	7.5%	45
West Virginia	690	341	49.4%	78	11.3%	270	39.1%	7
Wisconsin	1,808	1,295	71.6%	141	7.8%	371	20.5%	32
Wyoming	41	3	7.3%	12	29.3%	26	63.4%	1

Source: 2011 AAMC/AMA National GME Census

N.R. = Not Ranked

* Total includes 188 residents/fellows who are graduates of Canadian schools.

Figure 15. Ratio of Residents and Fellows (GME) to Medical and Osteopathic Students (UME), Academic Year 2011-2012



Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). Residents on duty in ACGME programs are from the 2011 AAMC/AMA National GME Census. Residents on duty in OGME programs are from JAOA 2013: 113(4):304.

Table 15. Ratio of Residents and Fellows (GME) to Medical and Osteopathic Students (UME), Academic Year 2011-2012

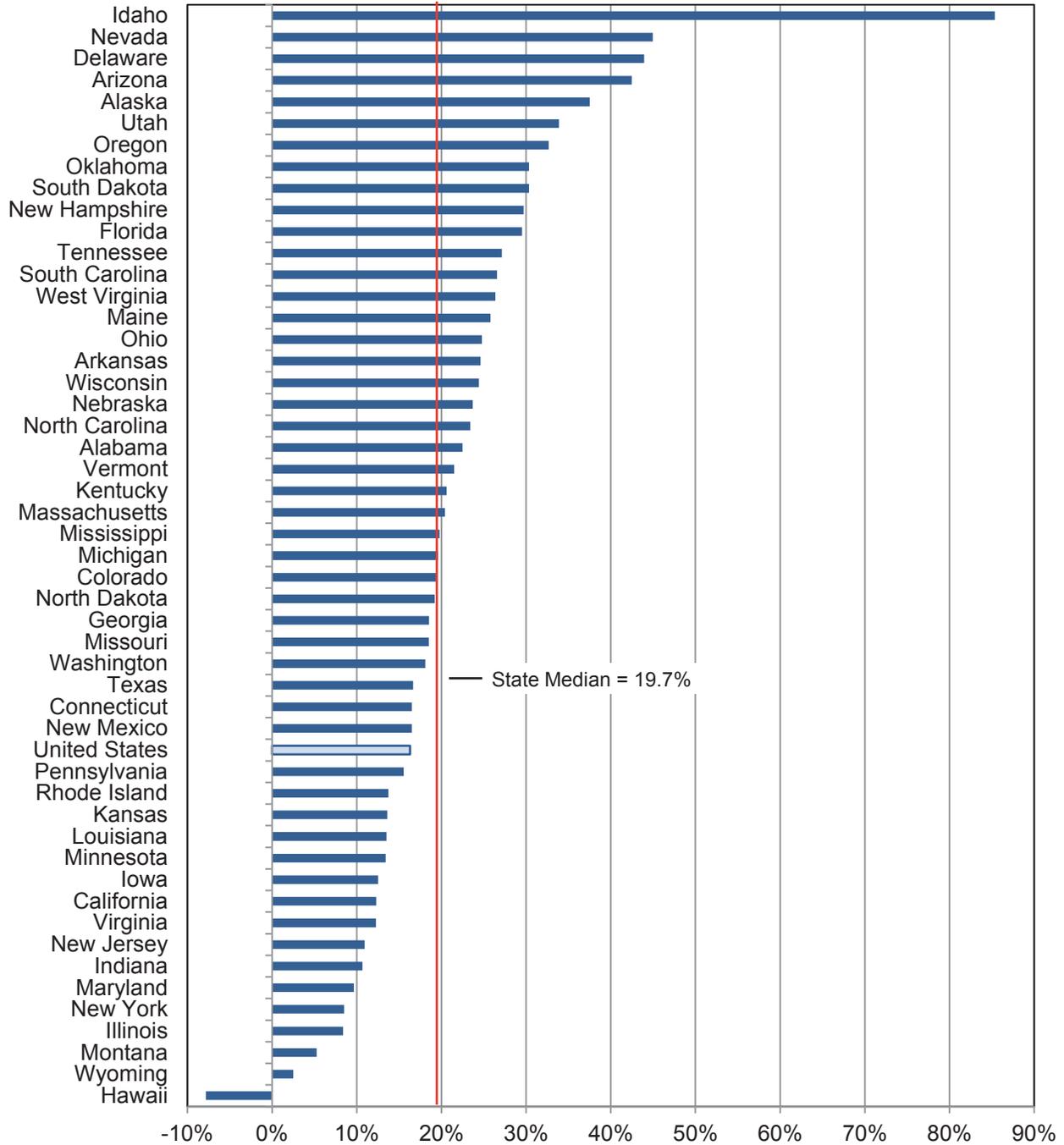
	Students Enrolled in UME			Residents and Fellows in GME			GME to UME	
	Total	Medical School	Osteopathic School	Total	ACGME Programs	OGME Programs	Ratio	Rank
United States	99,596	78,933	20,663	120,943	114,048	6,895	1.21	N.R.
Alabama	1,059	1,059	---	1,290	1,286	4	1.22	17
Alaska	---	---	---	39	33	6	---	---
Arizona	2,108	679	1,429	1,575	1,523	52	0.75	36
Arkansas	664	664	---	758	754	4	1.14	19
California	6,605	5,057	1,548	10,141	9,904	237	1.54	10
Colorado	1,309	701	608	1,226	1,217	9	0.94	30
Connecticut	907	907	---	2,215	2,204	11	2.44	1
Delaware	---	---	---	377	357	20	---	---
District of Columbia	2,037	2,037	---	1,650	1,650	---	0.81	N.R.
Florida	4,396	2,755	1,641	4,157	3,632	525	0.95	29
Georgia	2,478	2,088	390	2,155	2,136	19	0.87	32
Hawaii	258	258	---	389	389	---	1.51	12
Idaho	---	---	---	76	76	---	---	---
Illinois	5,637	4,867	770	6,271	5,930	341	1.11	21
Indiana	1,309	1,309	---	1,375	1,357	18	1.05	23
Iowa	1,534	648	886	859	827	32	0.56	41
Kansas	755	755	---	760	744	16	1.01	25
Kentucky	1,450	1,141	309	1,128	1,095	33	0.78	35
Louisiana	2,016	2,016	---	1,967	1,967	---	0.98	28
Maine	508	---	508	368	322	46	0.72	38
Maryland	1,947	1,947	---	2,749	2,749	---	1.41	14
Massachusetts	3,034	3,034	---	5,547	5,530	17	1.83	5
Michigan	3,952	2,791	1,161	6,422	4,907	1,515	1.63	9
Minnesota	1,222	1,222	---	2,269	2,256	13	1.86	4
Mississippi	711	500	211	574	557	17	0.81	34
Missouri	3,825	2,147	1,678	2,824	2,689	135	0.74	37
Montana	---	---	---	20	20	0	---	---
Nebraska	1,075	1,075	---	689	689	---	0.64	39
Nevada	791	253	538	354	274	80	0.45	45
New Hampshire	394	394	---	393	393	---	1.00	26
New Jersey	1,948	1,399	549	3,219	2,770	449	1.65	8
New Mexico	355	355	---	537	537	---	1.51	11
New York	9,748	8,034	1,714	16,747	16,022	725	1.72	6
North Carolina	2,048	2,048	---	3,083	3,059	24	1.51	13
North Dakota	254	254	---	118	118	---	0.46	44
Ohio	4,733	4,241	492	6,362	5,682	680	1.34	16
Oklahoma	1,034	669	365	1,075	829	246	1.04	24
Oregon	544	544	---	913	861	52	1.68	7
Pennsylvania	7,675	5,243	2,432	8,662	7,661	1,001	1.13	20
Puerto Rico	1,311	1,311	---	782	782	---	0.60	N.R.
Rhode Island	430	430	---	814	779	35	1.89	3
South Carolina	1,224	1,062	162	1,199	1,187	12	0.98	27
South Dakota	228	228	---	116	116	---	0.51	43
Tennessee	2,512	1,895	617	2,286	2,263	23	0.91	31
Texas	6,863	6,063	800	7,338	7,204	134	1.07	22
Utah	366	366	---	751	751	0	2.05	2
Vermont	467	467	---	277	277	---	0.59	40
Virginia	2,803	2,055	748	2,314	2,169	145	0.83	33
Washington	1,260	966	294	1,764	1,757	7	1.40	15
West Virginia	1,551	738	813	853	690	163	0.55	42
Wisconsin	1,572	1,572	---	1,847	1,808	39	1.17	18
Wyoming	---	---	---	51	41	10	---	---

Sources: Medical enrollment data are from the AAMC Data Warehouse accessed online 8/13/13 at <https://www.aamc.org/data/facts>. Osteopathic enrollment data are from the AACOM website <http://www.aacom.org/data/studentenrollment/Pages/default.aspx> (accessed 8/14/13). Residents on duty in ACGME programs are from the 2011 AAMC/AMA National GME Census. Residents on duty in OGME programs are from JAOA 2013: 113(4):304.

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states did not have a medical or osteopathic school or a GME program in the 2011-2012 academic year.

Figure 16. Percentage Change in Number of Residents and Fellows in ACGME-Accredited Programs, 2001 to 2011



Sources: Residents on duty in ACGME programs are from the 2001 and 2011 AAMC/AMA National GME Census.

Table 16. Change in Number of Residents and Fellows in ACGME-Accredited Programs, 2001-2011

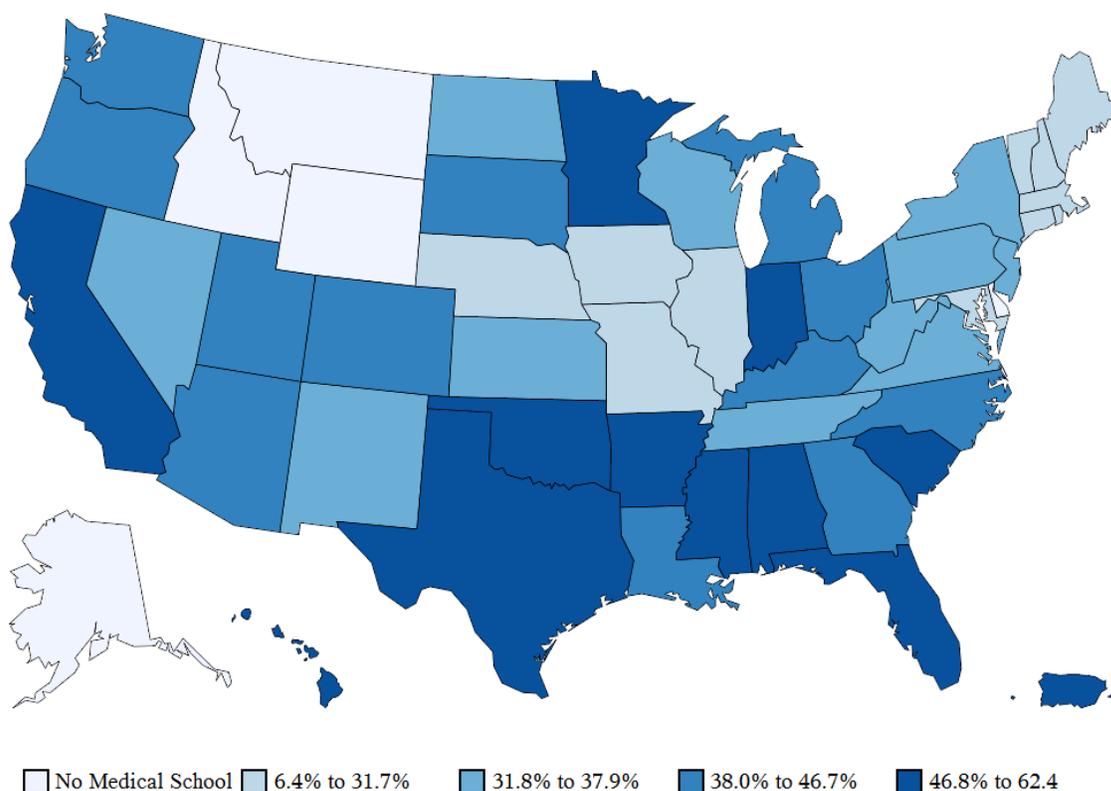
	Total Residents and Fellows in ACGME-Accredited Programs				
	2001	2011	Number Change	Percent Change	Rank
United States	98,070	114,048	15,975	16.3%	N.R.
Alabama	1,050	1,286	236	22.5%	21
Alaska	24	33	9	37.5%	5
Arizona	1,069	1,523	454	42.5%	4
Arkansas	605	754	149	24.6%	17
California	8,820	9,904	1,084	12.3%	41
Colorado	1,019	1,217	198	19.4%	27
Connecticut	1,892	2,204	312	16.5%	33
Delaware	248	357	109	44.0%	3
District of Columbia	1,609	1,650	41	2.5%	N.R.
Florida	2,804	3,632	828	29.5%	11
Georgia	1,802	2,136	334	18.5%	29
Hawaii	422	389	-33	-7.8%	50
Idaho	41	76	35	85.4%	1
Illinois	5,472	5,930	458	8.4%	47
Indiana	1,226	1,357	131	10.7%	44
Iowa	735	827	92	12.5%	40
Kansas	655	744	89	13.6%	37
Kentucky	908	1,095	187	20.6%	23
Louisiana	1,733	1,967	234	13.5%	38
Maine	256	322	66	25.8%	15
Maryland	2,507	2,749	242	9.7%	45
Massachusetts	4,592	5,530	938	20.4%	24
Michigan	4,103	4,907	804	19.6%	26
Minnesota	1,989	2,256	267	13.4%	39
Mississippi	465	557	92	19.8%	25
Missouri	2,269	2,689	420	18.5%	30
Montana	19	20	1	5.3%	48
Nebraska	557	689	132	23.7%	19
Nevada	189	274	85	45.0%	2
New Hampshire	303	393	90	29.7%	10
New Jersey	2,497	2,770	273	10.9%	43
New Mexico	461	537	76	16.5%	34
New York	14,767	16,022	1,255	8.5%	46
North Carolina	2,479	3,059	580	23.4%	20
North Dakota	99	118	19	19.2%	28
Ohio	4,554	5,682	1,128	24.8%	16
Oklahoma	636	829	193	30.3%	8
Oregon	649	861	212	32.7%	7
Pennsylvania	6,630	7,661	1,031	15.6%	35
Puerto Rico	763	782	19	2.5%	N.R.
Rhode Island	685	779	94	13.7%	36
South Carolina	938	1,187	249	26.5%	13
South Dakota	89	116	27	30.3%	9
Tennessee	1,780	2,263	483	27.1%	12
Texas	6,175	7,204	1,029	16.7%	32
Utah	561	751	190	33.9%	6
Vermont	228	277	49	21.5%	22
Virginia	1,932	2,169	237	12.3%	42
Washington	1,488	1,757	269	18.1%	31
West Virginia	546	690	144	26.4%	14
Wisconsin	1,453	1,808	355	24.4%	18
Wyoming	40	41	1	2.5%	49

Sources: Residents on duty in ACGME programs are from the 2001 and 2011 AAMC/AMA National GME Census.
N.R. = Not Ranked

Key Findings – Retention

- Overall, 38.7 percent of medical and osteopathic students end up practicing in the same state where they received their undergraduate medical education (UME). Six of the top 10 states in terms of UME retention were in the South (see Map 10, Figure 17, and Table 17).

Map 10. Percentage of Physicians Retained from UME, 2012

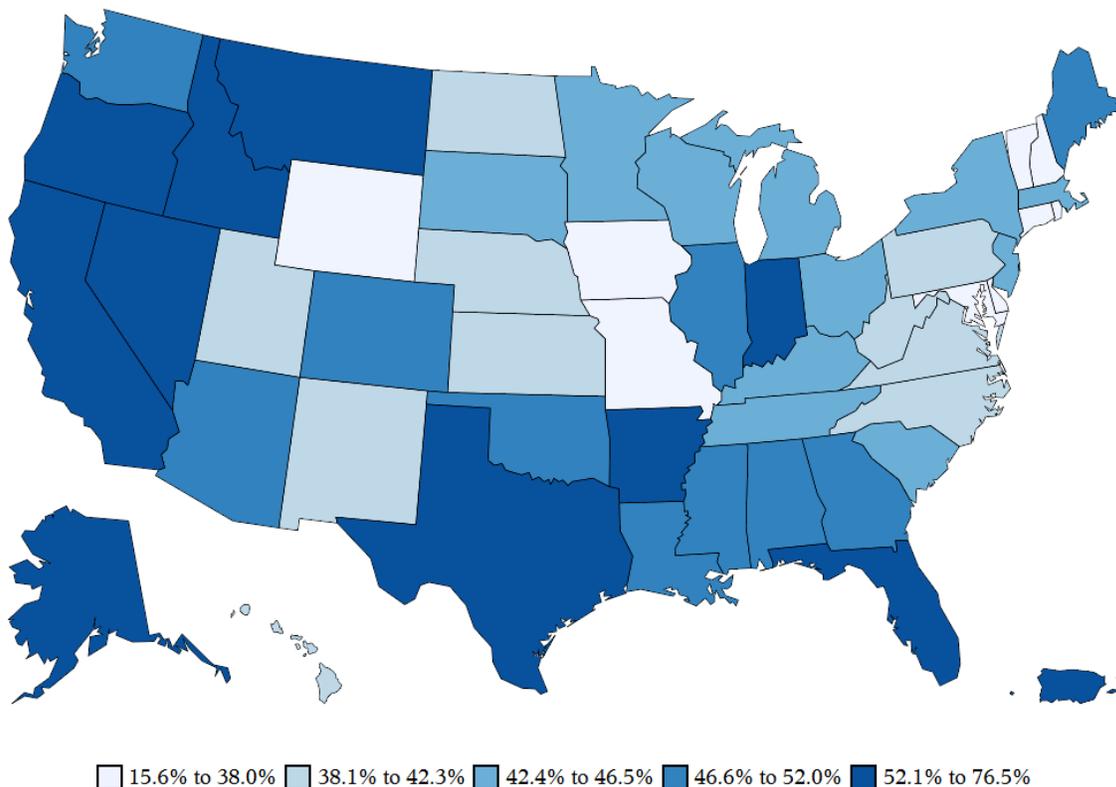


Source: AMA Physician Masterfile (December 31, 2012)

- In 2012, 46.8 percent of the physicians who graduated from a public medical or osteopathic school were practicing in the state from which they graduated (see Figure 18 and Table 18).

- After completing training in an ACGME-accredited program, 47.4 percent of physicians either stayed or returned to the state where they completed their most recent graduate medical education (GME). Six of the top 10 states with the highest GME retention rates were in the West (see Map 11, Figure 19, and Table 19).

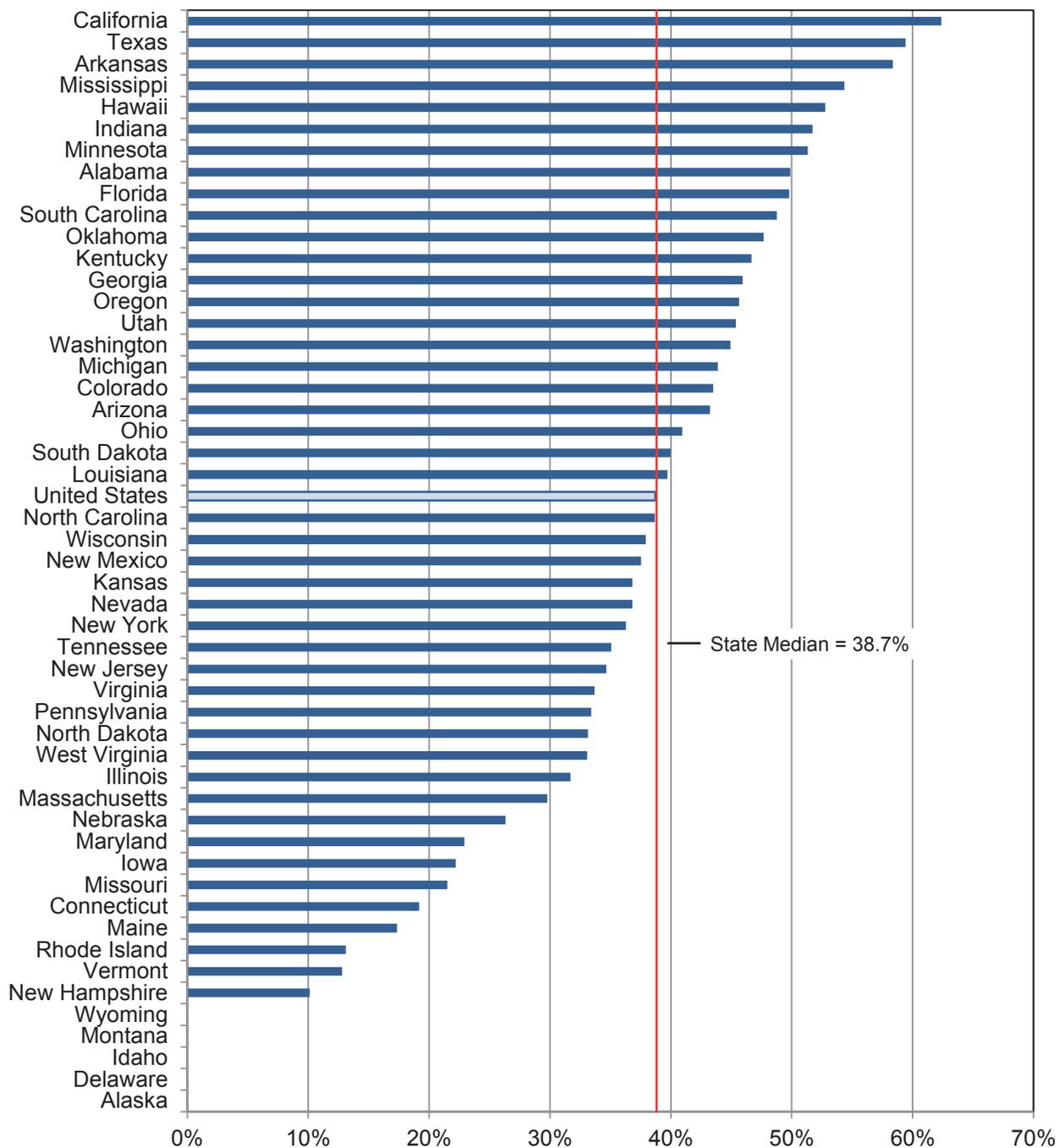
Map 11. Percentage of Residents and Fellows Retained from ACGME Programs, 2012



Source: AMA Physician Masterfile (December 31, 2012)

- Retention rates were highest for physicians who completed both UME and GME in the same state. Two-thirds (66.6 percent) of the physicians who completed UME and GME in the same state remained in state to practice. In terms of overall retention (i.e., both UME and GME were completed in the same state), eight of the top 10 states were in the South and West (see Figure 20 and Table 20).

Figure 17. Physicians Retained from Undergraduate Medical Education (UME), 2012



Source: AMA Physician Masterfile (December 31, 2012).

Table 17. Physicians Retained from Undergraduate Medical Education (UME), 2012

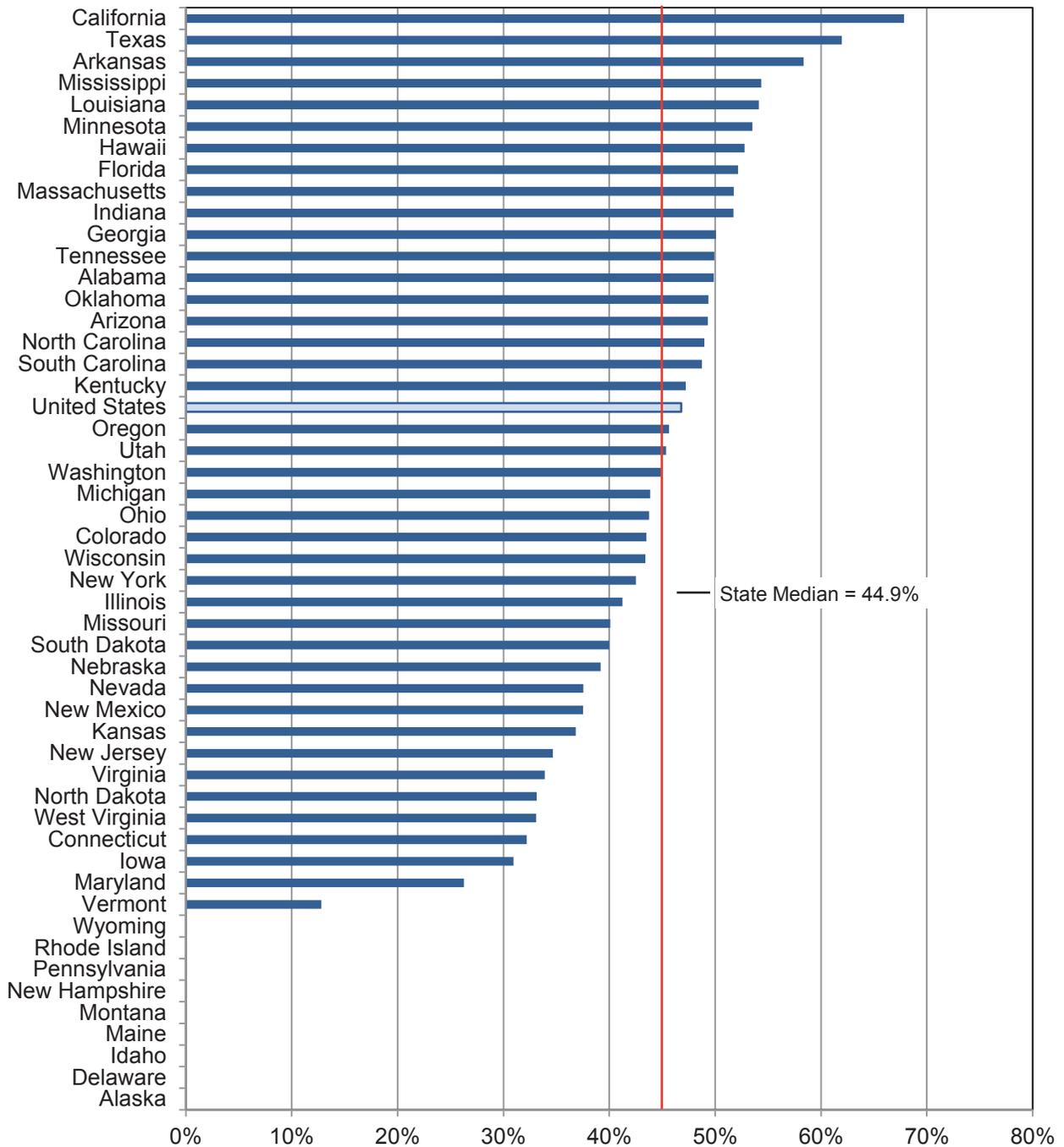
	Active Physicians Who Graduated from Medical or Osteopathic School In-State	Active Physicians Who Graduated from Medical or Osteopathic School In-State and Are Active In-State		
		Number	Percent	Rank
United States	609,987	236,182	38.7%	N.R.
Alabama	7,325	3,654	49.9%	8
Alaska	---	---	---	---
Arizona	3,931	1,700	43.2%	19
Arkansas	4,741	2,767	58.4%	3
California	39,338	24,538	62.4%	1
Colorado	4,639	2,018	43.5%	18
Connecticut	6,408	1,228	19.2%	41
Delaware	---	---	---	---
District of Columbia	16,225	1,038	6.4%	N.R.
Florida	15,072	7,504	49.8%	9
Georgia	11,874	5,455	45.9%	13
Hawaii	1,840	971	52.8%	5
Idaho	---	---	---	---
Illinois	41,566	13,177	31.7%	35
Indiana	9,947	5,146	51.7%	6
Iowa	12,118	2,692	22.2%	39
Kansas	6,299	2,320	36.8%	26
Kentucky	8,652	4,038	46.7%	12
Louisiana	14,892	5,915	39.7%	22
Maine	2,144	372	17.4%	42
Maryland	14,254	3,265	22.9%	38
Massachusetts	20,787	6,192	29.8%	36
Michigan	22,983	10,084	43.9%	17
Minnesota	10,140	5,205	51.3%	7
Mississippi	4,007	2,178	54.4%	4
Missouri	26,880	5,783	21.5%	40
Montana	---	---	---	---
Nebraska	8,804	2,317	26.3%	37
Nevada	1,393	513	36.8%	27
New Hampshire	1,877	190	10.1%	45
New Jersey	10,845	3,760	34.7%	30
New Mexico	2,329	874	37.5%	25
New York	67,847	24,612	36.3%	28
North Carolina	14,419	5,575	38.7%	23
North Dakota	1,548	513	33.1%	33
Ohio	29,783	12,194	40.9%	20
Oklahoma	7,731	3,686	47.7%	11
Oregon	3,656	1,669	45.7%	14
Pennsylvania	47,529	15,880	33.4%	32
Puerto Rico	8,389	4,506	53.7%	N.R.
Rhode Island	2,363	310	13.1%	43
South Carolina	6,639	3,237	48.8%	10
South Dakota	1,433	573	40.0%	21
Tennessee	14,289	5,010	35.1%	29
Texas	37,902	22,517	59.4%	2
Utah	3,555	1,613	45.4%	15
Vermont	3,227	413	12.8%	44
Virginia	13,484	4,541	33.7%	31
Washington	5,752	2,584	44.9%	16
West Virginia	5,879	1,945	33.1%	34
Wisconsin	11,641	4,416	37.9%	24
Wyoming	---	---	---	---

Source: AMA Physician Masterfile (December 31, 2012)

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a medical or osteopathic school.

Figure 18. Physicians Retained from *Public* Undergraduate Medical Education, 2012



Source: AMA Physician Masterfile (December 31, 2012).

Table 18. Physicians Retained from *Public Undergraduate Medical Education, 2012*

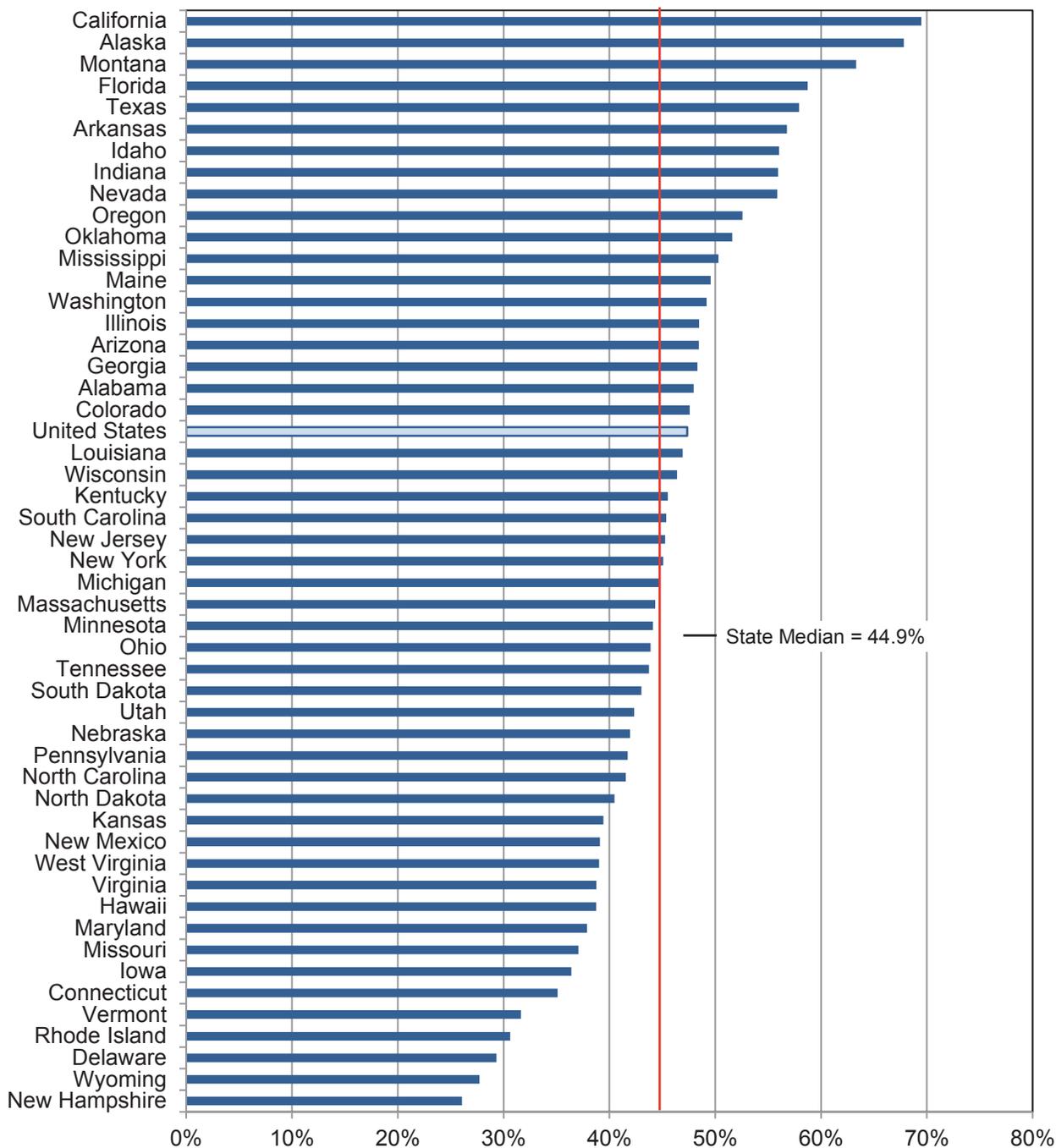
	Active Physicians Who Graduated from Public Medical or Osteopathic School In-State	Active Physicians Who Graduated from Public Medical or Osteopathic School In-State and Are Active In-State		
		Number	Percent	Rank
United States	335,615	157,051	46.8%	N.R.
Alabama	7,325	3,654	49.9%	13
Alaska	---	---	---	---
Arizona	2,956	1,458	49.3%	15
Arkansas	4,741	2,767	58.4%	3
California	21,535	14,615	67.9%	1
Colorado	4,639	2,018	43.5%	24
Connecticut	2,535	816	32.2%	38
Delaware	---	---	---	---
District of Columbia	---	---	---	N.R.
Florida	6,764	3,529	52.2%	8
Georgia	6,161	3,086	50.1%	11
Hawaii	1,840	971	52.8%	7
Idaho	---	---	---	---
Illinois	12,928	5,333	41.3%	27
Indiana	9,947	5,146	51.7%	10
Iowa	5,936	1,838	31.0%	39
Kansas	6,299	2,320	36.8%	33
Kentucky	8,206	3,875	47.2%	18
Louisiana	9,176	4,966	54.1%	5
Maine	---	---	---	---
Maryland	9,749	2,560	26.3%	40
Massachusetts	2,882	1,492	51.8%	9
Michigan	22,983	10,084	43.9%	22
Minnesota	8,937	4,783	53.5%	6
Mississippi	4,007	2,178	54.4%	4
Missouri	6,265	2,512	40.1%	28
Montana	---	---	---	---
Nebraska	4,689	1,837	39.2%	30
Nevada	1,318	495	37.6%	31
New Hampshire	---	---	---	---
New Jersey	10,845	3,760	34.7%	34
New Mexico	2,329	874	37.5%	32
New York	21,601	9,183	42.5%	26
North Carolina	6,916	3,387	49.0%	16
North Dakota	1,548	513	33.1%	36
Ohio	24,605	10,768	43.8%	23
Oklahoma	7,409	3,657	49.4%	14
Oregon	3,656	1,669	45.7%	19
Pennsylvania	---	---	---	---
Puerto Rico	4390	2,484	56.6%	N.R.
Rhode Island	---	---	---	---
South Carolina	6,639	3,237	48.8%	17
South Dakota	1,433	573	40.0%	29
Tennessee	7,826	3,908	49.9%	12
Texas	32,013	19,840	62.0%	2
Utah	3,555	1,613	45.4%	20
Vermont	3,227	413	12.8%	41
Virginia	13,282	4,502	33.9%	35
Washington	5,749	2,582	44.9%	21
West Virginia	5,879	1,945	33.1%	37
Wisconsin	5,285	2,294	43.4%	25
Wyoming	---	---	---	---

Source: AMA Physician Masterfile (December 31, 2012)

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a public medical or osteopathic school.

Figure 19. Physicians Retained from Graduate Medical Education (GME), 2012



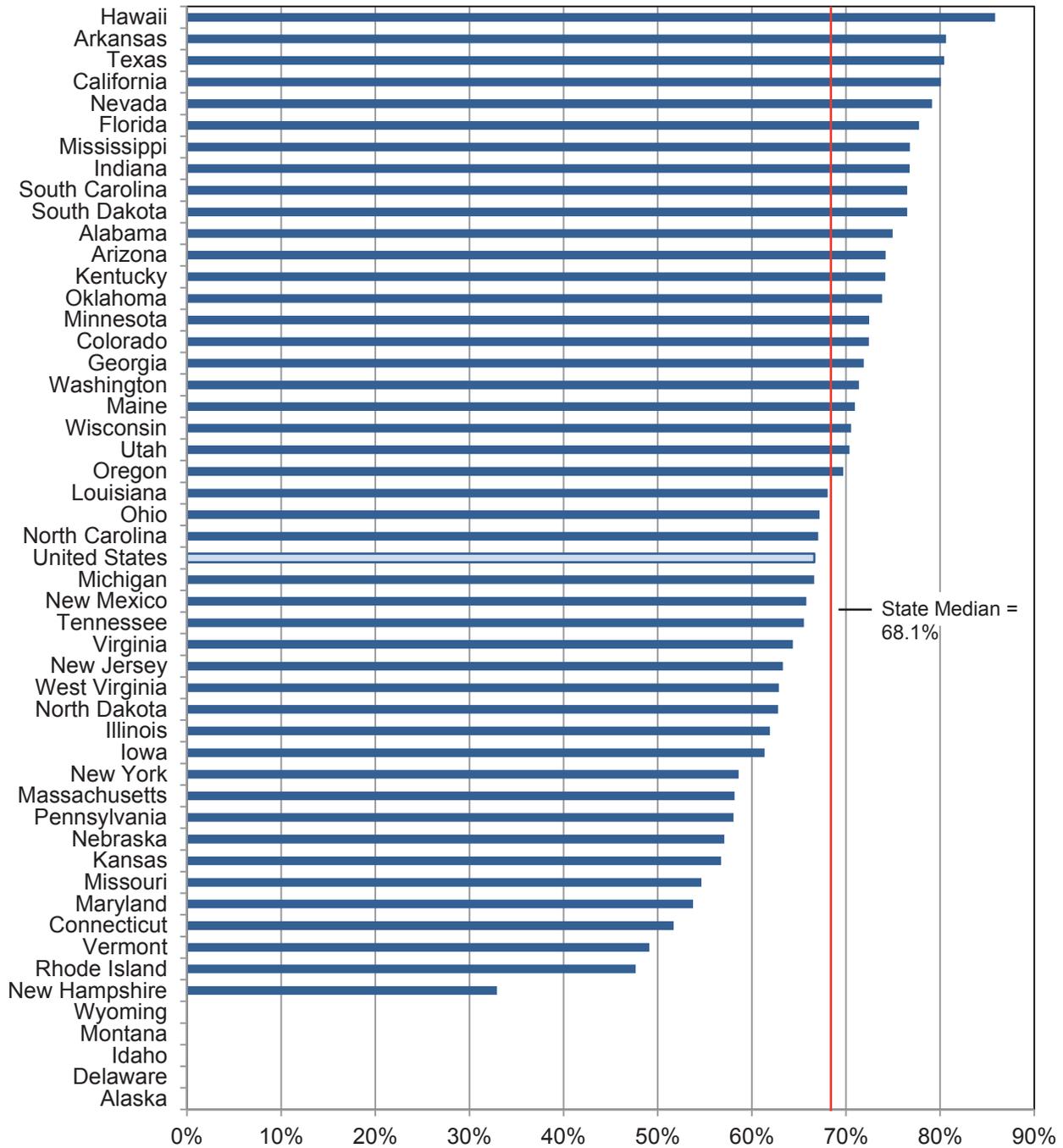
Source: AMA Physician Masterfile (December 31, 2012).

Table 19. Physicians Retained from Graduate Medical Education (GME), 2012

	Active Physicians Who Completed GME In-State	Active Physicians Who Completed GME In-State and are Active In-State		
		Number	Percent	Rank
United States	775,869	367,387	47.4%	N.R.
Alabama	8,285	3,973	48.0%	18
Alaska	115	78	67.8%	2
Arizona	7,863	3,809	48.4%	16
Arkansas	4,566	2,592	56.8%	6
California	77,587	53,914	69.5%	1
Colorado	9,655	4,591	47.6%	19
Connecticut	13,453	4,721	35.1%	45
Delaware	1,517	445	29.3%	48
District of Columbia	16,044	2,501	15.6%	N.R.
Florida	22,062	12,956	58.7%	4
Georgia	14,357	6,938	48.3%	17
Hawaii	3,005	1,164	38.7%	41
Idaho	348	195	56.0%	7
Illinois	42,140	20,425	48.5%	15
Indiana	10,014	5,601	55.9%	8
Iowa	6,572	2,393	36.4%	44
Kansas	5,719	2,255	39.4%	37
Kentucky	7,777	3,540	45.5%	22
Louisiana	12,687	5,954	46.9%	20
Maine	1,894	939	49.6%	13
Maryland	19,451	7,369	37.9%	42
Massachusetts	35,142	15,574	44.3%	27
Michigan	33,347	14,939	44.8%	26
Minnesota	17,848	7,874	44.1%	28
Mississippi	3,457	1,739	50.3%	12
Missouri	18,186	6,742	37.1%	43
Montana	90	57	63.3%	3
Nebraska	4,187	1,757	42.0%	33
Nevada	1,026	573	55.8%	9
New Hampshire	1,888	492	26.1%	50
New Jersey	18,310	8,289	45.3%	24
New Mexico	3,199	1,251	39.1%	38
New York	111,366	50,222	45.1%	25
North Carolina	18,416	7,653	41.6%	35
North Dakota	862	349	40.5%	36
Ohio	38,533	16,910	43.9%	29
Oklahoma	5,756	2,970	51.6%	11
Oregon	5,405	2,841	52.6%	10
Pennsylvania	51,557	21,508	41.7%	34
Puerto Rico	6,874	5,258	76.5%	N.R.
Rhode Island	4,394	1,346	30.6%	47
South Carolina	7,622	3,458	45.4%	23
South Dakota	730	314	43.0%	31
Tennessee	13,800	6,037	43.7%	30
Texas	46,506	26,939	57.9%	5
Utah	4,571	1,935	42.3%	32
Vermont	1,672	529	31.6%	46
Virginia	14,618	5,668	38.8%	40
Washington	11,586	5,699	49.2%	14
West Virginia	4,090	1,596	39.0%	39
Wisconsin	12,226	5,671	46.4%	21
Wyoming	368	102	27.7%	49

Source: AMA Physician Masterfile (December 31, 2012)

Figure 20. Physicians Retained from Undergraduate Medical Education (UME) and Graduate Medical Education (GME) Combined, 2012



Source: AMA Physician Masterfile (December 31, 2012).

Table 20. Physicians Retained from Undergraduate Medical Education (UME) and Graduate Medical Education (GME) Combined, 2012

	Active Physicians Who Graduated from Medical or Osteopathic School In State <i>and</i> Completed GME In State	Active Physicians Who Graduated from Medical or Osteopathic School In State, Completed GME In State, and are Active In State		
		Number	Percent	Rank
United States	236,266	157,449	66.6%	N.R.
Alabama	3,020	2,264	75.0%	11
Alaska	---	---	---	---
Arizona	1,296	962	74.2%	12
Arkansas	2,325	1,875	80.6%	2
California	24,690	19,771	80.1%	4
Colorado	1,673	1,212	72.4%	16
Connecticut	1,511	781	51.7%	42
Delaware	---	---	---	---
District of Columbia	3,522	707	20.1%	N.R.
Florida	5,218	4,058	77.8%	6
Georgia	4,214	3,030	71.9%	17
Hawaii	586	503	85.8%	1
Idaho	---	---	---	---
Illinois	15,317	9,487	61.9%	33
Indiana	4,723	3,626	76.8%	8
Iowa	2,373	1,456	61.4%	34
Kansas	2,363	1,341	56.7%	39
Kentucky	3,014	2,236	74.2%	13
Louisiana	5,998	4,082	68.1%	23
Maine	203	144	70.9%	19
Maryland	3,563	1,915	53.7%	41
Massachusetts	7,887	4,587	58.2%	36
Michigan	10,264	6,837	66.6%	26
Minnesota	5,151	3,733	72.5%	15
Mississippi	1,620	1,244	76.8%	7
Missouri	5,803	3,171	54.6%	40
Montana	---	---	---	---
Nebraska	2,272	1,297	57.1%	38
Nevada	211	167	79.1%	5
New Hampshire	161	53	32.9%	45
New Jersey	3,011	1,906	63.3%	30
New Mexico	640	421	65.8%	27
New York	33,801	19,806	58.6%	35
North Carolina	4,618	3,096	67.0%	25
North Dakota	317	199	62.8%	32
Ohio	12,811	8,610	67.2%	24
Oklahoma	2,723	2,011	73.9%	14
Oregon	1,067	744	69.7%	22
Pennsylvania	18,725	10,870	58.1%	37
Puerto Rico	3,836	3,008	78.4%	N.R.
Rhode Island	340	162	47.6%	44
South Carolina	2,410	1,844	76.5%	9
South Dakota	234	179	76.5%	10
Tennessee	4,708	3,086	65.5%	28
Texas	19,393	15,597	80.4%	3
Utah	915	644	70.4%	21
Vermont	344	169	49.1%	43
Virginia	3,795	2,442	64.3%	29
Washington	1,975	1,410	71.4%	18
West Virginia	1,804	1,134	62.9%	31
Wisconsin	3,657	2,580	70.5%	20
Wyoming	---	---	---	---

Source: AMA Physician Masterfile (December 31, 2012)

N.R. = Not Ranked

--- Indicates that the data are not applicable. Some states do not have a medical or osteopathic school.

Summary

- Between 2008 and 2012, there has been a small increase in the median number of active physicians and active patient care physicians per 100,000 population, but no appreciable increase in the median number of active primary care physicians. The state medians for the percent of female physicians and the percent of physicians age 60 or older increased from 2008 to 2012. While the median number of students enrolled in undergraduate medical education (UME) has increased relative to the population, the number of students enrolled in graduate medical education (GME) has remained flat. In terms of state retention, there has been very little change in the percent of physicians retained from both graduate and undergraduate medical education.

Table 21. State Medians for Key Physician Workforce Measures, 2008, 2010, and 2012

	Median ¹ 2008	Median ² 2010	Median ³ 2012
Physician Supply			
Active Physicians per 100,000 Population	239.6	244.2	244.5
Total Active Patient Care Physicians per 100,000 Population	213.5	215.1	217.6
Active Primary Care Physicians per 100,000 Population	89.9	91.0	90.3
Active Patient Care Primary Care Physicians per 100,000 Population	80.1	80.4	81.5
Percent Active Female Physicians	28.0%	29.3%	30.8%
Percent of Active Physicians who are International Medical Graduates	17.6%	17.8%	18.2%
Percentage of Active Physicians Who Are Age 60 or Older	23.4%	25.2%	26.5%
Undergraduate Medical Education (UME)			
Students Enrolled in Medical or Osteopathic School per 100,000 Population	25.4	27.9	29.1
Students Enrolled in Public Medical or Osteopathic Schools per 100,000 Population	15.5	19.7	18.8
Percent of Medical School Matriculants from In-State	64.4%	67.1%	67.7%
Graduate Medical Education³			
Total Residents/Fellows in ACGME Programs per 100,000 Population	26.8	26.2	26.8
Total Residents/Fellows in Primary Care ACGME Programs per 100,000 Population	10.5	10.2	10.4
Percentage of International Medical Graduates in ACGME Programs	22.9%	23.1%	22.4%
Ratio of Residents and Fellows (GME) to Medical and Osteopathic Students (UME)	1.11	1.09	1.05
Retention			
Percent of Physicians Retained in State from UME	37.2%	39.2%	38.7%
Percent of Physicians Retained in State from UME (Public)	42.4%	45.5%	44.9%
Percent of Physicians Retained in State from GME	45.4%	45.7%	44.9%
Percent of Physicians Retained in State from UME and GME Combined	66.5%	67.4%	68.1%

¹2009 State Physician Workforce Data Book, AAMC, <https://www.aamc.org/download/47340/data/statedata2009.pdf>

²2011 State Physician Workforce Data Book, AAMC, <https://www.aamc.org/download/263512/data/statedata2011.pdf>

³Data for Graduate Medical Education section reflect 2011 numbers



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