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# 2017 State Physician Workforce Data Report



November 2017

Association of  
American Medical Colleges

## Acknowledgments

We would like to express our appreciation to our AAMC colleagues for their collaborative efforts. The publication was produced under the direction of Michael Dill, Karen Jones, and Kara Fisher. We are grateful to the AAMC Data and Operations and Data Warehouse teams, without whose help the data analysis would not be possible, as well as to the AAMC Editorial Services, Creative Services, and Communications teams.

We also owe special thanks to the American Medical Association for making the Physician Masterfile available to the AAMC for research purposes and the American Association of Colleges of Osteopathic Medicine for providing data on students in DO-granting institutions.

The Workforce Studies team welcomes your comments and suggestions for future editions of this report.

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## Executive Summary

*The 2017 State Physician Workforce Data Report*, which is an update of the *2015 State Physician Workforce Data Book*, examines current physician supply, medical school enrollment, and graduate medical education (GME) in the United States. The report provides the most current data available for each state, the District of Columbia (D.C.), and Puerto Rico in a series of maps, figures, and tables, including the U.S. average (excluding Puerto Rico), state median (excluding D.C. and Puerto Rico),<sup>1</sup> and state rank. Additionally, this edition includes a summary table that compares the state median for each physician workforce measure in 2008, 2010, 2012, 2014, and 2016.

The *Data Report* is divided into four sections:

**Section 1: Physician Supply.** This section includes data on active physicians in each state, including physician-to-population ratios, percentage who are female, age distribution, and school type. Data by race and ethnicity are not available.

**Section 2: Undergraduate Medical Education.** This section provides information on enrollment at both MD-granting and DO-granting institutions, 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 School of Medicine to reserve undergraduate medical education (UME) slots for residents of those states. For this report, all students at the University of Washington Medical School are counted in the Washington enrollment 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 and medical school type. This section includes data on MDs and DOs training in programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). Where possible, data for physicians training in programs accredited by the American Osteopathic Association (AOA) are also included.

**Section 4: Retention.** This section presents data on states' retention of the physicians they educate in medical schools and GME programs.

The primary data sources for this report are:

- The American Medical Association (AMA) Physician Masterfile (December 31, 2016)
- 2016 population estimates from the U.S. Census Bureau
- The AAMC Student Record System
- The American Association of Colleges of Osteopathic Medicine
- The American Osteopathic Association
- The National GME Census, conducted jointly by the AAMC and the AMA
- The AAMC Applicant Matriculant File

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1. The U.S. average differs from the state median. The U.S. average is calculated by summing the values for all 50 states and D.C. and dividing the sum by 51. The state median, on the other hand, excludes D.C. and Puerto Rico, and is the value directly in the middle of the 50 states so that 25 states are above the state median, and 25 states are below the state median.

## State Snapshots

Individual state data summarized across all tables and figures in this data report, as well as physician counts for the top specialties and interstate migration of physicians in GME and active practice, can be downloaded online as a PDF at [aamc.org/workforce](http://aamc.org/workforce).

## Key Definitions

**Active physicians:** Physicians (federal and nonfederal) who are licensed by a state are considered active, provided they are working at least 20 hours per week. Physicians who are retired, semiretired, temporarily not in practice, or not active for other reasons or have not completed their graduate medical education are excluded. Active physicians include those working in direct patient care, administration, medical teaching, research, or other nonpatient care activities. Active physicians include those with a doctor of medicine (MD) or a doctor of osteopathic medicine (DO) degree. The total number of active physicians may differ between tables in this report as a result of missing information in the data file. For example, to determine the percentage of active physicians who are female, the total number of active physicians excludes people whose sex was not reported in the data file.

Unless stated otherwise, we include physicians who are active in the 50 U.S. states, D.C., and Puerto Rico—regardless of where they attended medical school. Physicians active in other U.S. territories are excluded. The location of the physician’s office was used to determine whether or not an active physician is in the United States. In cases where the physician’s office location was missing, the state from the preferred mailing address was used. This substitution occurred for approximately 11% 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. MD:** Physicians who received their MD degree from a medical school in the United States or Puerto Rico that is accredited by the Liaison Committee on Medical Education (LCME). Graduates of Canadian medical schools are not counted as U.S. MDs.

**DO:** Physicians who received their DO degree from a U.S. osteopathic school that is accredited by the American Osteopathic Association Commission on Osteopathic College Accreditation (COCA).

**International medical graduate (IMG):** An individual who graduated from a medical school outside 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. MDs, 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 (pediatrics), family medicine, general practice, geriatric medicine (family practice), geriatric medicine (internal 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, family practice, geriatric medicine (family practice), geriatric medicine (internal medicine), geriatric medicine/family practice, geriatric medicine/internal medicine, internal medicine, internal medicine/family practice, internal medicine/pediatrics, or pediatrics.

**Residents:** Physicians who have completed undergraduate medical education and are in a core 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.

## Commonly Used Acronyms

<b>AACOM</b>	American Association of Colleges of Osteopathic Medicine
<b>AAMC</b>	Association of American Medical Colleges
<b>ACGME</b>	Accreditation Council for Graduate Medical Education
<b>AMA</b>	American Medical Association
<b>AOA</b>	American Osteopathic Association
<b>DO</b>	Doctor of Osteopathic Medicine
<b>GME</b>	Graduate Medical Education
<b>IMG</b>	International Medical Graduate
<b>MD</b>	Doctor of Medicine
<b>OGME</b>	Osteopathic Graduate Medical Education
<b>UME</b>	Undergraduate Medical Education



## Section 1: Physician Supply

### Key Findings

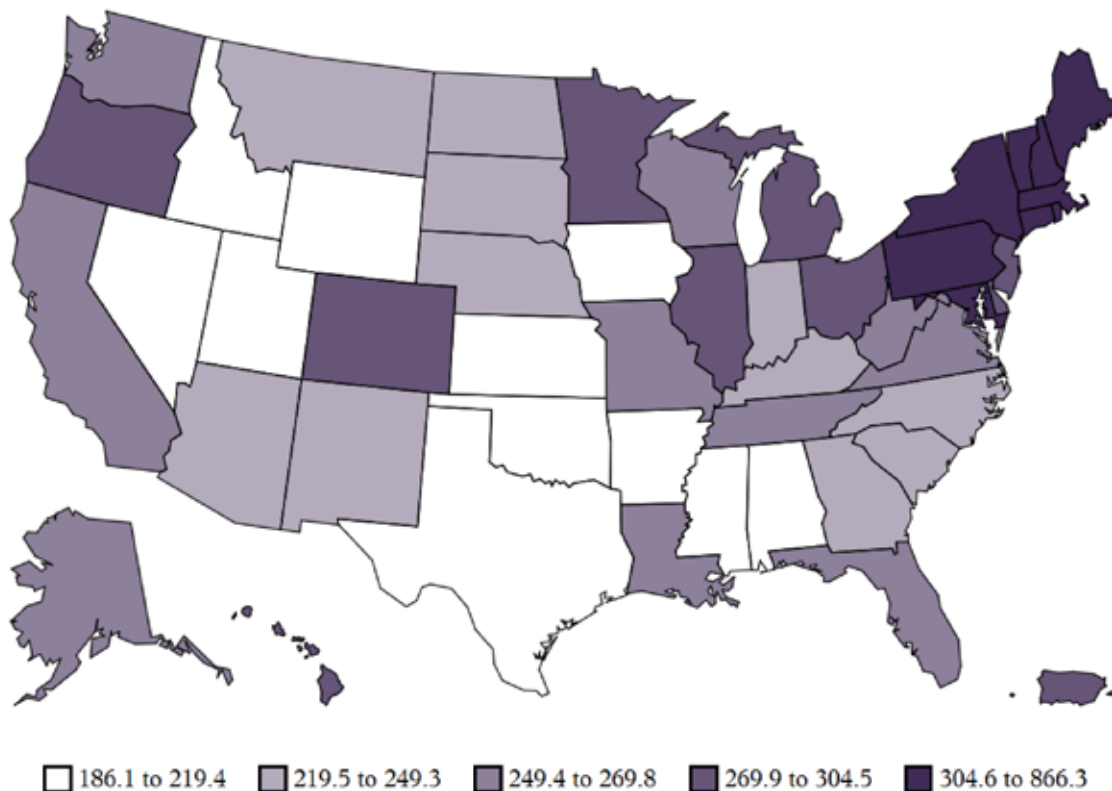
- In 2016, there were 271.6 active physicians per 100,000 population in the United States, ranging from a high of 443.5 in Massachusetts to a low of 186.1 in Mississippi. The states with the highest number of physicians per 100,000 population are concentrated in the Northeast (see Map 1.1, Figure 1.1, and Table 1.1).
- There were 91.7 active primary care physicians per 100,000 population in the United States in 2016 (see Map 1.3, Figure 1.3, and Table 1.3). Once again, Massachusetts was at the top, with a value of 134.4, while Mississippi had the lowest number of primary care physicians per 100,000 population (64.4).
- Nationally, there were 7.8 active general surgeons per 100,000 population in 2016 (see Map 1.5, Figure 1.5, and Table 1.5). Maine and Vermont had the highest number of general surgeons per 100,000 population (12.0), while Utah and Nevada had the lowest number of general surgeons per 100,000 population (5.7 and 6.1, respectively).
- Nationally, 24.5% of active physicians were IMGs (see Map 1.8, Figure 1.8, and Table 1.8). States varied widely in the percentage of their physician workforce that graduated from an international medical school.<sup>1</sup> New Jersey and New York had the highest percentages (38.7% and 37.2%, respectively), while Idaho and Montana had the lowest (5.1% and 5.2%, respectively).
- In 2016, 34.6% of active physicians in the United States were female (see Figure 1.7 and Table 1.7). More than a third of active physicians in 28 states, Puerto Rico, and the District of Columbia were female, while Utah had the lowest percentage of female physicians (23.8%).
- Nationally, almost one-third (30.9%) of active physicians were age 60 or older. There was some variation among the states in the percentage of physicians who were age 60 or older in 2016. New Mexico had the highest percentage (37.0%), while Utah had the lowest percentage of physicians 60 or older (26.0%) (see Figure 1.9 and Table 1.9).

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1. Graduates from Canadian medical schools are not considered IMGs. See **Key Definitions** for more information.

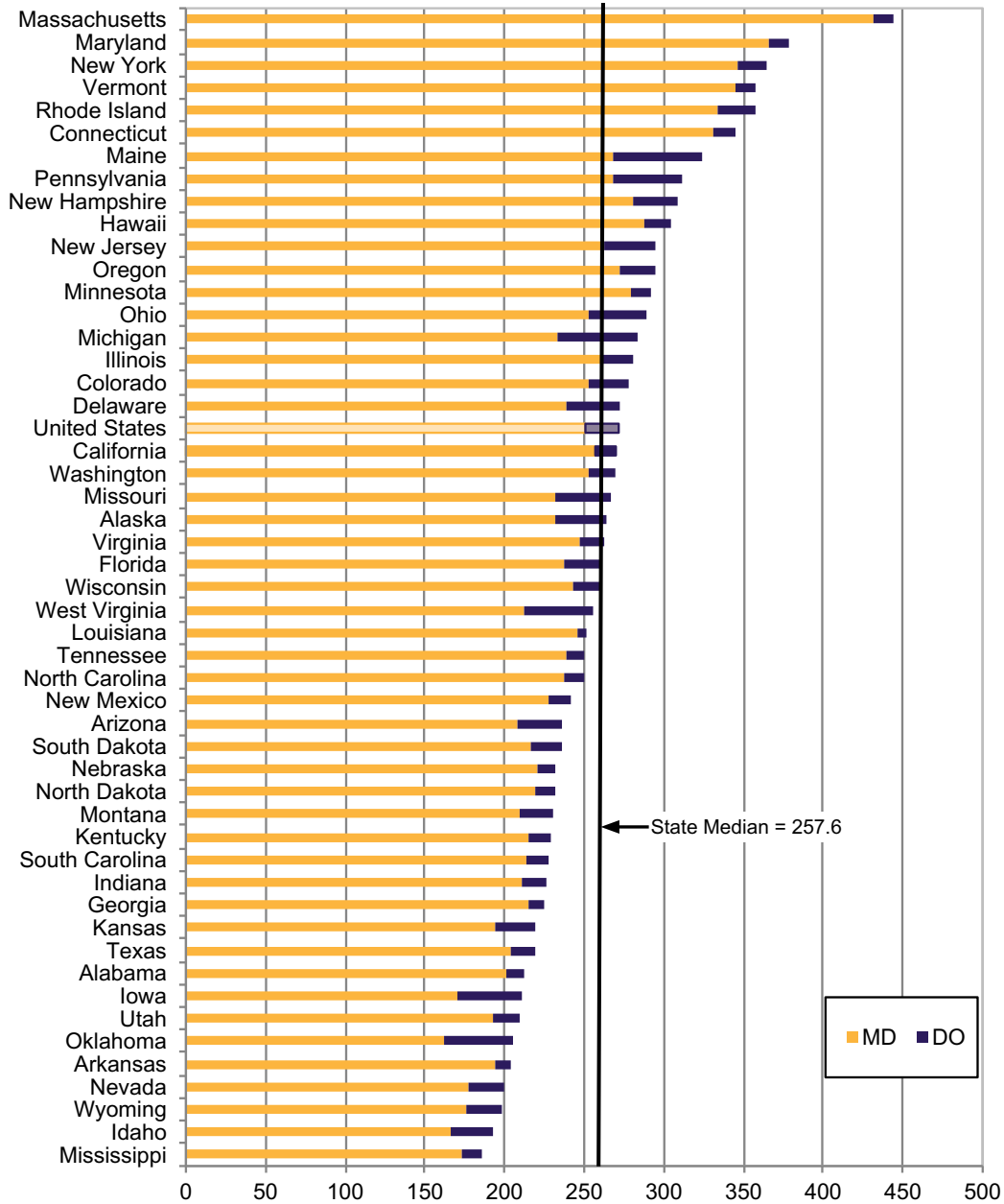
## 1. Active Physicians per 100,000 Population by Degree Type, 2016

Map 1.1. Active physicians per 100,000 population, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data include MDs and DOs and are from the 2017 AMA Physician Masterfile (December 31, 2016).

Figure 1.1. Active physicians per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose school type was unavailable (n = 39) are excluded.

Table 1.1. Active Physicians per 100,000 Population by Degree Type, 2016

	Total Population	Total Active Physicians*			Active MDs		Active DOs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	877,616	271.6	N.R.	810,043	250.7	67,534	20.9
Alabama	4,863,300	10,329	212.4	42	9,789	201.3	540	11.1
Alaska	741,894	1,961	264.3	22	1,720	231.8	241	32.5
Arizona	6,931,071	16,345	235.8	31	14,427	208.1	1,916	27.6
Arkansas	2,988,248	6,088	203.7	46	5,789	193.7	299	10.0
California	39,250,017	105,907	269.8	19	100,833	256.9	5,074	12.9
Colorado	5,540,545	15,422	278.3	17	14,019	253.0	1,403	25.3
Connecticut	3,576,452	12,341	345.1	6	11,859	331.6	482	13.5
Delaware	952,065	2,592	272.3	18	2,270	238.4	322	33.8
District of Columbia	681,170	5,901	866.3	N.R.	5,778	848.2	123	18.1
Florida	20,612,439	53,685	260.4	24	48,902	237.2	4,778	23.2
Georgia	10,310,371	23,215	225.2	39	22,138	214.7	1,074	10.4
Hawaii	1,428,557	4,350	304.5	10	4,118	288.3	232	16.2
Idaho	1,683,140	3,241	192.6	49	2,796	166.1	445	26.4
Illinois	12,801,539	35,927	280.6	16	33,487	261.6	2,439	19.1
Indiana	6,633,053	15,025	226.5	38	13,965	210.5	1,060	16.0
Iowa	3,134,693	6,627	211.4	43	5,362	171.1	1,265	40.4
Kansas	2,907,289	6,380	219.4	40	5,629	193.6	751	25.8
Kentucky	4,436,974	10,158	228.9	36	9,512	214.4	646	14.6
Louisiana	4,681,666	11,737	250.7	27	11,526	246.2	211	4.5
Maine	1,331,479	4,320	324.5	7	3,563	267.6	755	56.7
Maryland	6,016,447	22,731	377.8	2	21,968	365.1	762	12.7
Massachusetts	6,811,779	30,213	443.5	1	29,347	430.8	863	12.7
Michigan	9,928,300	28,206	284.1	15	23,097	232.6	5,108	51.4
Minnesota	5,519,952	16,105	291.8	13	15,386	278.7	718	13.0
Mississippi	2,988,726	5,562	186.1	50	5,190	173.7	371	12.4
Missouri	6,093,000	16,268	267.0	21	14,103	231.5	2,164	35.5
Montana	1,042,520	2,401	230.3	35	2,190	210.1	211	20.2
Nebraska	1,907,116	4,426	232.1	33	4,205	220.5	221	11.6
Nevada	2,940,058	5,884	200.1	47	5,225	177.7	659	22.4
New Hampshire	1,334,795	4,113	308.1	9	3,740	280.2	373	27.9
New Jersey	8,944,469	26,378	294.9	11	23,509	262.8	2,868	32.1
New Mexico	2,081,015	5,023	241.4	30	4,732	227.4	291	14.0
New York	19,745,289	72,095	365.1	3	68,344	346.1	3,745	19.0
North Carolina	10,146,788	25,295	249.3	29	24,018	236.7	1,277	12.6
North Dakota	757,952	1,759	232.1	34	1,662	219.3	97	12.8
Ohio	11,614,373	33,621	289.5	14	29,302	252.3	4,318	37.2
Oklahoma	3,923,561	8,057	205.3	45	6,334	161.4	1,723	43.9
Oregon	4,093,465	12,050	294.4	12	11,138	272.1	912	22.3
Pennsylvania	12,784,227	39,863	311.8	8	34,304	268.3	5,557	43.5
Puerto Rico	3,411,307	9,874	289.4	N.R.	9,873	289.4	1	0.0
Rhode Island	1,056,426	3,770	356.9	5	3,524	333.6	246	23.3
South Carolina	4,961,119	11,269	227.1	37	10,602	213.7	667	13.4
South Dakota	865,454	2,038	235.5	32	1,874	216.5	164	18.9
Tennessee	6,651,194	16,627	250.0	28	15,851	238.3	776	11.7
Texas	27,862,596	61,132	219.4	41	56,699	203.5	4,428	15.9
Utah	3,051,217	6,389	209.4	44	5,882	192.8	507	16.6
Vermont	624,594	2,233	357.5	4	2,152	344.5	81	13.0
Virginia	8,411,808	22,072	262.4	23	20,825	247.6	1,247	14.8
Washington	7,288,000	19,623	269.3	20	18,429	252.9	1,194	16.4
West Virginia	1,831,102	4,671	255.1	26	3,879	211.8	791	43.2
Wisconsin	5,778,708	15,026	260.0	25	14,018	242.6	1,006	17.4
Wyoming	585,501	1,165	199.0	48	1,032	176.3	133	22.7

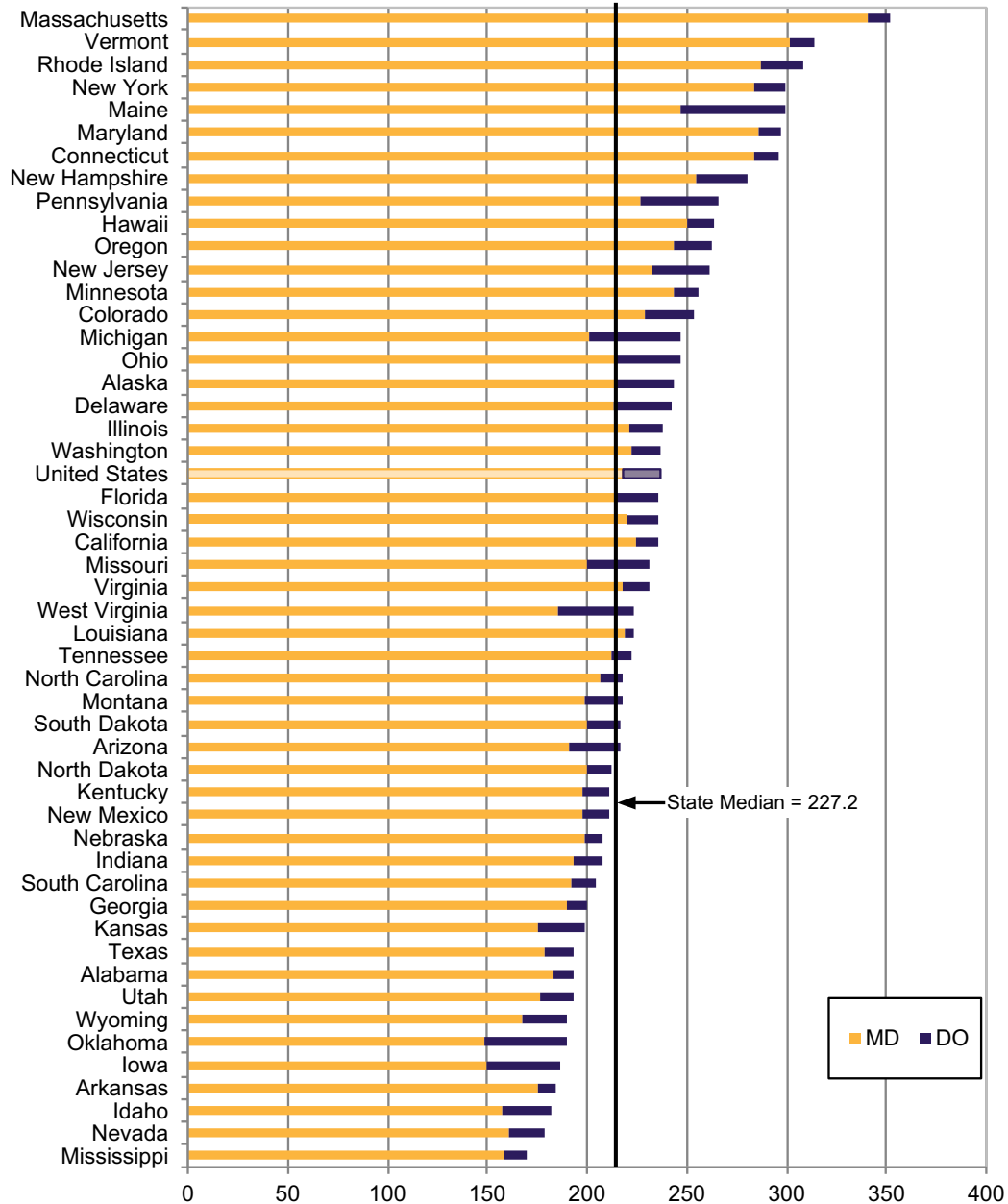
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose school type was unavailable (n = 39) are included in the total.

## 2. Active Patient Care Physicians per 100,000 Population by Degree Type, 2016

Figure 1.2. Active patient care physicians per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose school type was unavailable (n = 14) are excluded.

Table 1.2. Active Patient Care Physicians per 100,000 Population by Degree Type, 2016

	Total Population	Total Active Patient Care Physicians*			Active Patient Care MDs		Active Patient Care DOs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	765,115	236.8	N.R.	704,573	218.0	60,528	18.7
Alabama	4,863,300	9,398	193.2	42	8,893	182.9	505	10.4
Alaska	741,894	1,806	243.4	17	1,593	214.7	213	28.7
Arizona	6,931,071	15,007	216.5	32	13,207	190.5	1,800	26.0
Arkansas	2,988,248	5,518	184.7	47	5,243	175.5	275	9.2
California	39,250,017	92,614	236.0	23	88,167	224.6	4,447	11.3
Colorado	5,540,545	14,033	253.3	14	12,709	229.4	1,324	23.9
Connecticut	3,576,452	10,579	295.8	7	10,146	283.7	433	12.1
Delaware	952,065	2,306	242.2	18	2,026	212.8	280	29.4
District of Columbia	681,170	4,263	625.8	N.R.	4,175	612.9	88	12.9
Florida	20,612,439	48,666	236.1	21	44,278	214.8	4,385	21.3
Georgia	10,310,371	20,583	199.6	39	19,630	190.4	951	9.2
Hawaii	1,428,557	3,772	264.0	10	3,577	250.4	195	13.7
Idaho	1,683,140	3,058	181.7	48	2,646	157.2	412	24.5
Illinois	12,801,539	30,503	238.3	19	28,355	221.5	2,148	16.8
Indiana	6,633,053	13,780	207.7	37	12,794	192.9	986	14.9
Iowa	3,134,693	5,860	186.9	46	4,694	149.7	1,166	37.2
Kansas	2,907,289	5,770	198.5	40	5,087	175.0	683	23.5
Kentucky	4,436,974	9,391	211.7	34	8,795	198.2	596	13.4
Louisiana	4,681,666	10,451	223.2	27	10,264	219.2	187	4.0
Maine	1,331,479	3,986	299.4	5	3,286	246.8	698	52.4
Maryland	6,016,447	17,850	296.7	6	17,216	286.1	634	10.5
Massachusetts	6,811,779	23,933	351.3	1	23,199	340.6	734	10.8
Michigan	9,928,300	24,462	246.4	15	19,947	200.9	4,515	45.5
Minnesota	5,519,952	14,122	255.8	13	13,469	244.0	653	11.8
Mississippi	2,988,726	5,075	169.8	50	4,747	158.8	328	11.0
Missouri	6,093,000	14,085	231.2	24	12,170	199.7	1,915	31.4
Montana	1,042,520	2,272	217.9	30	2,076	199.1	196	18.8
Nebraska	1,907,116	3,971	208.2	36	3,783	198.4	188	9.9
Nevada	2,940,058	5,250	178.6	49	4,719	160.5	531	18.1
New Hampshire	1,334,795	3,742	280.3	8	3,395	254.3	347	26.0
New Jersey	8,944,469	23,389	261.5	12	20,778	232.3	2,611	29.2
New Mexico	2,081,015	4,396	211.2	35	4,126	198.3	270	13.0
New York	19,745,289	59,201	299.8	4	55,972	283.5	3,227	16.3
North Carolina	10,146,788	22,155	218.3	29	21,021	207.2	1,134	11.2
North Dakota	757,952	1,606	211.9	33	1,518	200.3	88	11.6
Ohio	11,614,373	28,616	246.4	16	24,908	214.5	3,708	31.9
Oklahoma	3,923,561	7,432	189.4	45	5,823	148.4	1,609	41.0
Oregon	4,093,465	10,763	262.9	11	9,950	243.1	813	19.9
Pennsylvania	12,784,227	34,035	266.2	9	28,947	226.4	5,087	39.8
Puerto Rico	3,411,307	8,060	236.3	N.R.	8,059	236.2	1	0.0
Rhode Island	1,056,426	3,255	308.1	3	3,034	287.2	221	20.9
South Carolina	4,961,119	10,129	204.2	38	9,537	192.2	592	11.9
South Dakota	865,454	1,878	217.0	31	1,730	199.9	148	17.1
Tennessee	6,651,194	14,817	222.8	28	14,113	212.2	704	10.6
Texas	27,862,596	53,962	193.7	41	49,952	179.3	4,007	14.4
Utah	3,051,217	5,881	192.7	43	5,389	176.6	492	16.1
Vermont	624,594	1,957	313.3	2	1,885	301.8	72	11.5
Virginia	8,411,808	19,417	230.8	25	18,346	218.1	1,071	12.7
Washington	7,288,000	17,280	237.1	20	16,189	222.1	1,091	15.0
West Virginia	1,831,102	4,094	223.6	26	3,400	185.7	694	37.9
Wisconsin	5,778,708	13,636	236.0	22	12,685	219.5	950	16.4
Wyoming	585,501	1,110	189.6	44	984	168.1	126	21.5

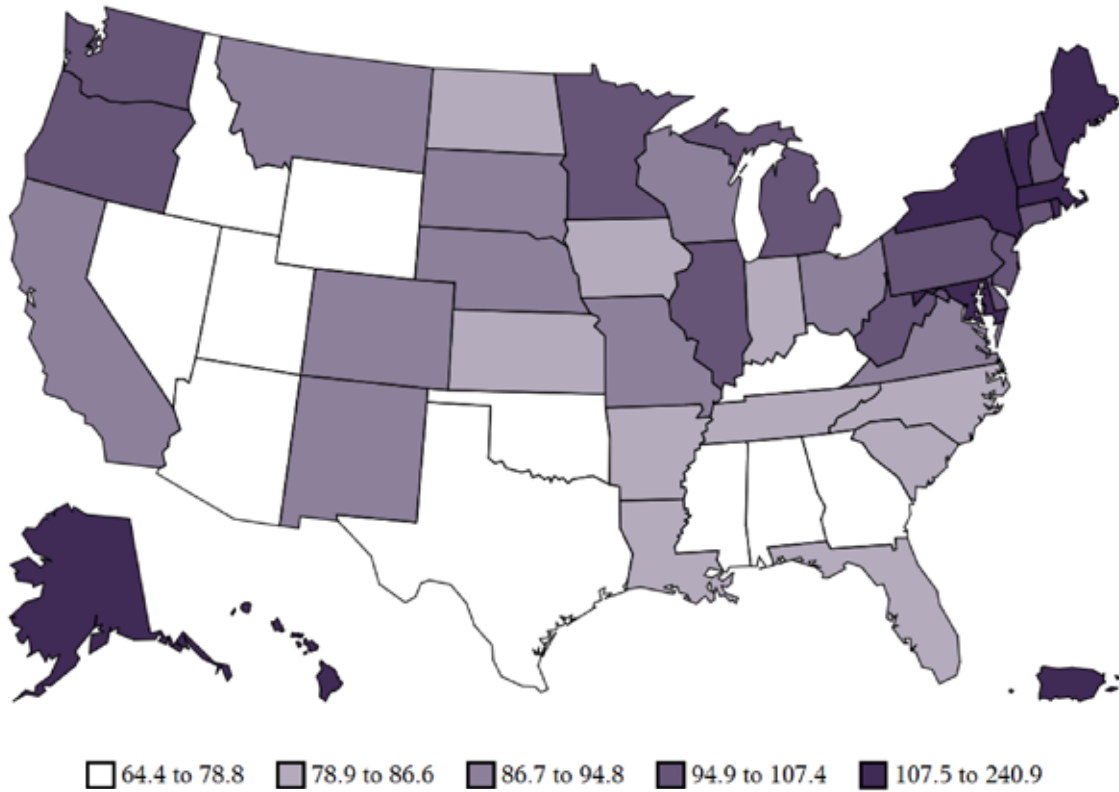
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (Release date: December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose school type was unavailable (n = 14) are included in the total.

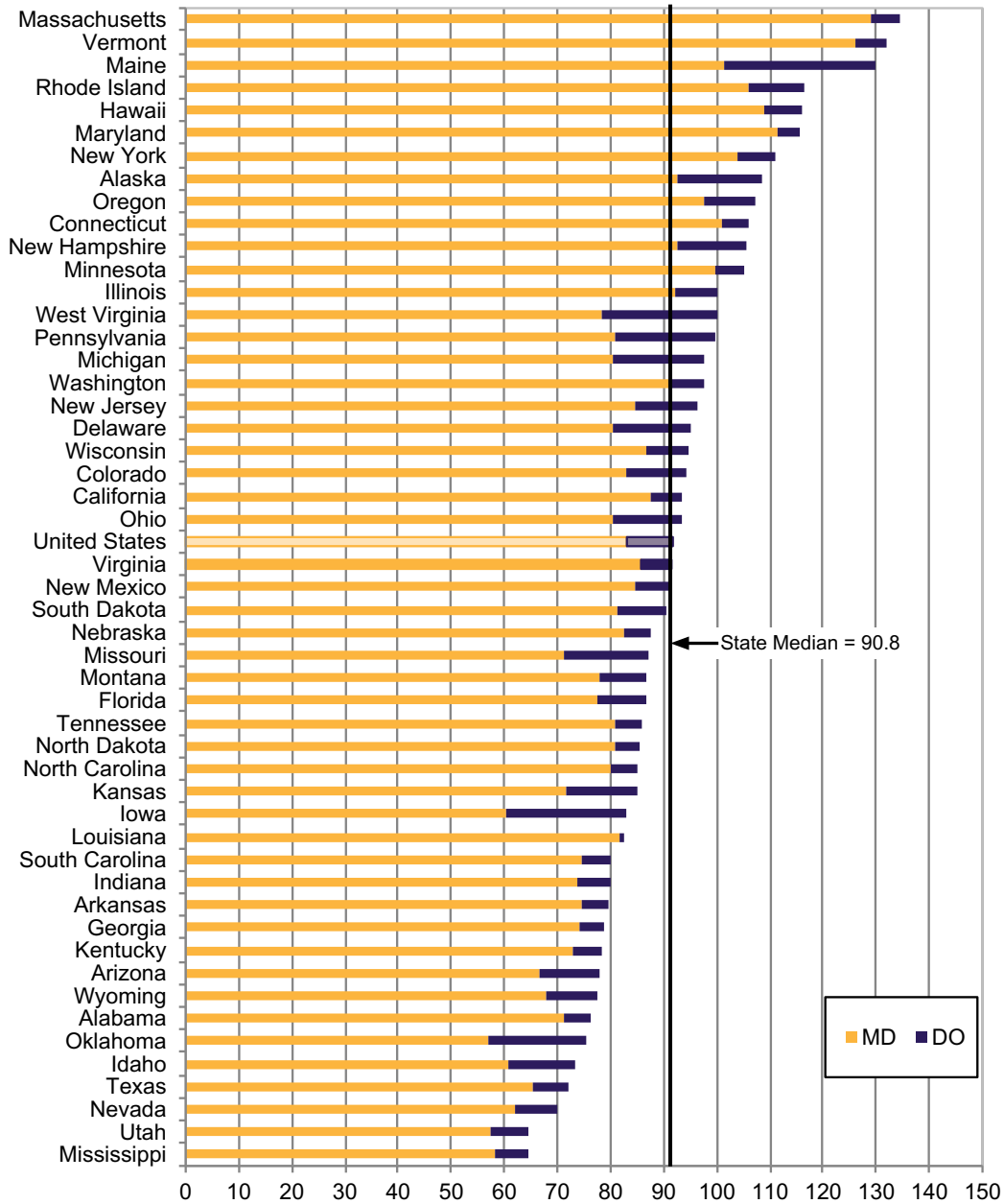
### 3. Active Primary Care Physicians per 100,000 Population by Degree Type, 2016

Map 1.3. Active primary care physicians per 100,000 population, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data include MDs and DOs and are from the 2017 AMA Physician Masterfile (December 31, 2016).

Figure 1.3. Active primary care physicians per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose school type was unavailable (n = 10) are excluded.



Table 1.3. Active Primary Care Physicians per 100,000 Population by Degree Type, 2016

	Total Population	Total Active Primary Care Physicians*			Active Primary Care MDs		Active Primary Care DOs	
		Number	Rate per		Number	Rate per 100,000	Number	Rate per 100,000
			100,000	Rank				
United States	323,127,513	296,353	91.7	N.R.	268,384	83.1	27,959	8.7
Alabama	4,863,300	3,713	76.3	44	3,468	71.3	245	5.0
Alaska	741,894	806	108.6	8	688	92.7	118	15.9
Arizona	6,931,071	5,396	77.9	42	4,628	66.8	768	11.1
Arkansas	2,988,248	2,377	79.5	39	2,223	74.4	154	5.2
California	39,250,017	36,700	93.5	22	34,289	87.4	2,411	6.1
Colorado	5,540,545	5,218	94.2	21	4,603	83.1	615	11.1
Connecticut	3,576,452	3,786	105.9	10	3,613	101.0	173	4.8
Delaware	952,065	904	95.0	19	764	80.2	140	14.7
District of Columbia	681,170	1,641	240.9	N.R.	1,605	235.6	36	5.3
Florida	20,612,439	17,851	86.6	30	15,981	77.5	1,869	9.1
Georgia	10,310,371	8,123	78.8	40	7,665	74.3	456	4.4
Hawaii	1,428,557	1,660	116.2	5	1,556	108.9	104	7.3
Idaho	1,683,140	1,231	73.1	46	1,020	60.6	211	12.5
Illinois	12,801,539	12,808	100.1	13	11,802	92.2	1,006	7.9
Indiana	6,633,053	5,301	79.9	38	4,880	73.6	421	6.3
Iowa	3,134,693	2,597	82.8	35	1,895	60.5	702	22.4
Kansas	2,907,289	2,467	84.9	34	2,077	71.4	390	13.4
Kentucky	4,436,974	3,467	78.1	41	3,228	72.8	239	5.4
Louisiana	4,681,666	3,873	82.7	36	3,816	81.5	57	1.2
Maine	1,331,479	1,731	130.0	3	1,349	101.3	381	28.6
Maryland	6,016,447	6,955	115.6	6	6,710	111.5	245	4.1
Massachusetts	6,811,779	9,156	134.4	1	8,783	128.9	373	5.5
Michigan	9,928,300	9,701	97.7	16	7,975	80.3	1,726	17.4
Minnesota	5,519,952	5,806	105.2	12	5,513	99.9	292	5.3
Mississippi	2,988,726	1,925	64.4	50	1,743	58.3	182	6.1
Missouri	6,093,000	5,301	87.0	28	4,342	71.3	959	15.7
Montana	1,042,520	903	86.6	29	812	77.9	91	8.7
Nebraska	1,907,116	1,673	87.7	27	1,574	82.5	99	5.2
Nevada	2,940,058	2,060	70.1	48	1,818	61.8	242	8.2
New Hampshire	1,334,795	1,407	105.4	11	1,235	92.5	172	12.9
New Jersey	8,944,469	8,613	96.3	18	7,570	84.6	1,042	11.6
New Mexico	2,081,015	1,892	90.9	25	1,760	84.6	132	6.3
New York	19,745,289	21,949	111.2	7	20,480	103.7	1,468	7.4
North Carolina	10,146,788	8,644	85.2	33	8,112	79.9	532	5.2
North Dakota	757,952	647	85.4	32	613	80.9	34	4.5
Ohio	11,614,373	10,842	93.3	23	9,360	80.6	1,482	12.8
Oklahoma	3,923,561	2,954	75.3	45	2,242	57.1	712	18.1
Oregon	4,093,465	4,397	107.4	9	3,989	97.4	408	10.0
Pennsylvania	12,784,227	12,744	99.7	15	10,321	80.7	2,423	19.0
Puerto Rico	3,411,307	3,985	116.8	N.R.	3,984	116.8	1	0.0
Rhode Island	1,056,426	1,230	116.4	4	1,121	106.1	109	10.3
South Carolina	4,961,119	3,976	80.1	37	3,699	74.6	277	5.6
South Dakota	865,454	784	90.6	26	705	81.5	79	9.1
Tennessee	6,651,194	5,706	85.8	31	5,369	80.7	337	5.1
Texas	27,862,596	20,076	72.1	47	18,170	65.2	1,904	6.8
Utah	3,051,217	1,974	64.7	49	1,755	57.5	219	7.2
Vermont	624,594	823	131.8	2	787	126.0	36	5.8
Virginia	8,411,808	7,692	91.4	24	7,211	85.7	481	5.7
Washington	7,288,000	7,113	97.6	17	6,614	90.8	499	6.8
West Virginia	1,831,102	1,830	99.9	14	1,434	78.3	396	21.6
Wisconsin	5,778,708	5,477	94.8	20	5,020	86.9	456	7.9
Wyoming	585,501	453	77.4	43	397	67.8	56	9.6

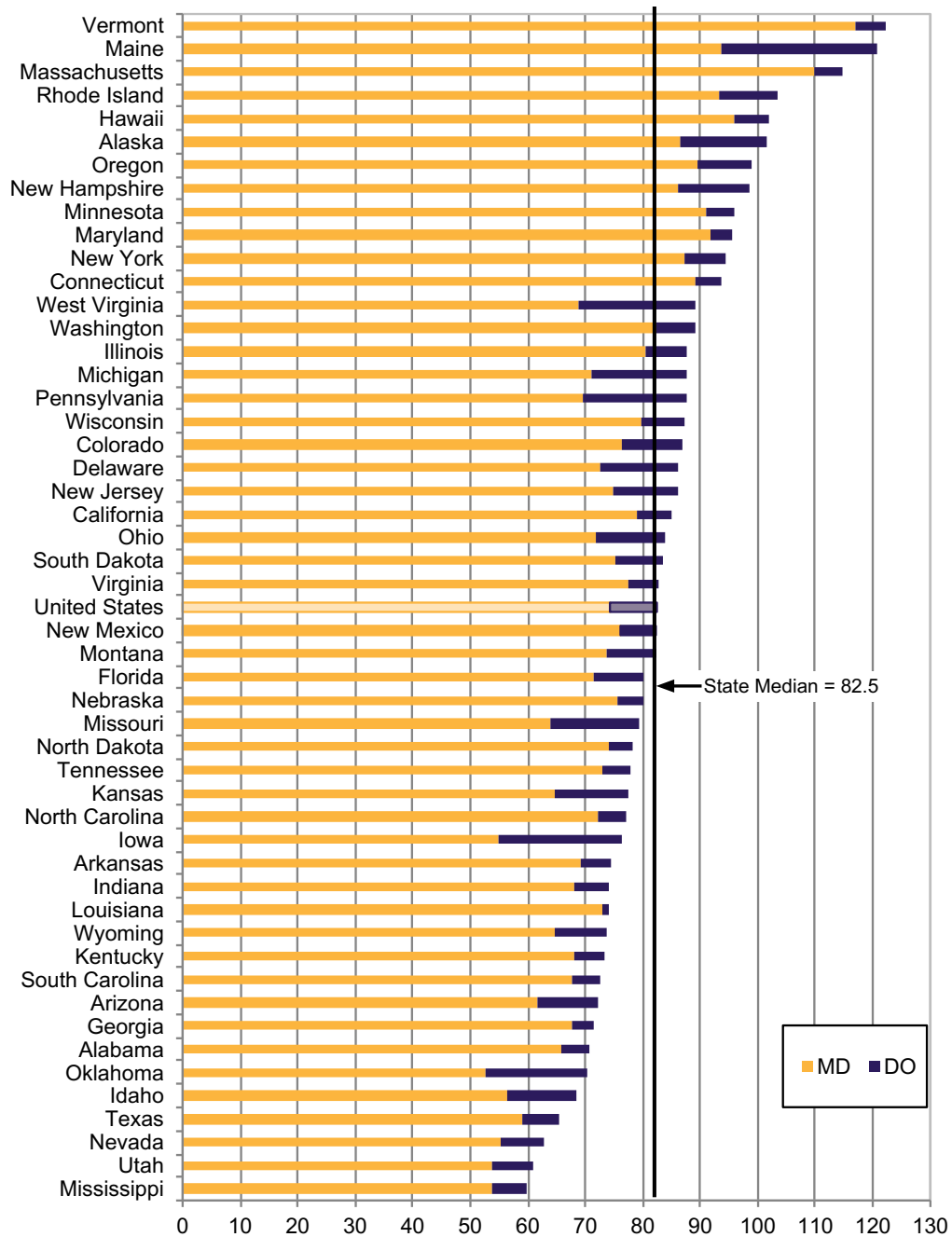
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose school type was unavailable (n = 10) are included in the total.

#### 4. Active Patient Care Primary Care Physicians per 100,000 Population by Degree Type, 2016

Figure 1.4. Active patient care primary care physicians per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose school type was unavailable (n = 7) are excluded.

Table 1.4. Active Patient Care Primary Care Physicians per 100,000 Population by Degree Type, 2016

	Total Population	Total Active Patient Care Primary Care Physicians*			Active Patient Care Primary Care MDs		Active Patient Care Primary Care DOs	
		Number	Rate per 100,000		Number	Rate per 100,000	Number	Rate per 100,000
			Rank					
United States	323,127,513	266,421	82.5	N.R.	240,041	74.3	26,373	8.2
Alabama	4,863,300	3,440	70.7	44	3,203	65.9	237	4.9
Alaska	741,894	752	101.4	6	643	86.7	109	14.7
Arizona	6,931,071	5,009	72.3	42	4,267	61.6	742	10.7
Arkansas	2,988,248	2,220	74.3	36	2,073	69.4	147	4.9
California	39,250,017	33,289	84.8	22	31,051	79.1	2,238	5.7
Colorado	5,540,545	4,820	87.0	19	4,224	76.2	596	10.8
Connecticut	3,576,452	3,353	93.8	12	3,190	89.2	163	4.6
Delaware	952,065	821	86.2	20	691	72.6	130	13.7
District of Columbia	681,170	1,229	180.4	N.R.	1,200	176.2	29	4.3
Florida	20,612,439	16,486	80.0	28	14,718	71.4	1,767	8.6
Georgia	10,310,371	7,381	71.6	43	6,963	67.5	416	4.0
Hawaii	1,428,557	1,457	102.0	5	1,369	95.8	88	6.2
Idaho	1,683,140	1,151	68.4	46	949	56.4	202	12.0
Illinois	12,801,539	11,232	87.7	15	10,294	80.4	938	7.3
Indiana	6,633,053	4,923	74.2	37	4,520	68.1	403	6.1
Iowa	3,134,693	2,390	76.2	35	1,721	54.9	669	21.3
Kansas	2,907,289	2,249	77.4	33	1,881	64.7	368	12.7
Kentucky	4,436,974	3,257	73.4	40	3,026	68.2	231	5.2
Louisiana	4,681,666	3,466	74.0	38	3,414	72.9	52	1.1
Maine	1,331,479	1,609	120.8	2	1,248	93.7	360	27.0
Maryland	6,016,447	5,757	95.7	10	5,532	91.9	225	3.7
Massachusetts	6,811,779	7,814	114.7	3	7,481	109.8	333	4.9
Michigan	9,928,300	8,708	87.7	16	7,051	71.0	1,657	16.7
Minnesota	5,519,952	5,301	96.0	9	5,024	91.0	277	5.0
Mississippi	2,988,726	1,785	59.7	50	1,613	54.0	172	5.8
Missouri	6,093,000	4,826	79.2	30	3,904	64.1	922	15.1
Montana	1,042,520	857	82.2	27	769	73.8	88	8.4
Nebraska	1,907,116	1,525	80.0	29	1,443	75.7	82	4.3
Nevada	2,940,058	1,846	62.8	48	1,626	55.3	220	7.5
New Hampshire	1,334,795	1,315	98.5	8	1,150	86.2	165	12.4
New Jersey	8,944,469	7,690	86.0	21	6,698	74.9	992	11.1
New Mexico	2,081,015	1,712	82.3	26	1,584	76.1	128	6.2
New York	19,745,289	18,612	94.3	11	17,256	87.4	1,356	6.9
North Carolina	10,146,788	7,813	77.0	34	7,329	72.2	484	4.8
North Dakota	757,952	594	78.4	31	561	74.0	33	4.4
Ohio	11,614,373	9,725	83.7	23	8,333	71.7	1,392	12.0
Oklahoma	3,923,561	2,755	70.2	45	2,068	52.7	687	17.5
Oregon	4,093,465	4,050	98.9	7	3,661	89.4	389	9.5
Pennsylvania	12,784,227	11,202	87.6	17	8,901	69.6	2,301	18.0
Puerto Rico	3,411,307	3,502	102.7	N.R.	3,501	102.6	1	0.0
Rhode Island	1,056,426	1,091	103.3	4	986	93.3	105	9.9
South Carolina	4,961,119	3,603	72.6	41	3,352	67.6	251	5.1
South Dakota	865,454	724	83.7	24	650	75.1	74	8.6
Tennessee	6,651,194	5,182	77.9	32	4,864	73.1	318	4.8
Texas	27,862,596	18,225	65.4	47	16,418	58.9	1,805	6.5
Utah	3,051,217	1,859	60.9	49	1,642	53.8	217	7.1
Vermont	624,594	764	122.3	1	731	117.0	33	5.3
Virginia	8,411,808	6,957	82.7	25	6,522	77.5	435	5.2
Washington	7,288,000	6,489	89.0	14	6,014	82.5	475	6.5
West Virginia	1,831,102	1,634	89.2	13	1,257	68.6	377	20.6
Wisconsin	5,778,708	5,041	87.2	18	4,597	79.6	443	7.7
Wyoming	585,501	431	73.6	39	379	64.7	52	8.9

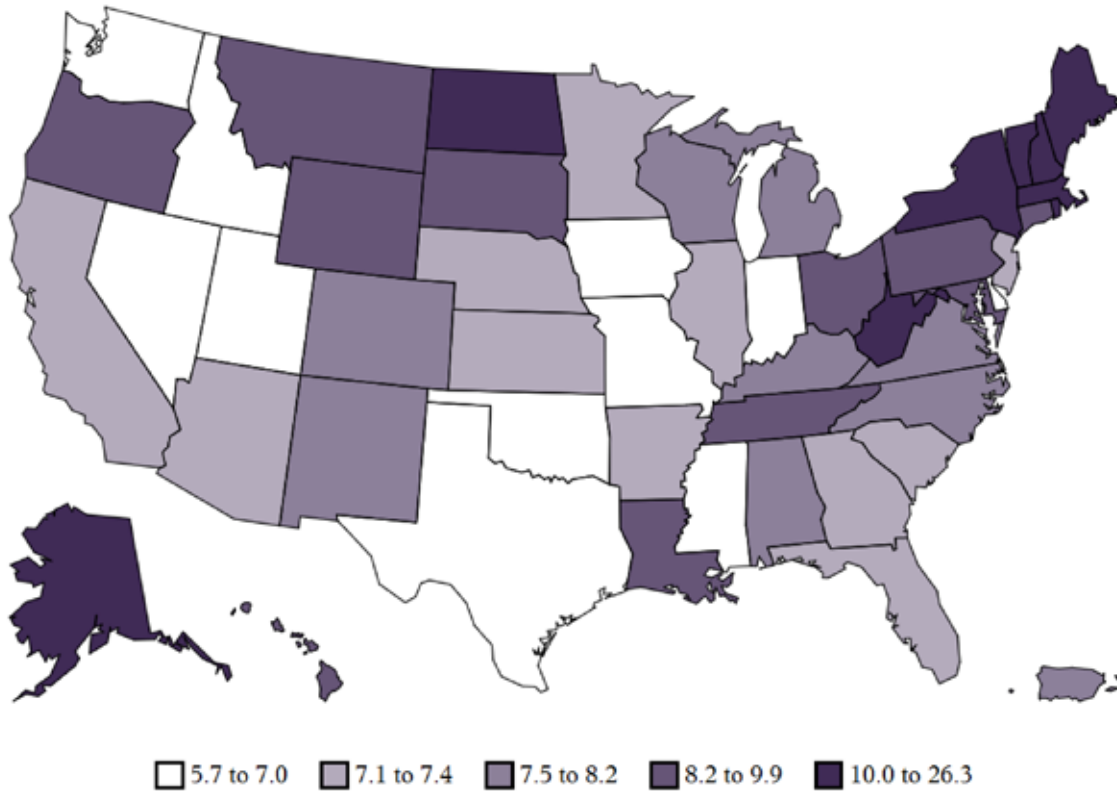
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose school type was unavailable (n = 7) are included in the total.

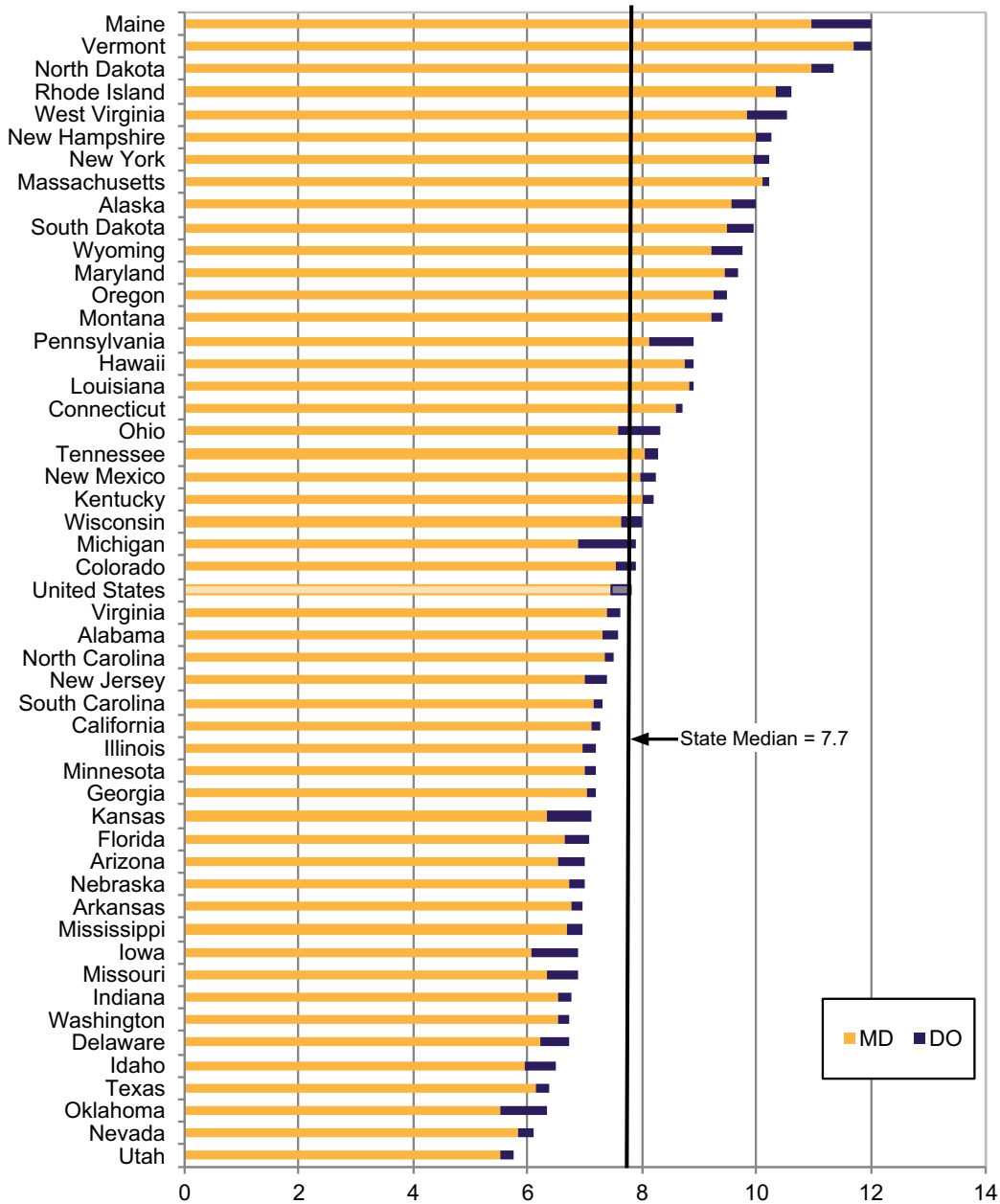
## 5. Active General Surgeons per 100,000 Population by Degree Type, 2016

Map 1.5. Active general surgeons per 100,000 population, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data include MDs and DOs and are from the 2017 AMA Physician Masterfile (December 31, 2016).

Figure 1.5. Active general surgeons per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose school type was unavailable (n = 3) are excluded.

Table 1.5. Active General Surgeons per 100,000 Population by Degree Type, 2016

	Total Population	Total Active General Surgeons*			Active General Surgeon MDs		Active General Surgeon DOs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	25,185	7.8	N.R.	24,105	7.5	1,077	0.3
Alabama	4,863,300	368	7.6	27	355	7.3	13	0.3
Alaska	741,894	74	10.0	9	71	9.6	3	0.4
Arizona	6,931,071	485	7.0	37	451	6.5	33	0.5
Arkansas	2,988,248	208	7.0	39	202	6.8	6	0.2
California	39,250,017	2,853	7.3	31	2,794	7.1	59	0.2
Colorado	5,540,545	436	7.9	25	417	7.5	19	0.3
Connecticut	3,576,452	311	8.7	18	307	8.6	4	0.1
Delaware	952,065	64	6.7	45	59	6.2	5	0.5
District of Columbia	681,170	179	26.3	N.R.	179	26.3	0	0.0
Florida	20,612,439	1,455	7.1	36	1,373	6.7	82	0.4
Georgia	10,310,371	739	7.2	34	725	7.0	14	0.1
Hawaii	1,428,557	127	8.9	16	125	8.8	2	0.1
Idaho	1,683,140	109	6.5	46	100	5.9	9	0.5
Illinois	12,801,539	922	7.2	32	888	6.9	34	0.3
Indiana	6,633,053	448	6.8	43	434	6.5	14	0.2
Iowa	3,134,693	216	6.9	41	190	6.1	26	0.8
Kansas	2,907,289	207	7.1	35	184	6.3	23	0.8
Kentucky	4,436,974	363	8.2	22	355	8.0	8	0.2
Louisiana	4,681,666	416	8.9	17	413	8.8	3	0.1
Maine	1,331,479	160	12.0	1	146	11.0	14	1.1
Maryland	6,016,447	582	9.7	12	567	9.4	15	0.2
Massachusetts	6,811,779	695	10.2	8	688	10.1	7	0.1
Michigan	9,928,300	783	7.9	24	684	6.9	99	1.0
Minnesota	5,519,952	397	7.2	33	387	7.0	10	0.2
Mississippi	2,988,726	208	7.0	40	200	6.7	8	0.3
Missouri	6,093,000	419	6.9	42	386	6.3	33	0.5
Montana	1,042,520	98	9.4	14	96	9.2	2	0.2
Nebraska	1,907,116	133	7.0	38	128	6.7	5	0.3
Nevada	2,940,058	179	6.1	49	171	5.8	8	0.3
New Hampshire	1,334,795	137	10.3	6	133	10.0	4	0.3
New Jersey	8,944,469	659	7.4	29	626	7.0	33	0.4
New Mexico	2,081,015	171	8.2	21	166	8.0	5	0.2
New York	19,745,289	2,017	10.2	7	1,963	9.9	53	0.3
North Carolina	10,146,788	762	7.5	28	743	7.3	19	0.2
North Dakota	757,952	86	11.3	3	83	11.0	3	0.4
Ohio	11,614,373	964	8.3	19	879	7.6	85	0.7
Oklahoma	3,923,561	249	6.3	48	217	5.5	32	0.8
Oregon	4,093,465	388	9.5	13	379	9.3	9	0.2
Pennsylvania	12,784,227	1,139	8.9	15	1,038	8.1	100	0.8
Puerto Rico	3,411,307	264	7.7	N.R.	264	7.7	0	0.0
Rhode Island	1,056,426	112	10.6	4	109	10.3	3	0.3
South Carolina	4,961,119	363	7.3	30	354	7.1	9	0.2
South Dakota	865,454	86	9.9	10	82	9.5	4	0.5
Tennessee	6,651,194	551	8.3	20	536	8.1	15	0.2
Texas	27,862,596	1,775	6.4	47	1,707	6.1	68	0.2
Utah	3,051,217	175	5.7	50	168	5.5	7	0.2
Vermont	624,594	75	12.0	2	73	11.7	2	0.3
Virginia	8,411,808	641	7.6	26	622	7.4	19	0.2
Washington	7,288,000	490	6.7	44	476	6.5	14	0.2
West Virginia	1,831,102	193	10.5	5	180	9.8	13	0.7
Wisconsin	5,778,708	461	8.0	23	442	7.6	19	0.3
Wyoming	585,501	57	9.7	11	54	9.2	3	0.5

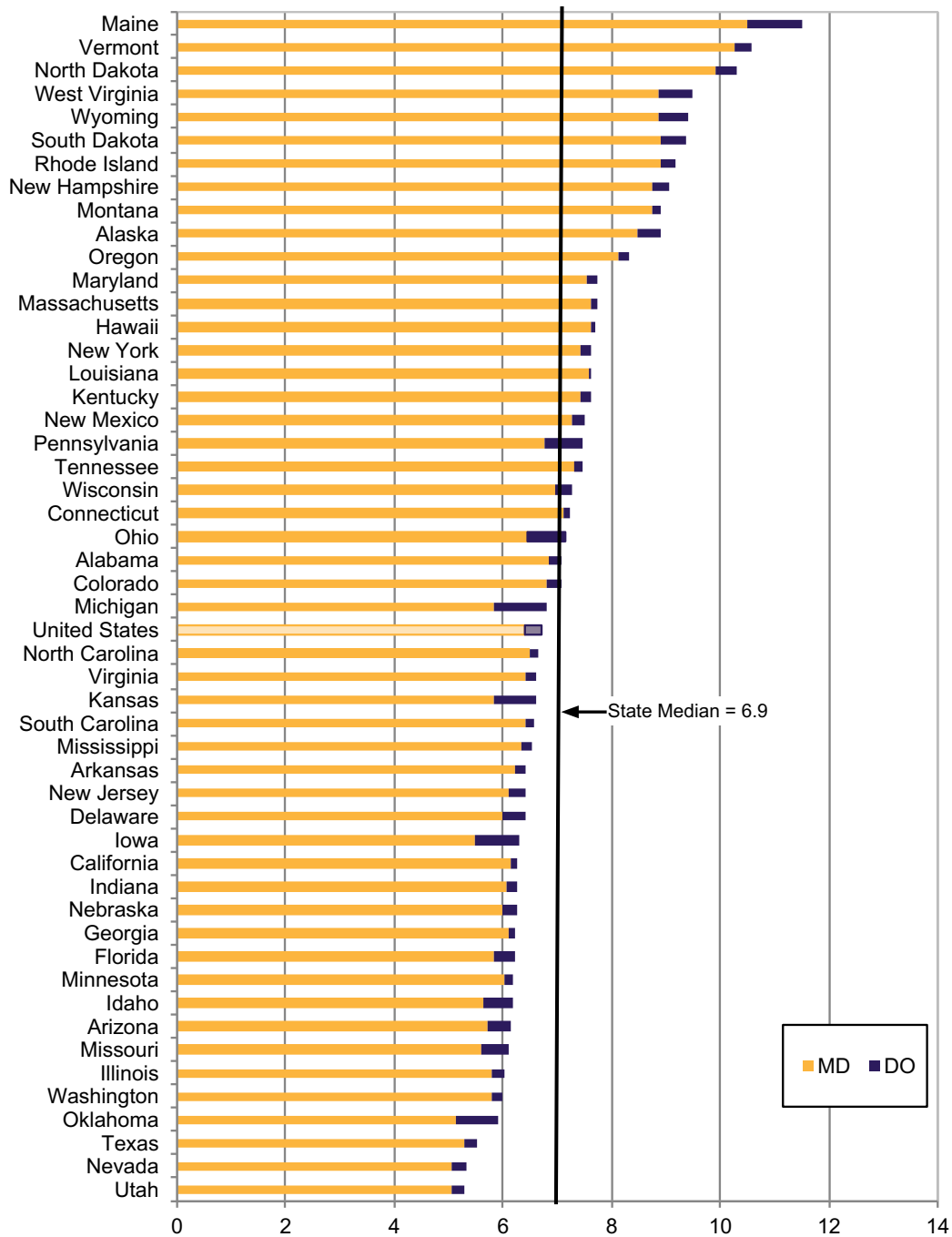
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose school type was unavailable (n = 3) are included in the total.

## 6. Active Patient Care General Surgeons per 100,000 Population by Degree Type, 2016

Figure 1.6. Active patient care general surgeons per 100,000 population by degree type, 2016.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physician whose school type was unavailable (n = 1) is excluded.

Table 1.6. Active Patient Care General Surgeons per 100,000 Population by Degree Type, 2016

	Total Population	Total Active Patient Care General Surgeons*			Active Patient Care General Surgeon MDs		Active Patient Care General Surgeon DOs	
		Number	Rate per 100,000		Number	Rate per 100,000	Number	Rate per 100,000
			Rank					
United States	323,127,513	21,677	6.7	N.R.	20,687	6.4	989	0.3
Alabama	4,863,300	345	7.1	24	333	6.8	12	0.2
Alaska	741,894	66	8.9	10	63	8.5	3	0.4
Arizona	6,931,071	426	6.1	43	396	5.7	30	0.4
Arkansas	2,988,248	192	6.4	32	186	6.2	6	0.2
California	39,250,017	2,457	6.3	36	2,405	6.1	52	0.1
Colorado	5,540,545	393	7.1	25	376	6.8	17	0.3
Connecticut	3,576,452	258	7.2	22	254	7.1	4	0.1
Delaware	952,065	61	6.4	34	57	6.0	4	0.4
District of Columbia	681,170	105	15.4	N.R.	105	15.4	0	0.0
Florida	20,612,439	1,279	6.2	40	1,201	5.8	78	0.4
Georgia	10,310,371	642	6.2	39	630	6.1	12	0.1
Hawaii	1,428,557	110	7.7	14	109	7.6	1	0.1
Idaho	1,683,140	104	6.2	42	95	5.6	9	0.5
Illinois	12,801,539	771	6.0	45	740	5.8	31	0.2
Indiana	6,633,053	415	6.3	37	401	6.0	14	0.2
Iowa	3,134,693	197	6.3	35	172	5.5	25	0.8
Kansas	2,907,289	192	6.6	29	170	5.8	22	0.8
Kentucky	4,436,974	338	7.6	17	330	7.4	8	0.2
Louisiana	4,681,666	357	7.6	16	355	7.6	2	0.0
Maine	1,331,479	153	11.5	1	140	10.5	13	1.0
Maryland	6,016,447	465	7.7	12	453	7.5	12	0.2
Massachusetts	6,811,779	526	7.7	13	519	7.6	7	0.1
Michigan	9,928,300	675	6.8	26	579	5.8	96	1.0
Minnesota	5,519,952	342	6.2	41	333	6.0	9	0.2
Mississippi	2,988,726	195	6.5	31	189	6.3	6	0.2
Missouri	6,093,000	372	6.1	44	342	5.6	30	0.5
Montana	1,042,520	93	8.9	9	91	8.7	2	0.2
Nebraska	1,907,116	119	6.2	38	114	6.0	5	0.3
Nevada	2,940,058	157	5.3	49	149	5.1	8	0.3
New Hampshire	1,334,795	121	9.1	8	117	8.8	4	0.3
New Jersey	8,944,469	574	6.4	33	547	6.1	27	0.3
New Mexico	2,081,015	156	7.5	18	151	7.3	5	0.2
New York	19,745,289	1,507	7.6	15	1,465	7.4	42	0.2
North Carolina	10,146,788	674	6.6	27	658	6.5	16	0.2
North Dakota	757,952	78	10.3	3	75	9.9	3	0.4
Ohio	11,614,373	830	7.1	23	749	6.4	81	0.7
Oklahoma	3,923,561	232	5.9	47	201	5.1	31	0.8
Oregon	4,093,465	340	8.3	11	332	8.1	8	0.2
Pennsylvania	12,784,227	957	7.5	19	864	6.8	92	0.7
Puerto Rico	3,411,307	227	6.7	N.R.	227	6.7	0	0.0
Rhode Island	1,056,426	97	9.2	7	94	8.9	3	0.3
South Carolina	4,961,119	325	6.6	30	318	6.4	7	0.1
South Dakota	865,454	81	9.4	6	77	8.9	4	0.5
Tennessee	6,651,194	497	7.5	20	486	7.3	11	0.2
Texas	27,862,596	1,534	5.5	48	1,471	5.3	63	0.2
Utah	3,051,217	161	5.3	50	154	5.0	7	0.2
Vermont	624,594	66	10.6	2	64	10.2	2	0.3
Virginia	8,411,808	557	6.6	28	539	6.4	18	0.2
Washington	7,288,000	436	6.0	46	422	5.8	14	0.2
West Virginia	1,831,102	174	9.5	4	162	8.8	12	0.7
Wisconsin	5,778,708	420	7.3	21	402	7.0	18	0.3
Wyoming	585,501	55	9.4	5	52	8.9	3	0.5

Sources: July 1, 2016 population estimates are from the U.S. Census Bureau (released December 2016). Physician data are from the 2017 AMA Physician Masterfile (December 31, 2016).

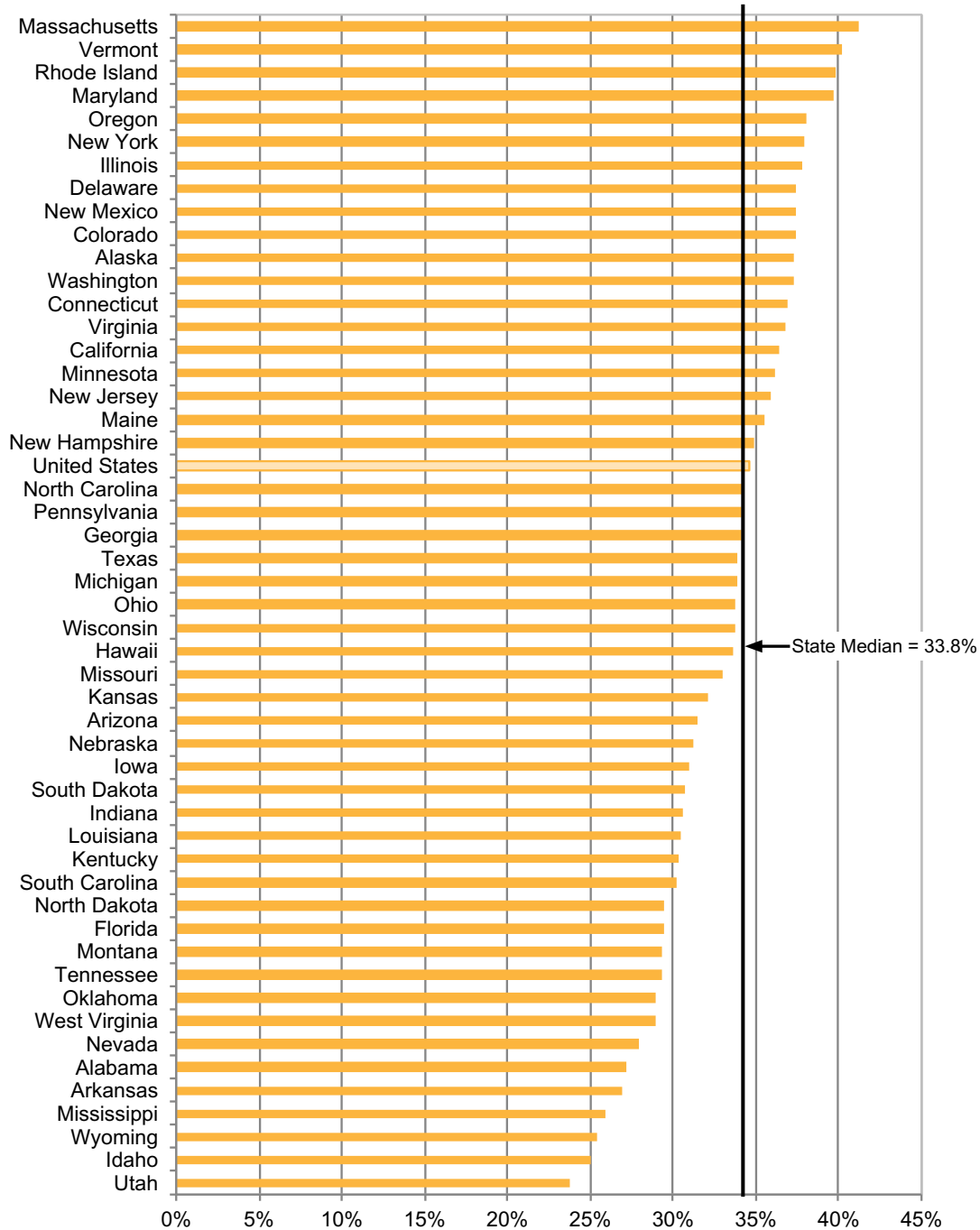
Note: N.R. = not ranked.

\* Physician whose school type was unavailable (n = 1) is included in the total.



## 7. Active Female Physicians, 2016

Figure 1.7. Percentage of active physicians who are female, 2016.



Source: 2017 AMA Physician Masterfile (December 31, 2016).

Note: Physicians whose sex was missing (n = 1,117) are excluded.

Table 1.7. Active Female Physicians, 2016

	Total Active Physicians*	Active Female Physicians		
		Number	Percent	Rank
United States	876,529	303,306	34.6%	N.R.
Alabama	10,325	2,808	27.2%	45
Alaska	1,959	730	37.3%	11
Arizona	16,315	5,141	31.5%	30
Arkansas	6,084	1,640	27.0%	46
California	105,708	38,524	36.4%	15
Colorado	15,409	5,764	37.4%	10
Connecticut	12,332	4,554	36.9%	13
Delaware	2,592	971	37.5%	8
District of Columbia	5,895	2,760	46.8%	N.R.
Florida	53,610	15,757	29.4%	39
Georgia	23,200	7,910	34.1%	22
Hawaii	4,344	1,463	33.7%	27
Idaho	3,238	812	25.1%	49
Illinois	35,880	13,543	37.7%	7
Indiana	15,008	4,590	30.6%	34
Iowa	6,615	2,051	31.0%	32
Kansas	6,375	2,047	32.1%	29
Kentucky	10,149	3,083	30.4%	36
Louisiana	11,731	3,568	30.4%	35
Maine	4,317	1,533	35.5%	18
Maryland	22,706	9,013	39.7%	4
Massachusetts	30,179	12,455	41.3%	1
Michigan	28,160	9,535	33.9%	24
Minnesota	16,092	5,817	36.1%	16
Mississippi	5,559	1,444	26.0%	47
Missouri	16,256	5,372	33.0%	28
Montana	2,399	705	29.4%	40
Nebraska	4,423	1,380	31.2%	31
Nevada	5,873	1,640	27.9%	44
New Hampshire	4,111	1,436	34.9%	19
New Jersey	26,321	9,444	35.9%	17
New Mexico	5,019	1,878	37.4%	9
New York	71,985	27,279	37.9%	6
North Carolina	25,280	8,645	34.2%	20
North Dakota	1,757	518	29.5%	38
Ohio	33,586	11,345	33.8%	25
Oklahoma	8,041	2,332	29.0%	42
Oregon	12,036	4,577	38.0%	5
Pennsylvania	39,815	13,596	34.1%	21
Puerto Rico	9,844	3,665	37.2%	N.R.
Rhode Island	3,768	1,501	39.8%	3
South Carolina	11,257	3,406	30.3%	37
South Dakota	2,037	627	30.8%	33
Tennessee	16,622	4,867	29.3%	41
Texas	61,047	20,712	33.9%	23
Utah	6,384	1,521	23.8%	50
Vermont	2,233	897	40.2%	2
Virginia	22,049	8,099	36.7%	14
Washington	19,602	7,303	37.3%	12
West Virginia	4,663	1,349	28.9%	43
Wisconsin	15,019	5,068	33.7%	26
Wyoming	1,164	296	25.4%	48

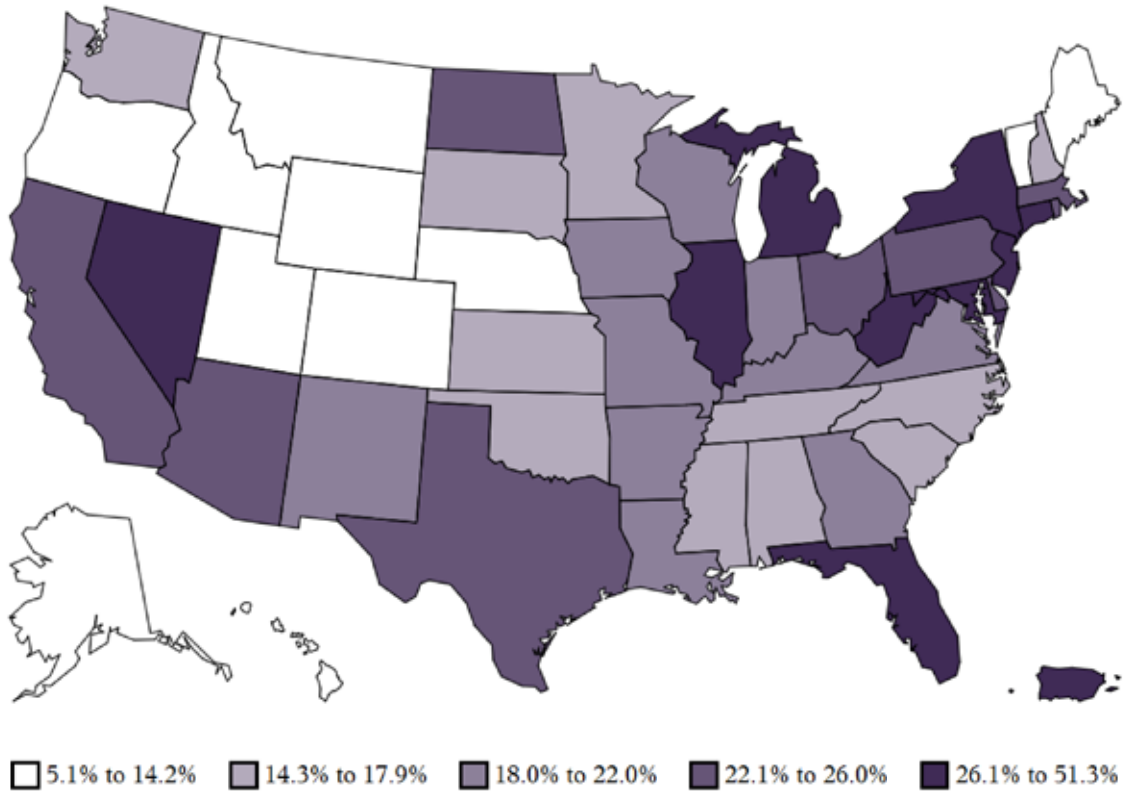
Source: 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose sex was missing (n = 1,117) are excluded.

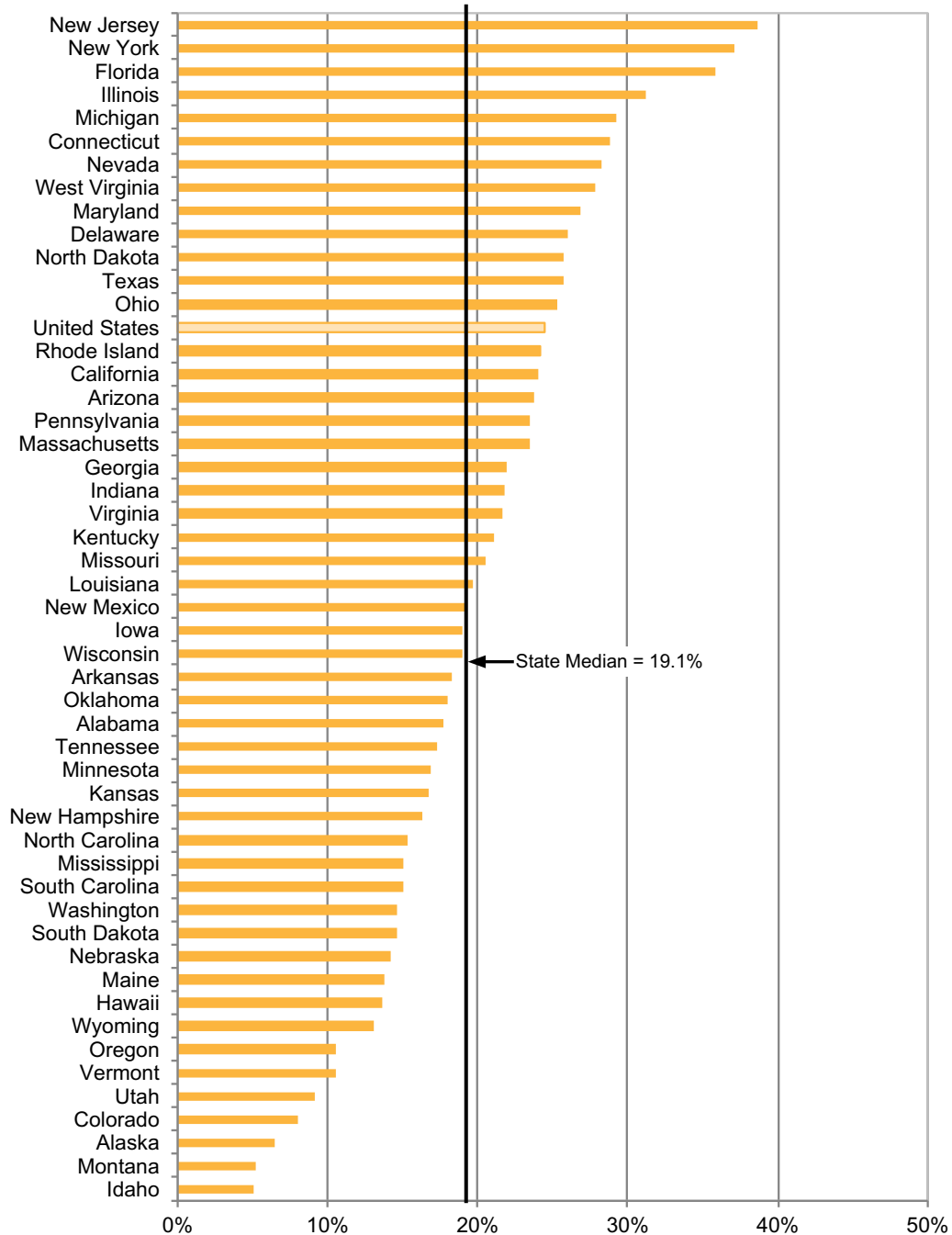
## 8. Active Physicians by School Type, 2016

Map 1.8. Percentage of active physicians who are international medical graduates (IMGs), 2016.



Source: Data are from the 2017 AMA Physician Masterfile (December 31, 2016).

Figure 1.8. Percentage of active physicians who are international medical graduates (IMGs), 2016.



Source: 2017 AMA Physician Masterfile (December 31, 2016).

Note: The total excludes active physicians whose school type was unavailable (n = 38) and physicians who are graduates of Canadian medical schools (n = 9,076).

Table 1.8. Active Physicians by School Type, 2016

	Total Active Physicians*		U.S. MD		DO		IMG		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Rank
United States	877,578		586,287	66.8%	67,534	7.7%	214,681	24.5%	N.R.
Alabama	10,329		7,869	76.2%	540	5.2%	1,830	17.7%	30
Alaska	1,961		1,581	80.6%	241	12.3%	127	6.5%	48
Arizona	16,344		10,263	62.8%	1,916	11.7%	3,894	23.8%	16
Arkansas	6,088		4,647	76.3%	299	4.9%	1,110	18.2%	28
California	105,907		73,960	69.8%	5,074	4.8%	25,501	24.1%	15
Colorado	15,422		12,631	81.9%	1,403	9.1%	1,235	8.0%	47
Connecticut	12,341		8,188	66.3%	482	3.9%	3,560	28.8%	6
Delaware	2,592		1,579	60.9%	322	12.4%	673	26.0%	10
District of Columbia	5,901		4,390	74.4%	123	2.1%	1,340	22.7%	N.R.
Florida	53,680		29,232	54.5%	4,778	8.9%	19,237	35.8%	3
Georgia	23,212		16,877	72.7%	1,074	4.6%	5,100	22.0%	19
Hawaii	4,350		3,462	79.6%	232	5.3%	594	13.7%	42
Idaho	3,241		2,596	80.1%	445	13.7%	165	5.1%	50
Illinois	35,926		22,029	61.3%	2,439	6.8%	11,190	31.1%	4
Indiana	15,025		10,556	70.3%	1,060	7.1%	3,271	21.8%	20
Iowa	6,627		4,027	60.8%	1,265	19.1%	1,262	19.0%	26
Kansas	6,380		4,523	70.9%	751	11.8%	1,069	16.8%	33
Kentucky	10,158		7,272	71.6%	646	6.4%	2,142	21.1%	22
Louisiana	11,737		9,155	78.0%	211	1.8%	2,313	19.7%	24
Maine	4,318		2,871	66.5%	755	17.5%	596	13.8%	41
Maryland	22,730		15,670	68.9%	762	3.4%	6,093	26.8%	9
Massachusetts	30,210		21,525	71.3%	863	2.9%	7,075	23.4%	18
Michigan	28,205		14,623	51.8%	5,108	18.1%	8,229	29.2%	5
Minnesota	16,104		12,299	76.4%	718	4.5%	2,724	16.9%	32
Mississippi	5,561		4,325	77.8%	371	6.7%	835	15.0%	36
Missouri	16,267		10,682	65.7%	2,164	13.3%	3,337	20.5%	23
Montana	2,401		2,049	85.3%	211	8.8%	124	5.2%	49
Nebraska	4,426		3,543	80.0%	221	5.0%	629	14.2%	40
Nevada	5,884		3,512	59.7%	659	11.2%	1,662	28.2%	7
New Hampshire	4,113		2,962	72.0%	373	9.1%	668	16.2%	34
New Jersey	26,377		13,190	50.0%	2,868	10.9%	10,199	38.7%	1
New Mexico	5,023		3,729	74.2%	291	5.8%	966	19.2%	25
New York	72,089		40,803	56.6%	3,745	5.2%	26,799	37.2%	2
North Carolina	25,295		19,924	78.8%	1,277	5.0%	3,879	15.3%	35
North Dakota	1,759		1,153	65.5%	97	5.5%	453	25.8%	11
Ohio	33,620		20,444	60.8%	4,318	12.8%	8,509	25.3%	13
Oklahoma	8,057		4,851	60.2%	1,723	21.4%	1,445	17.9%	29
Oregon	12,050		9,692	80.4%	912	7.6%	1,270	10.5%	44
Pennsylvania	39,861		24,679	61.9%	5,557	13.9%	9,338	23.4%	17
Puerto Rico	9,874		4,919	49.8%	1	0.0%	4,954	50.2%	N.R.
Rhode Island	3,770		2,561	67.9%	246	6.5%	911	24.2%	14
South Carolina	11,269		8,860	78.6%	667	5.9%	1,689	15.0%	37
South Dakota	2,038		1,561	76.6%	164	8.0%	298	14.6%	39
Tennessee	16,627		12,860	77.3%	776	4.7%	2,865	17.2%	31
Texas	61,127		40,497	66.3%	4,428	7.2%	15,686	25.7%	12
Utah	6,389		5,239	82.0%	507	7.9%	582	9.1%	46
Vermont	2,233		1,837	82.3%	81	3.6%	234	10.5%	45
Virginia	22,072		15,890	72.0%	1,247	5.6%	4,789	21.7%	21
Washington	19,623		15,126	77.1%	1,194	6.1%	2,879	14.7%	38
West Virginia	4,670		2,553	54.7%	791	16.9%	1,299	27.8%	8
Wisconsin	15,024		11,064	73.6%	1,006	6.7%	2,853	19.0%	27
Wyoming	1,165		876	75.2%	133	11.4%	153	13.1%	43

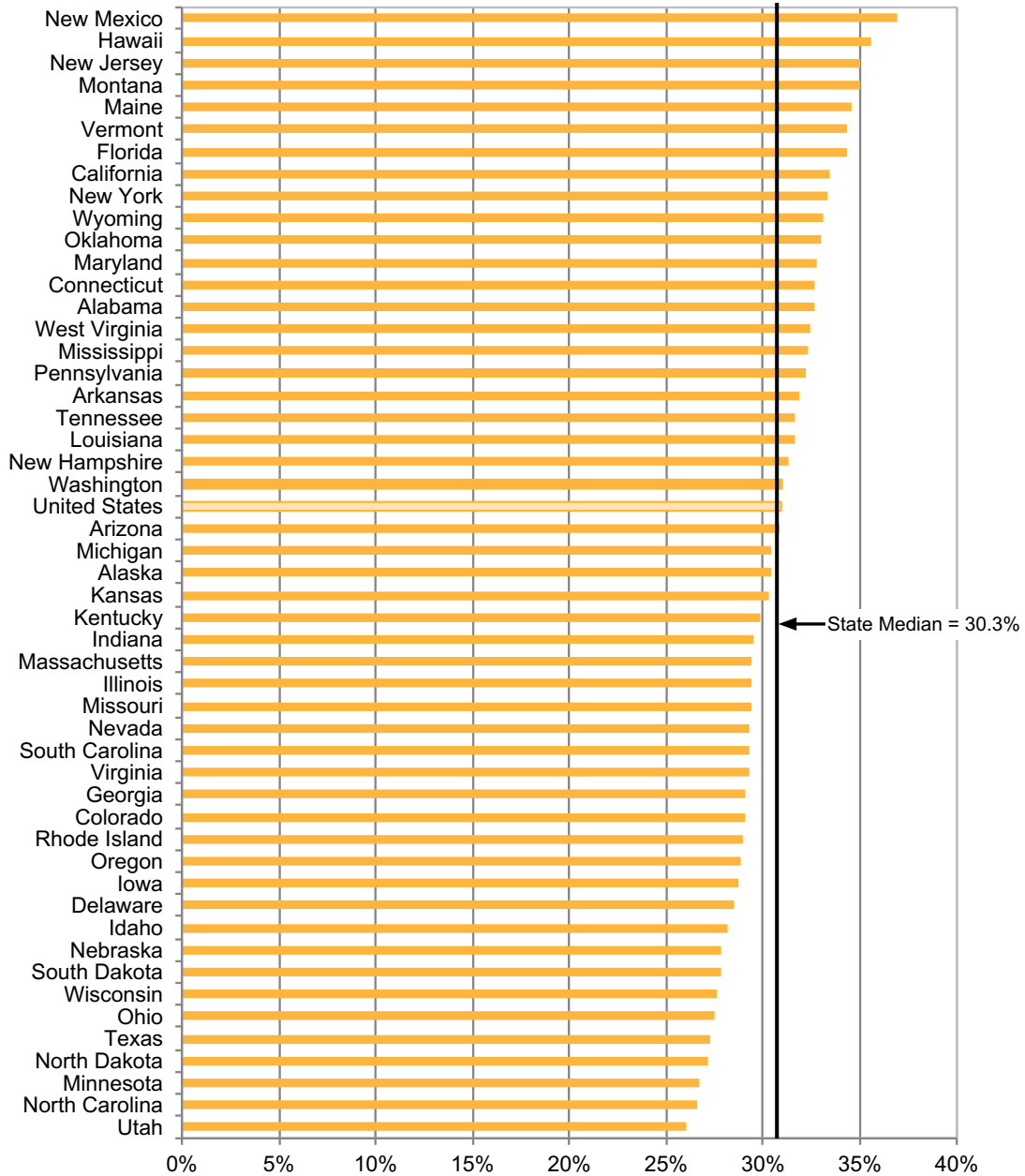
Source: 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* The total excludes active physicians whose school type was unavailable (n = 38). Physicians who are graduates of Canadian medical schools are included in the total (n = 9,076).

## 9. Active Physicians by Selected Age Groups, 2016

Figure 1.9. Percentage of active physicians who are age 60 or older, 2016.



Source: 2017 AMA Physician Masterfile (December 31, 2016).  
 Note: Physicians whose age was missing (n = 2,191) are excluded.

Table 1.9. Active Physicians by Selected Age Groups, 2016

	Total Active Physicians*		Under Age 40		Age 60 or Older		Rank
	Number		Number	Percent	Number	Percent	
United States	875,455		148,815	17.0%	270,781	30.9%	N.R.
Alabama	10,317		1,683	16.3%	3,366	32.6%	14
Alaska	1,949		341	17.5%	592	30.4%	25
Arizona	16,232		2,220	13.7%	5,013	30.9%	23
Arkansas	6,084		1,073	17.6%	1,942	31.9%	18
California	105,773		16,307	15.4%	35,372	33.4%	8
Colorado	15,379		2,429	15.8%	4,466	29.0%	36
Connecticut	12,327		1,892	15.3%	4,023	32.6%	13
Delaware	2,588		424	16.4%	738	28.5%	40
District of Columbia	5,898		1,474	25.0%	1,757	29.8%	N.R.
Florida	53,474		7,029	13.1%	18,367	34.3%	7
Georgia	23,182		3,870	16.7%	6,742	29.1%	35
Hawaii	4,347		631	14.5%	1,544	35.5%	2
Idaho	3,237		486	15.0%	912	28.2%	41
Illinois	35,890		7,091	19.8%	10,565	29.4%	30
Indiana	15,012		2,426	16.2%	4,432	29.5%	28
Iowa	6,600		1,244	18.8%	1,895	28.7%	39
Kansas	6,362		1,275	20.0%	1,926	30.3%	26
Kentucky	10,139		1,853	18.3%	3,023	29.8%	27
Louisiana	11,725		2,327	19.8%	3,708	31.6%	20
Maine	4,307		607	14.1%	1,491	34.6%	5
Maryland	22,692		3,627	16.0%	7,436	32.8%	12
Massachusetts	30,202		5,567	18.4%	8,891	29.4%	29
Michigan	27,987		5,608	20.0%	8,518	30.4%	24
Minnesota	16,099		3,056	19.0%	4,306	26.7%	48
Mississippi	5,557		915	16.5%	1,797	32.3%	16
Missouri	16,218		3,134	19.3%	4,768	29.4%	31
Montana	2,397		286	11.9%	839	35.0%	4
Nebraska	4,412		883	20.0%	1,230	27.9%	42
Nevada	5,840		813	13.9%	1,713	29.3%	32
New Hampshire	4,107		547	13.3%	1,286	31.3%	21
New Jersey	26,324		3,406	12.9%	9,215	35.0%	3
New Mexico	5,017		737	14.7%	1,854	37.0%	1
New York	72,007		12,830	17.8%	24,021	33.4%	9
North Carolina	25,286		4,487	17.7%	6,728	26.6%	49
North Dakota	1,754		404	23.0%	477	27.2%	47
Ohio	33,381		6,742	20.2%	9,190	27.5%	45
Oklahoma	7,993		1,339	16.8%	2,635	33.0%	11
Oregon	11,989		1,848	15.4%	3,453	28.8%	38
Pennsylvania	39,732		6,993	17.6%	12,784	32.2%	17
Puerto Rico	9,844		1,137	11.6%	3,811	38.7%	N.R.
Rhode Island	3,767		759	20.1%	1,092	29.0%	37
South Carolina	11,260		1,974	17.5%	3,297	29.3%	33
South Dakota	2,032		386	19.0%	565	27.8%	43
Tennessee	16,601		2,654	16.0%	5,252	31.6%	19
Texas	60,999		11,640	19.1%	16,614	27.2%	46
Utah	6,374		1,016	15.9%	1,658	26.0%	50
Vermont	2,231		328	14.7%	767	34.4%	6
Virginia	22,017		3,562	16.2%	6,441	29.3%	34
Washington	19,597		2,997	15.3%	6,069	31.0%	22
West Virginia	4,600		887	19.3%	1,492	32.4%	15
Wisconsin	15,002		2,552	17.0%	4,135	27.6%	44
Wyoming	1,159		156	13.5%	384	33.1%	10

Source: 2017 AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

\* Physicians whose age was missing (n = 2,191) are excluded.

## Section 2: Undergraduate Medical Education (UME)

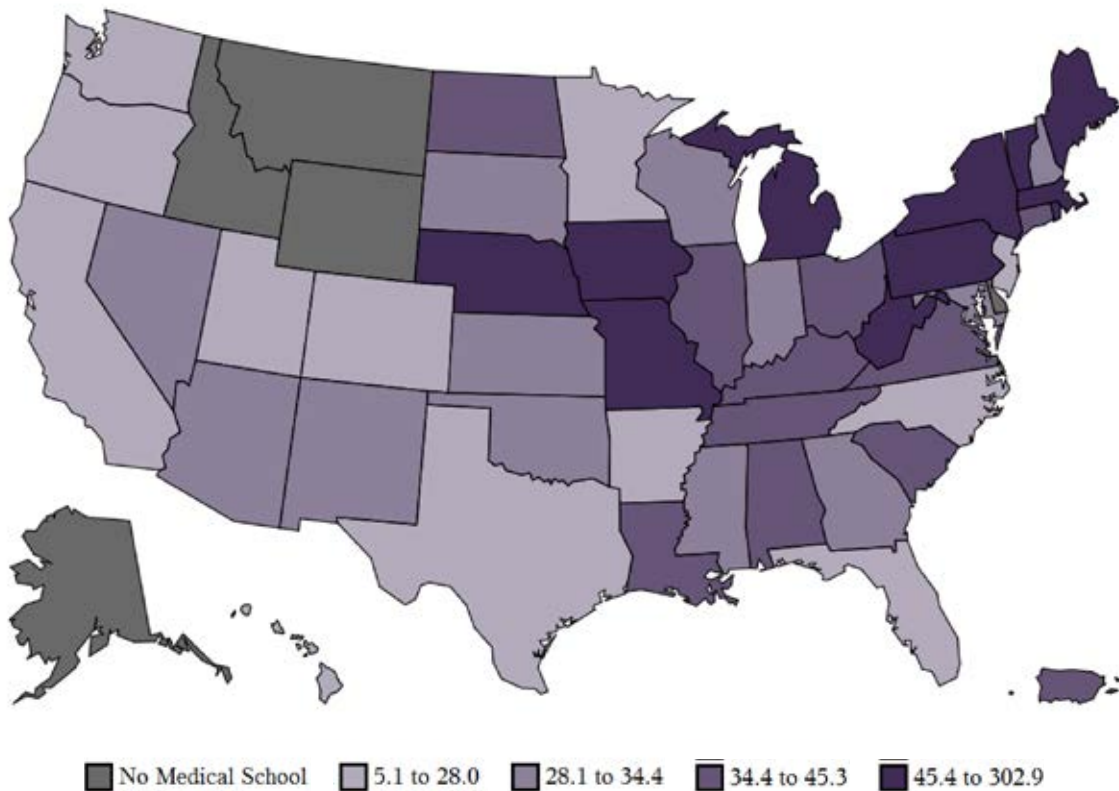
### Key Findings

- During the 2016–2017 academic year, there were 35.4 students per 100,000 population enrolled in MD-granting and DO-granting schools in the United States. The states with the highest student-to-population ratio were concentrated in the Northeast and the Midwest (see Map 2.1, Figure 2.1, and Table 2.1)
- More than half (60.9%) of the students enrolled in MD-granting institutions in the United States were enrolled in public schools, while less than one-fifth of students enrolled in DO-granting institutions (18.2%) were enrolled in public schools. The rate of students enrolled in public schools per 100,000 population varied widely across states where a public school exists, from a low of 8.6 in California to a high of 88.4 in West Virginia (see Map 2.2, Figure 2.2, and Table 2.2). In the United States overall, there were 17.9 students per 100,000 population enrolled in public schools.
- Between the 2006–2007 and 2016–2017 academic years, the total number of students enrolled in MD-granting and DO-granting schools increased by 32.8% in the United States. The growth was driven by a slightly greater increase in the total number of students enrolled in MD-granting schools (15,204) compared to DO-granting schools (13,076). This represents a 21.2% increase in MD enrollment and a 90.7% increase in DO enrollment during the 10-year period. Every state experienced an increase in enrollment, and 32 states had enrollment increases of 20% or more (see Figure 2.3 and Table 2.3).
- For the 2016–2017 academic year, 60.7% of new students in MD-granting schools matriculated in their home state. West Virginia, Puerto Rico, and South Carolina had the highest in-state matriculation rates—more than 90% of new medical students matriculated in state. In contrast, New Hampshire had the lowest in-state matriculation rate of states with a medical school—only 15.4% of the new medical students from New Hampshire matriculated in state (see Figure 2.4 and Table 2.4).



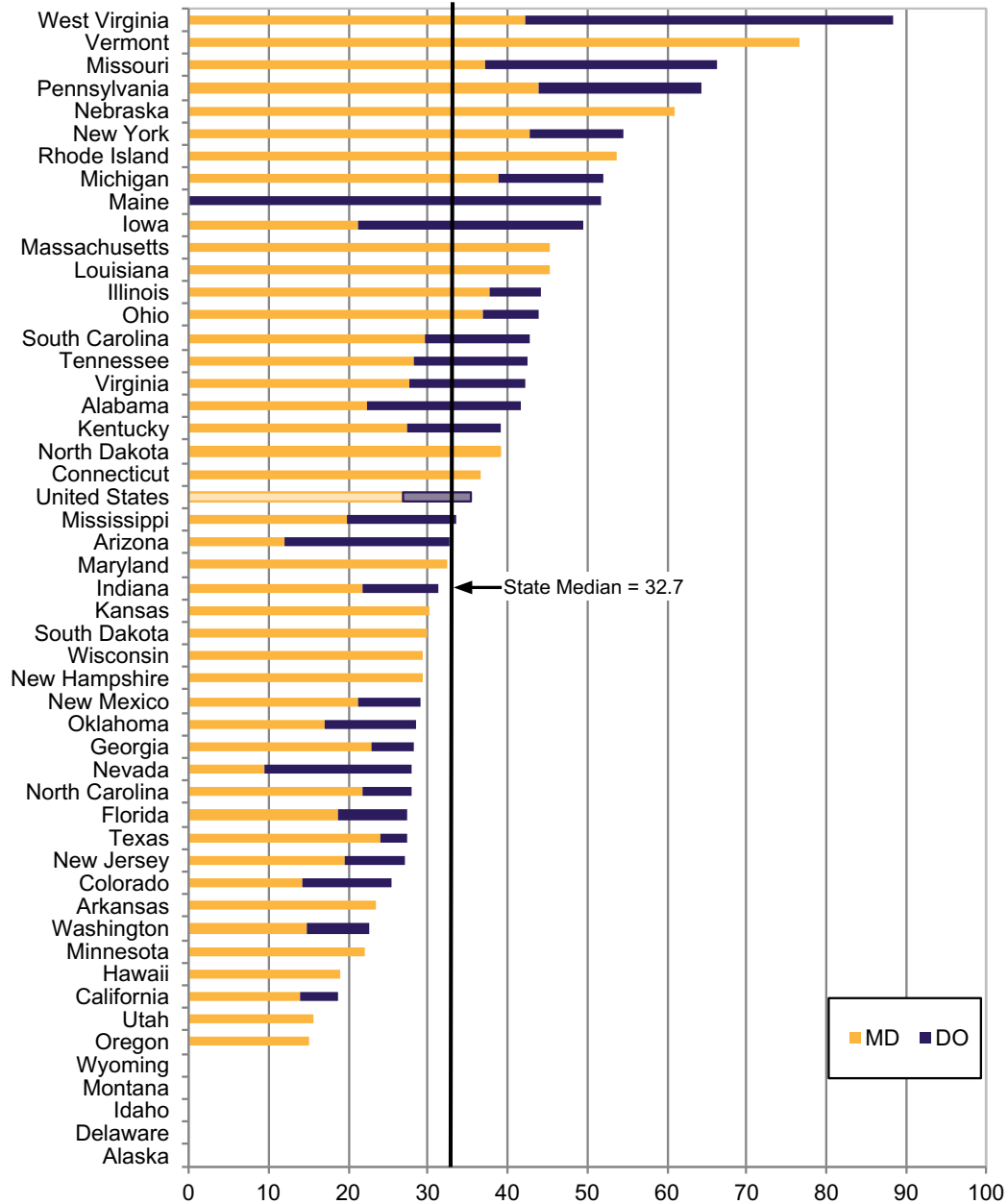
## 1. Student Enrollment per 100,000 Population by School Type, Academic Year 2016–2017

Map 2.1. Student enrollment per 100,000 population, academic year 2016–2017.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016).

Figure 2.1. Student enrollment per 100,000 population by school type, academic year 2016–2017.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016).

Note: California enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University's Northwest campus in Lebanon, Oregon.

Table 2.1. Student Enrollment per 100,000 Population by School Type, Academic Year 2016–2017

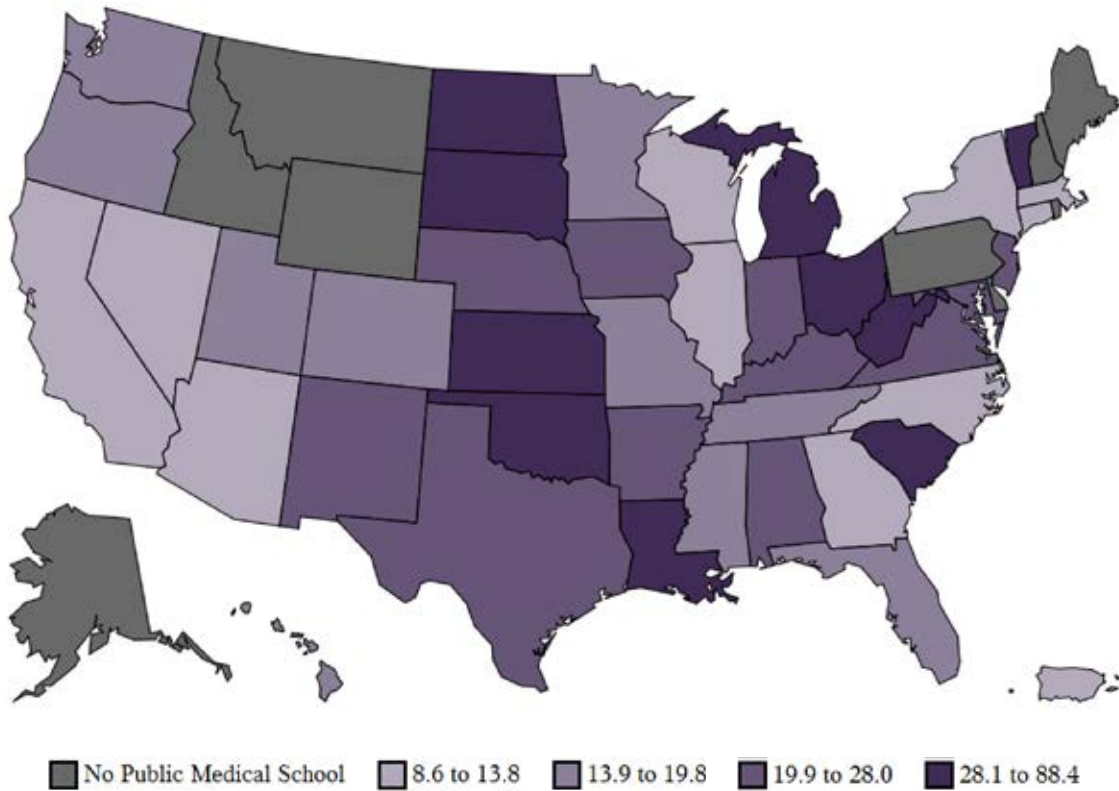
	Total Population	Total Students Enrolled in MD- or DO-Granting Institutions			Students Enrolled in MD-Granting Institutions		Students Enrolled in DO-Granting Institutions	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	114,395	35.4	N.R.	86,910	26.9	27,485	8.5
Alabama	4,863,300	2,020	41.5	18	1,094	22.5	926	19.0
Alaska	741,894	---	---	---	---	---	---	---
Arizona	6,931,071	2,269	32.7	23	843	12.2	1,426	20.6
Arkansas	2,988,248	702	23.5	39	702	23.5	---	---
California	39,250,017	7,387	18.8	43	5,540	14.1	1,847	5
Colorado	5,540,545	1,416	25.6	38	786	14.2	630	11.4
Connecticut	3,576,452	1,308	36.6	21	1,308	36.6	---	---
Delaware	952,065	---	---	---	---	---	---	---
District of Columbia	681,170	2,063	302.9	N.R.	2,063	302.9	---	---
Florida	20,612,439	5,676	27.5	35	3,883	18.8	1,793	8.7
Georgia	10,310,371	2,911	28.2	32	2,377	23.1	534	5.2
Hawaii	1,428,557	270	18.9	42	270	18.9	---	---
Idaho	1,683,140	---	---	---	---	---	---	---
Illinois	12,801,539	5,649	44.1	13	4,842	37.8	807	6.3
Indiana	6,633,053	2,069	31.2	25	1,448	21.8	621	9.4
Iowa	3,134,693	1,549	49.4	10	663	21.2	886	28.3
Kansas	2,907,289	876	30.1	26	876	30.1	---	---
Kentucky	4,436,974	1,737	39.1	19	1,210	27.3	527	11.9
Louisiana	4,681,666	2,121	45.3	12	2,121	45.3	---	---
Maine	1,331,479	690	51.8	9	---	---	690	51.8
Maryland	6,016,447	1,950	32.4	24	1,950	32.4	---	---
Massachusetts	6,811,779	3,088	45.3	11	3,088	45.3	---	---
Michigan	9,928,300	5,169	52.1	8	3,856	38.8	1,313	13.2
Minnesota	5,519,952	1,215	22.0	41	1,215	22.0	---	---
Mississippi	2,988,726	1,000	33.5	22	592	19.8	408	14
Missouri	6,093,000	4,031	66.2	3	2,270	37.3	1,761	28.9
Montana	1,042,520	---	---	---	---	---	---	---
Nebraska	1,907,116	1,160	60.8	5	1,160	60.8	---	---
Nevada	2,940,058	826	28.1	33	280	9.5	546	19
New Hampshire	1,334,795	393	29.4	29	393	29.4	---	---
New Jersey	8,944,469	2,429	27.2	37	1,753	19.6	676	7.6
New Mexico	2,081,015	603	29.0	30	441	21.2	162	7.8
New York	19,745,289	10,743	54.4	6	8,427	42.7	2,316	12
North Carolina	10,146,788	2,841	28.0	34	2,204	21.7	637	6.3
North Dakota	757,952	296	39.1	20	296	39.1	---	---
Ohio	11,614,373	5,112	44.0	14	4,297	37.0	815	7.0
Oklahoma	3,923,561	1,116	28.4	31	670	17.1	446	11
Oregon	4,093,465	621	15.2	45	621	15.2	---	---
Pennsylvania	12,784,227	8,206	64.2	4	5,625	44.0	2,581	20.2
Puerto Rico	3,411,307	1,394	40.9	N.R.	1,394	40.9	---	---
Rhode Island	1,056,426	568	53.8	7	568	53.8	---	---
South Carolina	4,961,119	2,117	42.7	15	1,473	29.7	644.0	13.0
South Dakota	865,454	258	29.8	27	258	29.8	---	---
Tennessee	6,651,194	2,832	42.6	16	1,883	28.3	949	14.3
Texas	27,862,596	7,632	27.4	36	6,716	24.1	916	3.3
Utah	3,051,217	474	15.5	44	474	15.5	---	---
Vermont	624,594	478	76.5	2	478	76.5	---	---
Virginia	8,411,808	3,546	42.2	17	2,333	27.7	1,213	14.4
Washington	7,288,000	1,657	22.7	40	1,089	14.9	568	7.8
West Virginia	1,831,102	1,618	88.4	1	771	42.1	847	46
Wisconsin	5,778,708	1,703	29.5	28	1,703	29.5	---	---
Wyoming	585,501	---	---	---	---	---	---	---

Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016).

Note: N.R. = not ranked. --- Indicates that the data are not applicable. Some states do not have an MD-granting or DO-granting institution. California enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University's Northwest campus in Lebanon, Oregon.

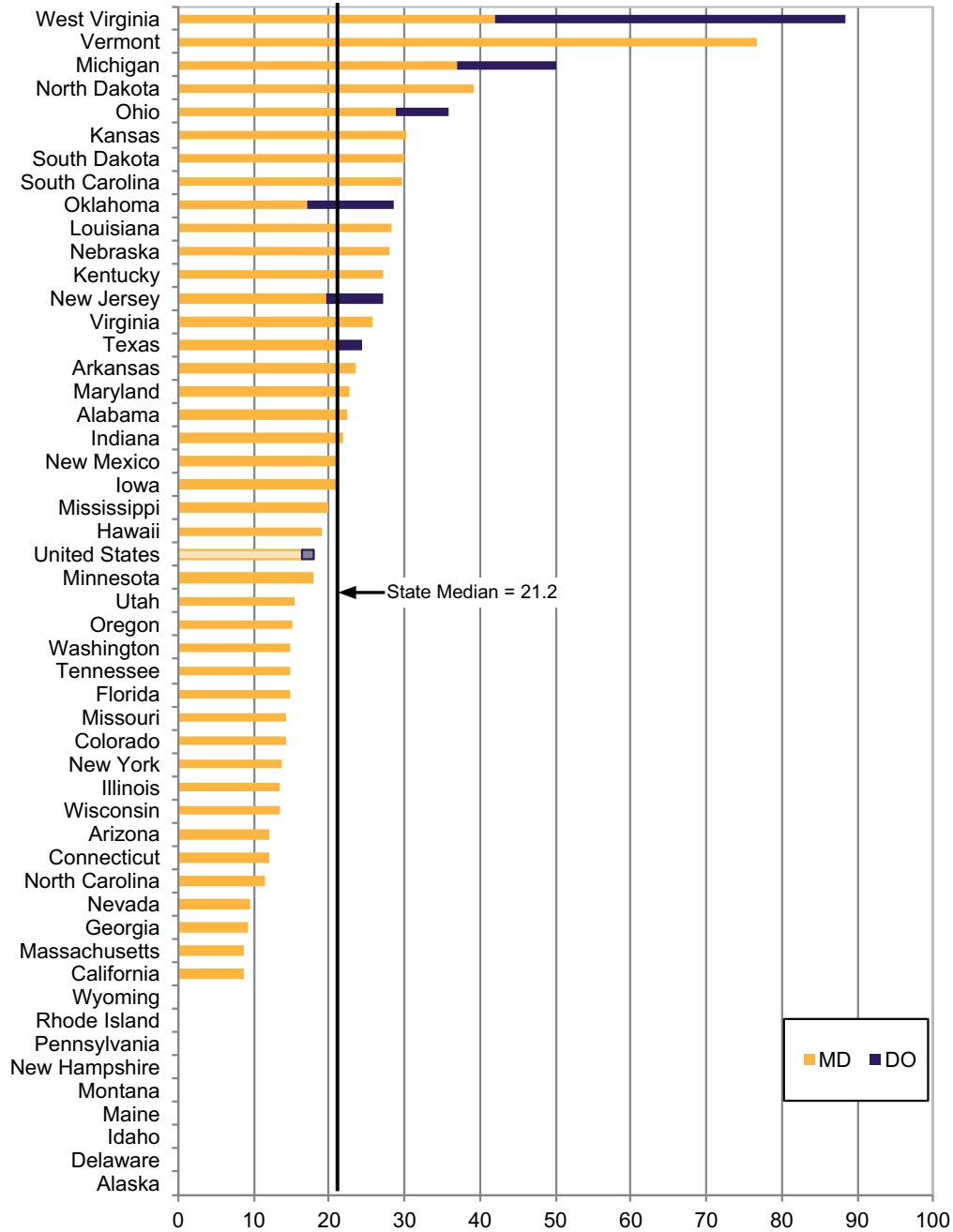
## 2. Student Enrollment in Public Schools per 100,000 Population by School Type, Academic Year 2016–2017

Map 2.2. Student enrollment in public schools per 100,000 population, academic year 2016–2017.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016).

Figure 2.2. Student enrollment in public schools per 100,000 population by school type, academic year 2016–2017.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, Note: California enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University's Northwest campus in Lebanon, Oregon.

Table 2.2. Student Enrollment in Public Schools per 100,000 Population by School Type, Academic Year 2016–2017

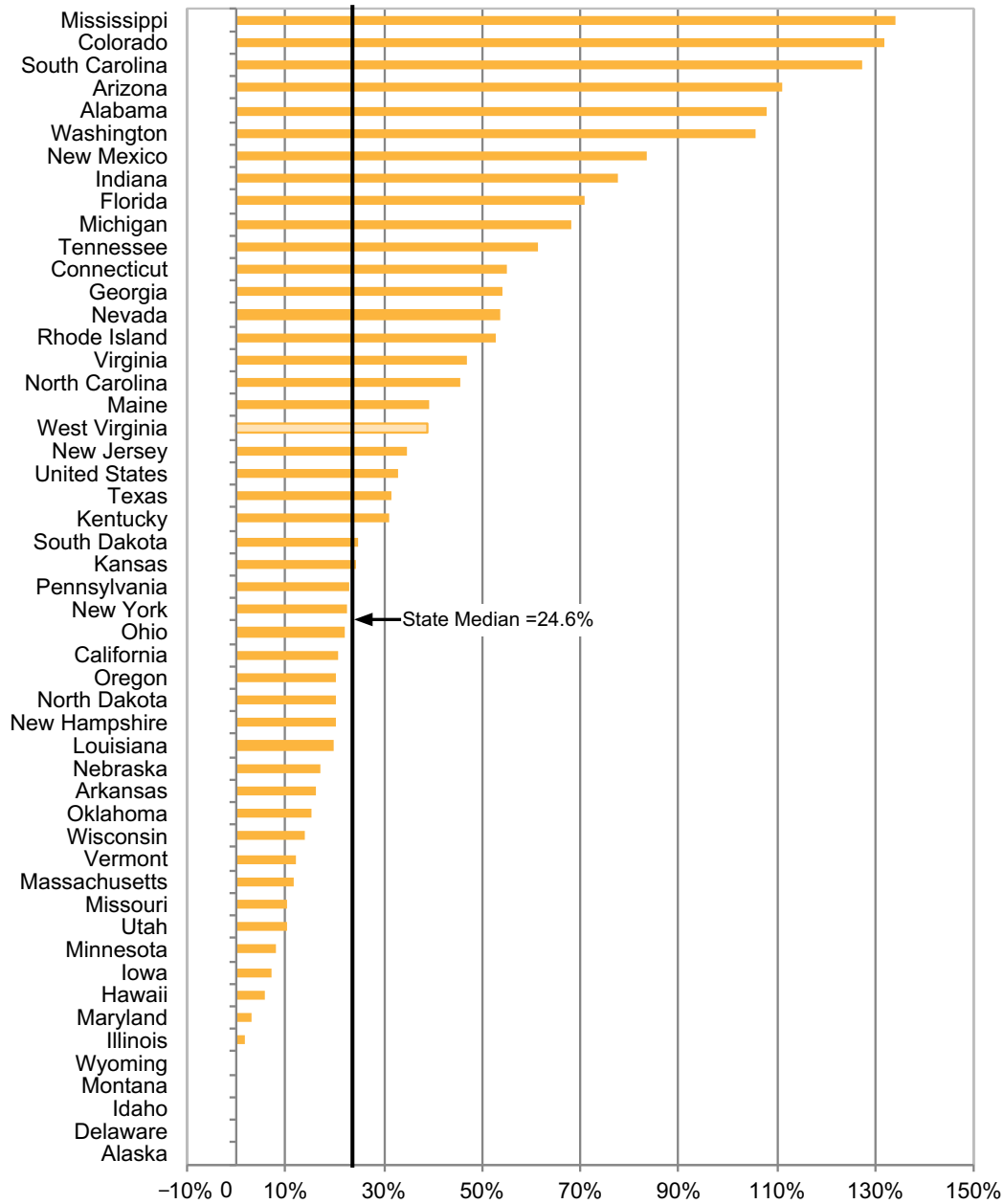
	Total Population	Total Students Enrolled in Public MD- or DO-Granting Institutions			Students Enrolled in Public MD-Granting Institutions		Students Enrolled in Public DO-Granting Institutions	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	57,976	17.9	N.R.	52,963	16.4	5,013	1.6
Alabama	4,863,300	1,094	22.5	18	1,094	22.5	---	---
Alaska	741,894	---	---	---	---	---	---	---
Arizona	6,931,071	843	12.2	35	843	12.2	---	---
Arkansas	2,988,248	702	23.5	16	702	23.5	---	---
California	39,250,017	3,370	8.6	41	3,370	8.6	---	---
Colorado	5,540,545	786	14.2	31	786	14.2	---	---
Connecticut	3,576,452	430	12.0	36	430	12.0	---	---
Delaware	952,065	---	---	---	---	---	---	---
District of Columbia	681,170	---	---	N.R.	---	---	---	---
Florida	20,612,439	3,031	14.7	29	3,031	14.7	---	---
Georgia	10,310,371	950	9.2	39	950	9.2	---	---
Hawaii	1,428,557	270	18.9	23	270	18.9	---	---
Idaho	1,683,140	---	---	---	---	---	---	---
Illinois	12,801,539	1,710	13.4	33	1,710	13.4	---	---
Indiana	6,633,053	1,448	21.8	19	1,448	21.8	---	---
Iowa	3,134,693	663	21.2	21	663	21.2	---	---
Kansas	2,907,289	876	30.1	6	876	30.1	---	---
Kentucky	4,436,974	1,210	27.3	12	1,210	27.3	---	---
Louisiana	4,681,666	1,317	28.1	10	1,317	28.1	---	---
Maine	1,331,479	---	---	---	---	---	---	---
Maryland	6,016,447	1,359	22.6	17	1,359	22.6	---	---
Massachusetts	6,811,779	598	8.8	40	598	8.8	---	---
Michigan	9,928,300	4,985	50.2	3	3,672	37.0	1,313	13.2
Minnesota	5,519,952	981	17.8	24	981	17.8	---	---
Mississippi	2,988,726	592	19.8	22	592	19.8	---	---
Missouri	6,093,000	877	14.4	30	877	14.4	---	---
Montana	1,042,520	---	---	---	---	---	---	---
Nebraska	1,907,116	534	28.0	11	534	28.0	---	---
Nevada	2,940,058	280	9.5	38.0	280	9.5	---	---
New Hampshire	1,334,795	---	---	---	---	---	---	---
New Jersey	8,944,469	2,429	27.2	13	1,753	19.6	676	7.6
New Mexico	2,081,015	441	21.2	20	441	21.2	---	---
New York	19,745,289	2,733	13.8	32	2,733	13.8	---	---
North Carolina	10,146,788	1,162	11.5	37	1,162	11.5	---	---
North Dakota	757,952	296	39.1	4	296	39.1	---	---
Ohio	11,614,373	4,152	35.7	5	3,337	28.7	815	7.0
Oklahoma	3,923,561	1,116	28.4	9	670	17.1	446	11
Oregon	4,093,465	621	15.2	26	621	15.2	---	---
Pennsylvania	12,784,227	---	---	---	---	---	---	---
Puerto Rico	3,411,307	472	13.8	N.R.	472	13.8	---	---
Rhode Island	1,056,426	---	---	---	---	---	---	---
South Carolina	4,961,119	1,473	29.7	8	1,473	29.7	---	---
South Dakota	865,454	258	29.8	7	258	29.8	---	---
Tennessee	6,651,194	980	14.7	28	980	14.7	---	---
Texas	27,862,596	6,816	24.5	15	5,900	21.2	916	3.3
Utah	3,051,217	474	15.5	25	474	15.5	---	---
Vermont	624,594	478	76.5	2	478	76.5	---	---
Virginia	8,411,808	2,165	25.7	14	2,165	25.7	---	---
Washington	7,288,000	1,089	14.9	27	1,089	14.9	---	---
West Virginia	1,831,102	1,618	88.4	1	771	42.1	847	46
Wisconsin	5,778,708	769	13.3	34	769	13.3	---	---
Wyoming	585,501	---	---	---	---	---	---	---

Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (released December 2016).

Note: N.R. = not ranked. --- Indicates that the data are not applicable. Some states do not have a public MD-granting or DO-granting institution. California enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University's Northwest campus in Lebanon, Oregon.

### 3. Percentage Change in Student Enrollment, 2006–2016

Figure 2.3. Percentage change in student enrollment, 2006–2016.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (Release date: December 2016).

Note: California enrollment data for DO-granting institutions includes enrollment at Western University's Northwest campus in Lebanon, Oregon.

Table 2.3. Percentage Change in Student Enrollment by School Type, 2006–2016

	Total Students Enrolled in UME				Students Enrolled in MD-Granting Institution		Students Enrolled in DO-Granting Institution	
	2006	2016	Percent Change	Rank	2006	2016	2006	2016
United States	86,115	114,395	32.8%	N.R.	71,706	86,910	14,409	27,485
Alabama	971	2,020	108.0%	5	971	1,094	---	926
Alaska	---	---	---	---	---	---	---	---
Arizona	1,076	2,269	110.9%	4	493	843	583	1,426
Arkansas	605	702	16.0%	34	605	702	---	---
California	6,120	7,387	20.7%	28	4,809	5,540	1,311	1,847
Colorado	611	1,416	131.8%	2	611	786	---	630
Connecticut	843	1,308	55.2%	12	843	1,308	---	---
Delaware	---	---	---	---	---	---	---	---
District of Columbia	1,954	2,063	5.6%	N.R.	1,954	2,063	---	---
Florida	3,325	5,676	70.7%	9	1,966	3,883	1,359	1,793
Georgia	1,888	2,911	54.2%	13	1,719	2,377	169	534
Hawaii	255	270	5.9%	43	255	270	---	---
Idaho	---	---	---	---	---	---	---	---
Illinois	5,556	5,649	1.7%	45	4,866	4,842	690	807
Indiana	1,164	2,069	77.7%	8	1,164	1,448	---	621
Iowa	1,444	1,549	7.3%	42	630	663	814	886
Kansas	704	876	24.4%	24	704	876	---	---
Kentucky	1,327	1,737	30.9%	22	1,026	1,210	301	527
Louisiana	1,769	2,121	19.9%	32	1,769	2,121	---	---
Maine	496	690	39.1%	18	---	---	496	690
Maryland	1,889	1,950	3.2%	44	1,889	1,950	---	---
Massachusetts	2,762	3,088	11.8%	38	2,762	3,088	---	---
Michigan	3,071	5,169	68.3%	10	2,363	3,856	708	1,313
Minnesota	1,122	1,215	8.3%	41	1,122	1,215	---	---
Mississippi	427	1,000	134.2%	1	427	592	---	408
Missouri	3,646	4,031	10.6%	39	1,996	2,270	1,650	1,761
Montana	---	---	---	---	---	---	---	---
Nebraska	991	1,160	17.1%	33	991	1,160	---	---
Nevada	538	826	53.5%	14	218	280	320	546
New Hampshire	327	393	20.2%	31	327	393	---	---
New Jersey	1,800	2,429	34.9%	20	1,402	1,753	398	676
New Mexico	329	603	83.3%	7	329	441	---	162
New York	8,755	10,743	22.7%	26	7,535	8,427	1,220	2,316
North Carolina	1,953	2,841	45.5%	17	1,953	2,204	---	637
North Dakota	246	296	20.3%	30	246	296	---	---
Ohio	4,192	5,112	21.9%	27	3,764	4,297	428	815
Oklahoma	969	1,116	15.2%	35	617	670	352	446
Oregon	516	621	20.3%	29	516	621	---	---
Pennsylvania	6,682	8,206	22.8%	25	4,736	5,625	1,946	2,581
Puerto Rico	1,191	1,394	17.0%	N.R.	1,191	1,394	---	---
Rhode Island	372	568	52.7%	15	372	568	---	---
South Carolina	931	2,117	127.4%	3	931	1,473	---	644
South Dakota	207	258	24.6%	23	207	258	---	---
Tennessee	1,757	2,832	61.2%	11	1,757	1,883	---	949
Texas	5,798	7,632	31.6%	21	5,243	6,716	555	916
Utah	429	474	10.5%	40	429	474	---	---
Vermont	426	478	12.2%	37	426	478	---	---
Virginia	2,410	3,546	47.1%	16	1,803	2,333	607	1,213
Washington	805	1,657	105.8%	6	805	1,089	---	568
West Virginia	1,165	1,618	38.9%	19	663	771	502	847
Wisconsin	1,492	1,703	14.1%	36	1,492	1,703	---	---
Wyoming	---	---	---	---	---	---	---	---

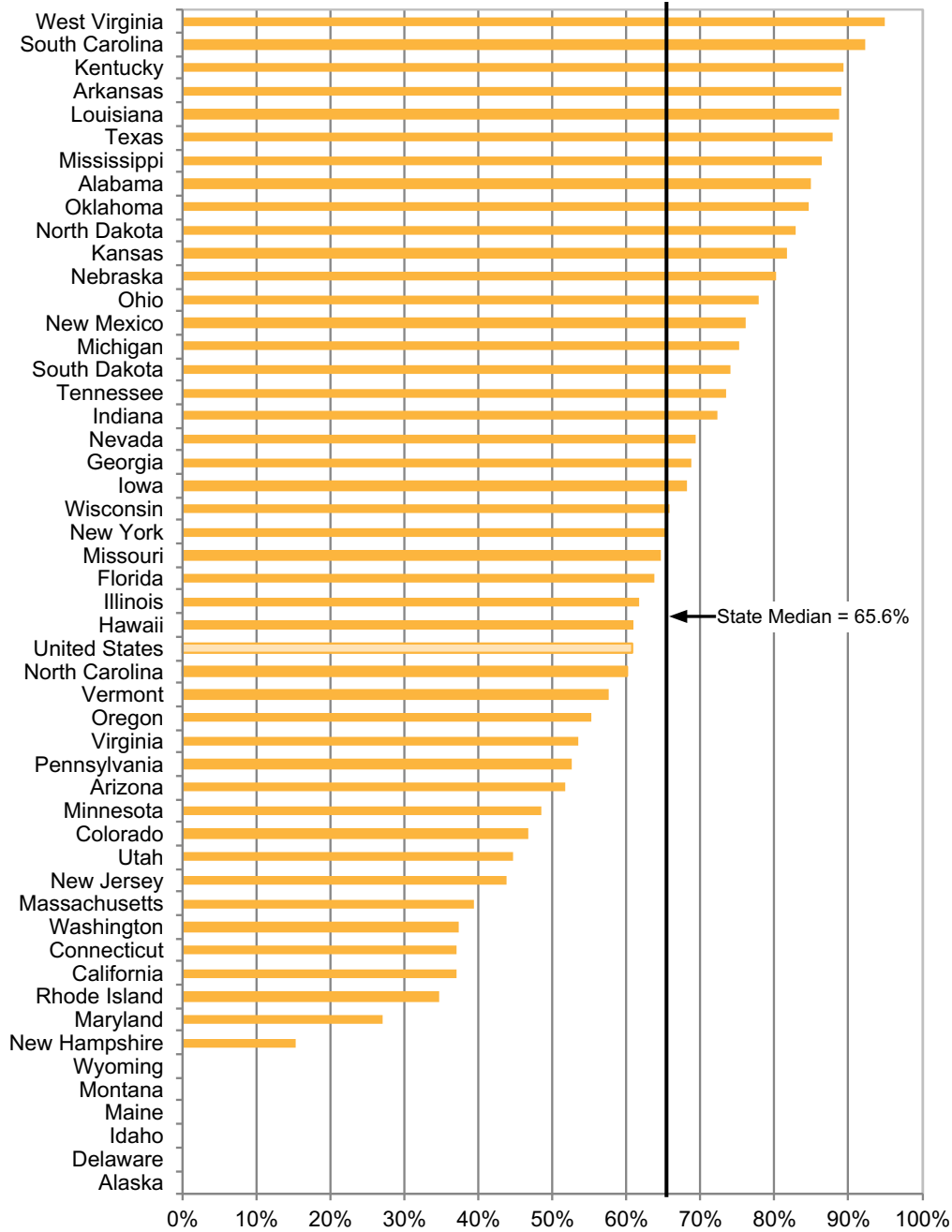
Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records Systems (SRS) and are as of July 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. July 1, 2016, population estimates are from the U.S. Census Bureau (Release date: December 2016).

N.R. = Not Ranked --- Indicates that the data are not applicable. Some states do not have a MD-granting or DO-granting institution. California enrollment data for DO-granting institutions includes enrollment at Western University's Northwest campus in Lebanon, Oregon.



#### 4. Percentage of Students Matriculating in State, Academic Year 2016–2017

Figure 2.4. Percentage of students matriculating in state, academic year 2016–2017.



Source: Association of American Medical Colleges (AAMC) Applicant Matriculant File as of July 2017.

Note: The data shown here are for students in MD-granting institutions only. Students attending DO-granting institutions are excluded. Excludes the 190 matriculants where legal residence is unknown, outside the United States, or a U.S. territory or possession.

Table 2.4. Percentage of Students Matriculating in State, Academic Year 2016–2017

	Matriculants to MD-Granting Institution by State of Legal Residence	Medical Students Who Matriculated to a MD-Granting Institution in Their Legal State of Residence		
	Number	Number	Percent	Rank
United States	20,546	12,478	60.7%	N.R.
Alabama	271	230	84.9%	8
Alaska	38	---	---	---
Arizona	286	148	51.7%	33
Arkansas	174	155	89.1%	4
California	2,606	964	37.0%	41
Colorado	284	133	46.8%	35
Connecticut	281	104	37.0%	40
Delaware	49	---	---	---
District of Columbia	41	8	19.5%	N.R.
Florida	1,075	684	63.6%	25
Georgia	669	460	68.8%	20
Hawaii	92	56	60.9%	27
Idaho	67	---	---	---
Illinois	949	585	61.6%	26
Indiana	358	259	72.3%	18
Iowa	141	96	68.1%	21
Kansas	234	191	81.6%	11
Kentucky	233	208	89.3%	3
Louisiana	359	318	88.6%	5
Maine	53	---	---	---
Maryland	510	138	27.1%	43
Massachusetts	659	259	39.3%	38
Michigan	808	607	75.1%	15
Minnesota	405	196	48.4%	34
Mississippi	168	145	86.3%	7
Missouri	312	202	64.7%	24
Montana	55	---	---	---
Nebraska	141	113	80.1%	12
Nevada	72	50	69.4%	19
New Hampshire	52	8	15.4%	44
New Jersey	785	343	43.7%	37
New Mexico	129	98	76.0%	14
New York	1,603	1,050	65.5%	23
North Carolina	468	281	60.0%	28
North Dakota	58	48	82.8%	10
Ohio	767	598	78.0%	13
Oklahoma	180	152	84.4%	9
Oregon	199	110	55.3%	30
Pennsylvania	751	394	52.5%	32
Puerto Rico	294	276	93.9%	N.R.
Rhode Island	52	18	34.6%	42
South Carolina	319	294	92.2%	2
South Dakota	69	51	73.9%	16
Tennessee	343	252	73.5%	17
Texas	1,697	1,489	87.7%	6
Utah	197	88	44.7%	36
Vermont	59	34	57.6%	29
Virginia	524	280	53.4%	31
Washington	385	144	37.4%	39
West Virginia	135	128	94.8%	1
Wisconsin	353	232	65.7%	22
Wyoming	31	---	---	---

Source: Association of American Medical Colleges (AAMC) Applicant Matriculant File as of July 2017.

Note: 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 MD-granting institutions only. Students attending DO-granting institutions are excluded.

Excludes the 190 matriculants where legal residence is unknown, outside the United States, or a U.S. territory or possession.

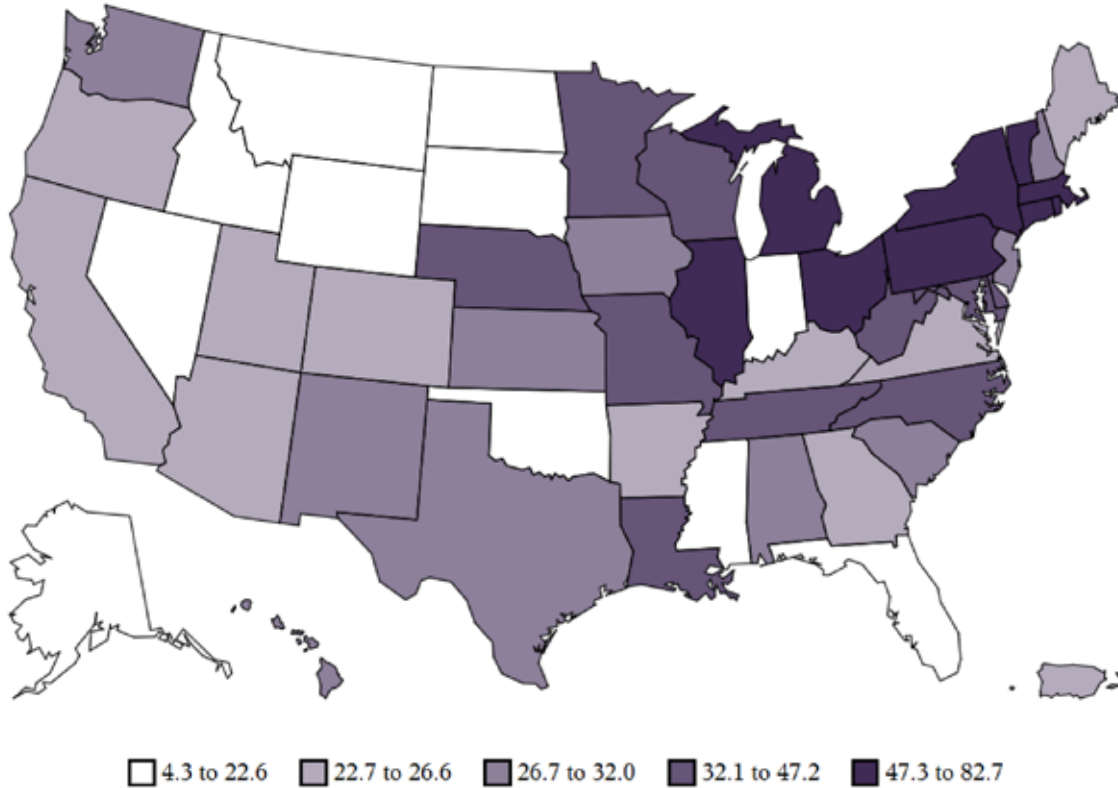
## Section 3: Graduate Medical Education (GME)

### Key Findings

- In 2016, every state in the United States had at least one ACGME-accredited graduate medical education 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 4.3 in Alaska to a high of 82.7 in Massachusetts (see Map 3.1, Figure 3.1, and Table 3.1). The national average was 37.8 residents and fellows per 100,000 population.
- There were 13.9 residents and fellows in primary care programs accredited by the ACGME per 100,000 population in the United States in 2016. There was a wide range among the states; the highest numbers of residents and fellows in primary care GME programs per 100,000 population were primarily in the Northeast and Midwest (see Map 3.2, Figure 3.2, and Table 3.2).
- Nationally, about one-quarter (24.4%) of the residents and fellows in ACGME training programs were IMGs in 2016. The percentage varied widely across the states. In Alaska, only one resident was an IMG. At the other end of the spectrum, more than half the residents and fellows in Wyoming and New Jersey were IMGs (see Figure 3.3 and Table 3.3).
- In 2016, there were more residents and fellows in ACGME and OCGME programs than there were students in MD- and DO-granting institutions in the United States, in part because of the inflow of IMGs to GME. The ratio of total GME to total UME enrollees was 1.1. However, many states had fewer residents and fellows than medical students, and the state median ratio of GME to UME enrollees was 0.98. The lowest ratio of GME to UME enrollees (0.5) was in North Dakota (see Map 3.4, Figure 3.4, and Table 3.4).
- Between 2006 and 2016, the number of residents and fellows in ACGME programs increased by 15,449 (14.5%). All states except Hawaii and Alaska saw an increase over that period in the number of residents and fellows (see Map 3.5.1, Figure 3.5, and Table 3.5). The rate of change varied widely by state, as can be seen in Map 3.5.2, Figure 3.5, and Table 3.5.

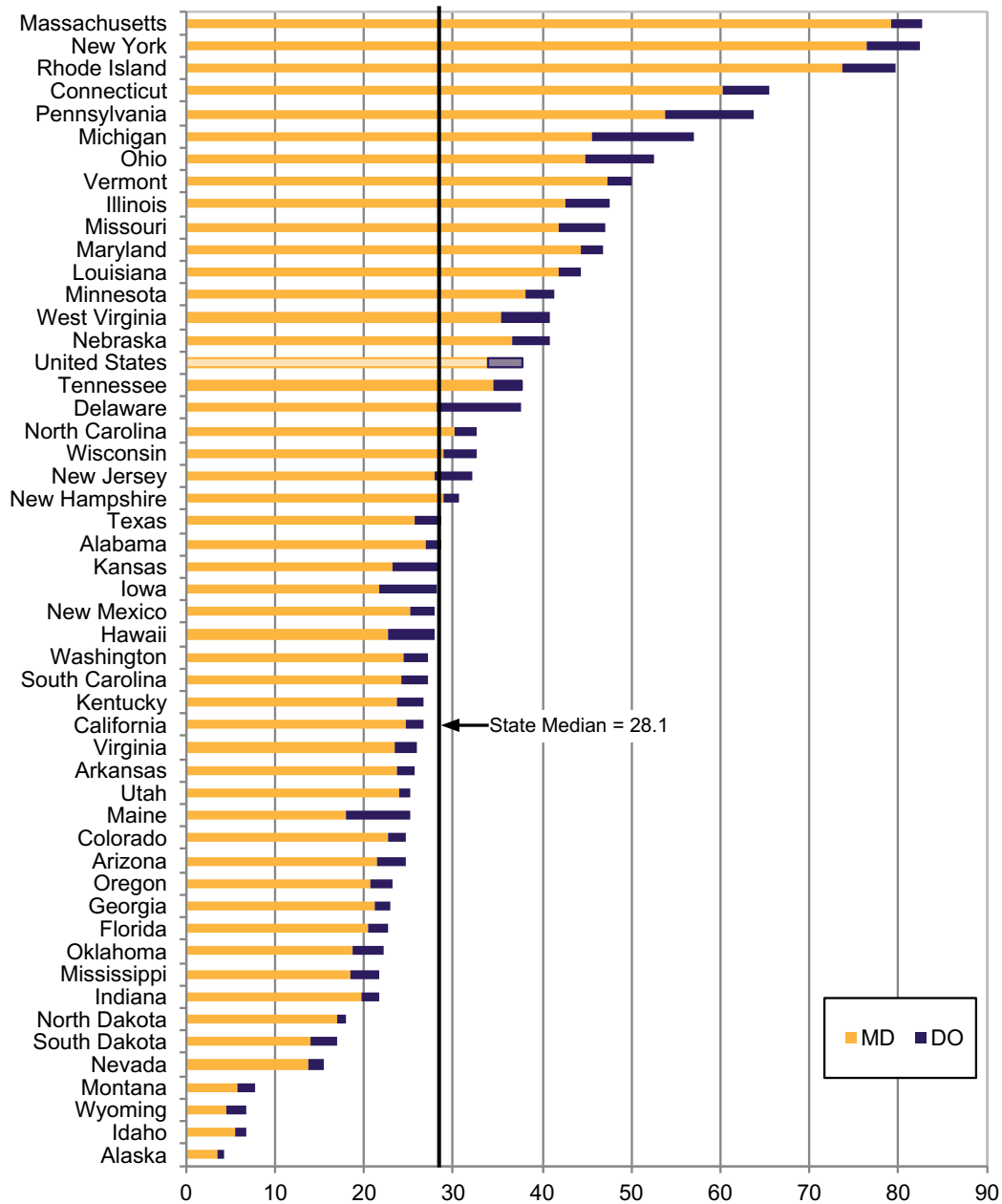
## 1. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Programs per 100,000 Population by Degree Type

Map 3.1. Residents and fellows on duty as of December 31, 2016, in ACGME-accredited programs per 100,000 population.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.

Figure 3.1. Residents and fellows on duty as of December 31, 2016, in ACGME-accredited programs per 100,000 population by degree type.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.

**Table 3.1. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Programs per 100,000 Population by Degree Type**

	Total Population	Total Residents/Fellows in ACGME Programs			MDs in ACGME Programs*		DOs in ACGME Programs	
		Number	Rate per 100,000	Rank	Number	Rate per 100,000	Number	Rate per 100,000
United States	323,127,513	122,002	37.8	N.R.	109,540	33.9	12,462	3.9
Alabama	4,863,300	1,392	28.6	23	1,304	26.8	88	1.8
Alaska	741,894	32	4.3	50	25	3.4	7	0.9
Arizona	6,931,071	1,704	24.6	37	1,481	21.4	223	3.2
Arkansas	2,988,248	768	25.7	33	704	23.6	64	2.1
California	39,250,017	10,429	26.6	31	9,707	24.7	722	1.8
Colorado	5,540,545	1,370	24.7	36	1,251	22.6	119	2.1
Connecticut	3,576,452	2,344	65.5	4	2,156	60.3	188	5.3
Delaware	952,065	357	37.5	17	267	28.0	90	9.5
District of Columbia	681,170	1,646	241.6	N.R.	1,576	231.4	70	10.3
Florida	20,612,439	4,652	22.6	40	4,190	20.3	462	2.2
Georgia	10,310,371	2,375	23.0	39	2,175	21.1	200	1.9
Hawaii	1,428,557	400	28.0	27	323	22.6	77	5.4
Idaho	1,683,140	113	6.7	49	94	5.6	19	1.1
Illinois	12,801,539	6,092	47.6	9	5,445	42.5	647	5.1
Indiana	6,633,053	1,433	21.6	43	1,297	19.6	136	2.1
Iowa	3,134,693	882	28.1	25	683	21.8	199	6.3
Kansas	2,907,289	826	28.4	24	670	23.0	156	5.4
Kentucky	4,436,974	1,180	26.6	30	1,051	23.7	129	2.9
Louisiana	4,681,666	2,074	44.3	12	1,963	41.9	111	2.4
Maine	1,331,479	334	25.1	35	240	18.0	94	7.1
Maryland	6,016,447	2,814	46.8	11	2,669	44.4	145	2.4
Massachusetts	6,811,779	5,630	82.7	1	5,391	79.1	239	3.5
Michigan	9,928,300	5,655	57.0	6	4,526	45.6	1,129	11.4
Minnesota	5,519,952	2,285	41.4	13	2,108	38.2	177	3.2
Mississippi	2,988,726	648	21.7	42	551	18.4	97	3.2
Missouri	6,093,000	2,873	47.2	10	2,556	41.9	317	5.2
Montana	1,042,520	80	7.7	47	61	5.9	19	1.8
Nebraska	1,907,116	779	40.8	15	696	36.5	83	4.4
Nevada	2,940,058	455	15.5	46	401	13.6	54	1.8
New Hampshire	1,334,795	409	30.6	21	384	28.8	25	1.9
New Jersey	8,944,469	2,865	32.0	20	2,489	27.8	376	4.2
New Mexico	2,081,015	583	28.0	26	522	25.1	61	2.9
New York	19,745,289	16,276	82.4	2	15,081	76.4	1,195	6.1
North Carolina	10,146,788	3,308	32.6	18	3,067	30.2	241	2.4
North Dakota	757,952	136	17.9	44	128	16.9	8	1.1
Ohio	11,614,373	6,104	52.6	7	5,210	44.9	894	7.7
Oklahoma	3,923,561	873	22.3	41	732	18.7	141	3.6
Oregon	4,093,465	953	23.3	38	842	20.6	111	2.7
Pennsylvania	12,784,227	8,139	63.7	5	6,864	53.7	1,275	10.0
Puerto Rico	3,411,307	782	22.9	N.R.	782	22.9	0	0.0
Rhode Island	1,056,426	841	79.6	3	778	73.6	63	6.0
South Carolina	4,961,119	1,344	27.1	29	1,198	24.1	146	2.9
South Dakota	865,454	147	17.0	45	120	13.9	27	3.1
Tennessee	6,651,194	2,506	37.7	16	2,303	34.6	203	3.1
Texas	27,862,596	7,997	28.7	22	7,154	25.7	843	3.0
Utah	3,051,217	768	25.2	34	728	23.9	40	1.3
Vermont	624,594	312	50.0	8	296	47.4	16	2.6
Virginia	8,411,808	2,174	25.8	32	1,962	23.3	212	2.5
Washington	7,288,000	1,975	27.1	28	1,774	24.3	201	2.8
West Virginia	1,831,102	748	40.8	14	646	35.3	102	5.6
Wisconsin	5,778,708	1,881	32.6	19	1,673	29.0	208	3.6
Wyoming	585,501	40	6.8	48	27	4.6	13	2.2

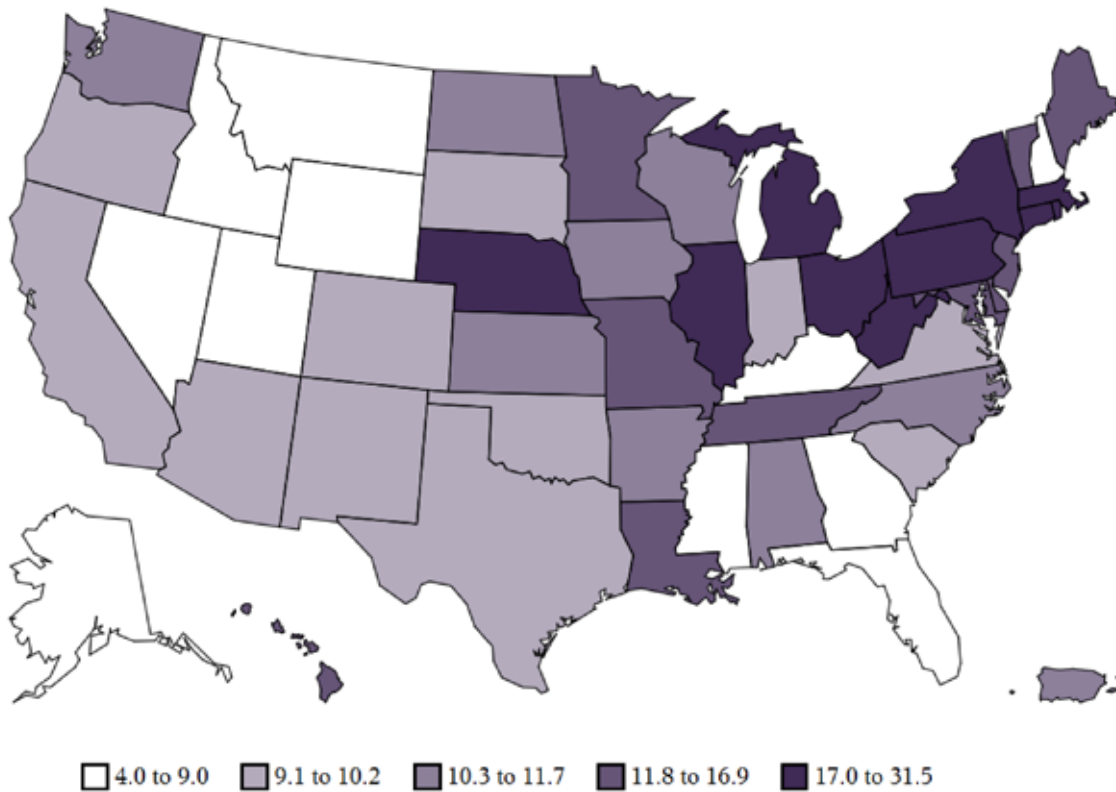
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.

Note: N.R. = not ranked.

\* Includes MDs from international medical schools.

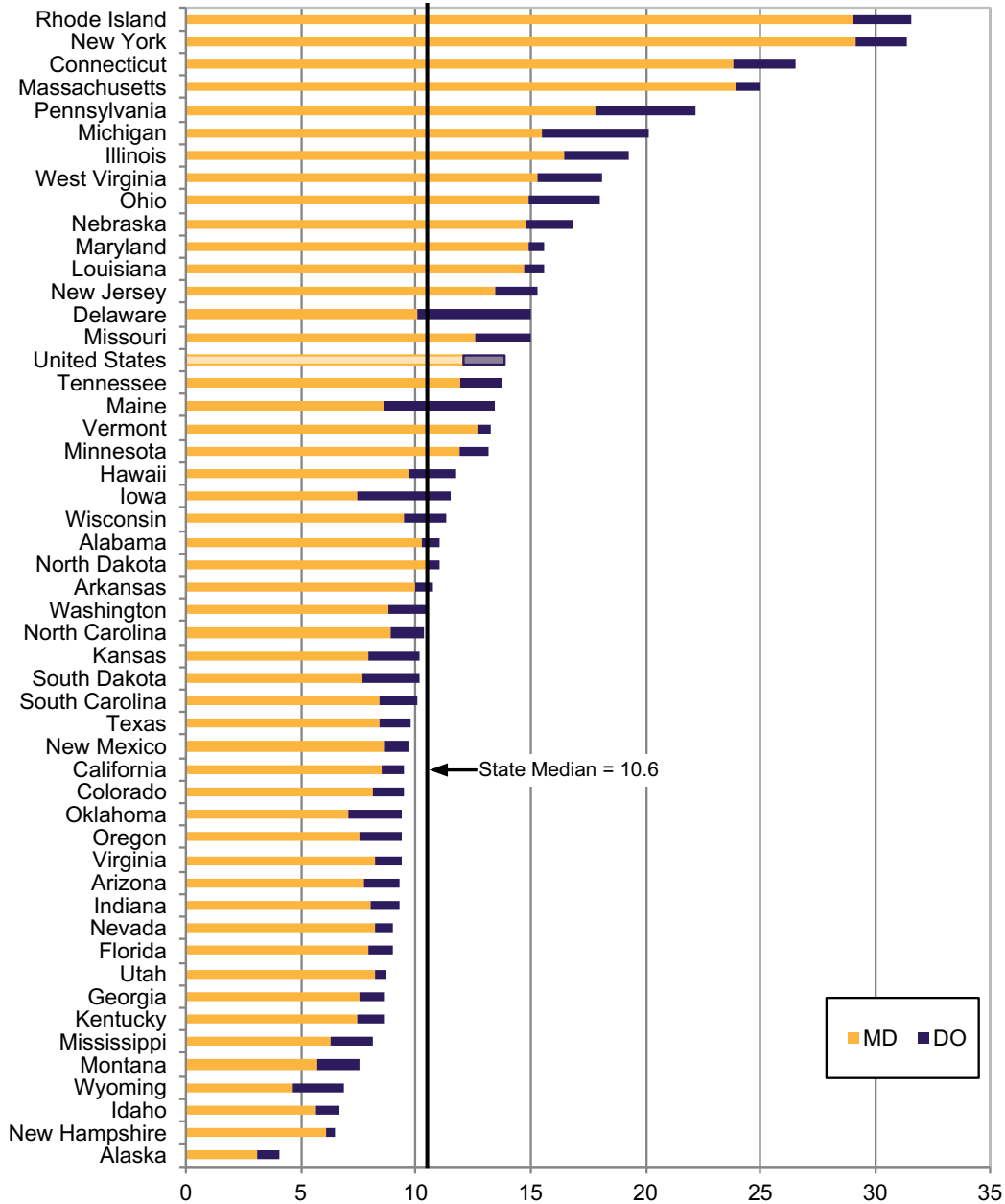
## 2. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Primary Care Programs per 100,000 Population by Degree Type

Map 3.2. Residents and fellows on duty as of December 31, 2016, in ACGME-accredited primary care per 100,000 population.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.

Figure 3.2. Residents and fellows on duty as of December 31, 2016, in ACGME-accredited primary care programs per 100,000 population by degree type.



Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.



**Table 3.2. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Primary Care Programs per 100,000 Population by Degree Type**

	Total Population	Total Residents in Primary Care ACGME Programs			MDs in Primary Care ACGME Programs*		DOs in Primary Care ACGME Programs	
		Number	Rate per	Rank	Number	Rate per	Number	Rate per
			100,000			100,000		100,000
United States	323,127,513	44,817	13.9	N.R.	39,047	12.1	5,770	1.8
Alabama	4,863,300	539	11.1	23	498	10.2	41	0.8
Alaska	741,894	30	4.0	50	23	3.1	7	0.9
Arizona	6,931,071	646	9.3	38	540	7.8	106	1.5
Arkansas	2,988,248	322	10.8	25	297	9.9	25	0.8
California	39,250,017	3,730	9.5	33	3,333	8.5	397	1.0
Colorado	5,540,545	524	9.5	34	451	8.1	73	1.3
Connecticut	3,576,452	949	26.5	3	851	23.8	98	2.7
Delaware	952,065	143	15.0	14	96	10.1	47	4.9
District of Columbia	681,170	567	83.2	N.R.	547	80.3	20	2.9
Florida	20,612,439	1,848	9.0	41	1,631	7.9	217	1.1
Georgia	10,310,371	893	8.7	43	779	7.6	114	1.1
Hawaii	1,428,557	167	11.7	20	138	9.7	29	2.0
Idaho	1,683,140	112	6.7	48	94	5.6	18	1.1
Illinois	12,801,539	2,463	19.2	7	2,112	16.5	351	2.7
Indiana	6,633,053	614	9.3	39	536	8.1	78	1.2
Iowa	3,134,693	361	11.5	21	233	7.4	128	4.1
Kansas	2,907,289	296	10.2	28	230	7.9	66	2.3
Kentucky	4,436,974	384	8.7	44	330	7.4	54	1.2
Louisiana	4,681,666	728	15.6	12	687	14.7	41	0.9
Maine	1,331,479	179	13.4	17	115	8.6	64	4.8
Maryland	6,016,447	938	15.6	11	900	15.0	38	0.6
Massachusetts	6,811,779	1,704	25.0	4	1,627	23.9	77	1.1
Michigan	9,928,300	1,996	20.1	6	1,540	15.5	456	4.6
Minnesota	5,519,952	728	13.2	19	658	11.9	70	1.3
Mississippi	2,988,726	242	8.1	45	187	6.3	55	1.8
Missouri	6,093,000	912	15.0	15	766	12.6	146	2.4
Montana	1,042,520	79	7.6	46	60	5.8	19	1.8
Nebraska	1,907,116	322	16.9	10	282	14.8	40	2.1
Nevada	2,940,058	265	9.0	40	242	8.2	23	0.8
New Hampshire	1,334,795	87	6.5	49	81	6.1	6	0.4
New Jersey	8,944,469	1,366	15.3	13	1,207	13.5	159	1.8
New Mexico	2,081,015	201	9.7	32	179	8.6	22	1.1
New York	19,745,289	6,190	31.3	2	5,747	29.1	443	2.2
North Carolina	10,146,788	1,050	10.3	27	907	8.9	143	1.4
North Dakota	757,952	84	11.1	24	80	10.6	4	0.5
Ohio	11,614,373	2,089	18.0	9	1,735	14.9	354	3.0
Oklahoma	3,923,561	370	9.4	35	278	7.1	92	2.3
Oregon	4,093,465	383	9.4	36	309	7.5	74	1.8
Pennsylvania	12,784,227	2,835	22.2	5	2,284	17.9	551	4.3
Puerto Rico	3,411,307	361	10.6	N.R.	361	10.6	0	0.0
Rhode Island	1,056,426	333	31.5	1	307	29.1	26	2.5
South Carolina	4,961,119	502	10.1	30	416	8.4	86	1.7
South Dakota	865,454	88	10.2	29	66	7.6	22	2.5
Tennessee	6,651,194	913	13.7	16	794	11.9	119	1.8
Texas	27,862,596	2,724	9.8	31	2,347	8.4	377	1.4
Utah	3,051,217	266	8.7	42	252	8.3	14	0.5
Vermont	624,594	83	13.3	18	79	12.6	4	0.6
Virginia	8,411,808	787	9.4	37	695	8.3	92	1.1
Washington	7,288,000	760	10.4	26	645	8.9	115	1.6
West Virginia	1,831,102	332	18.1	8	280	15.3	52	2.8
Wisconsin	5,778,708	653	11.3	22	549	9.5	104	1.8
Wyoming	585,501	40	6.8	47	27	4.6	13	2.2

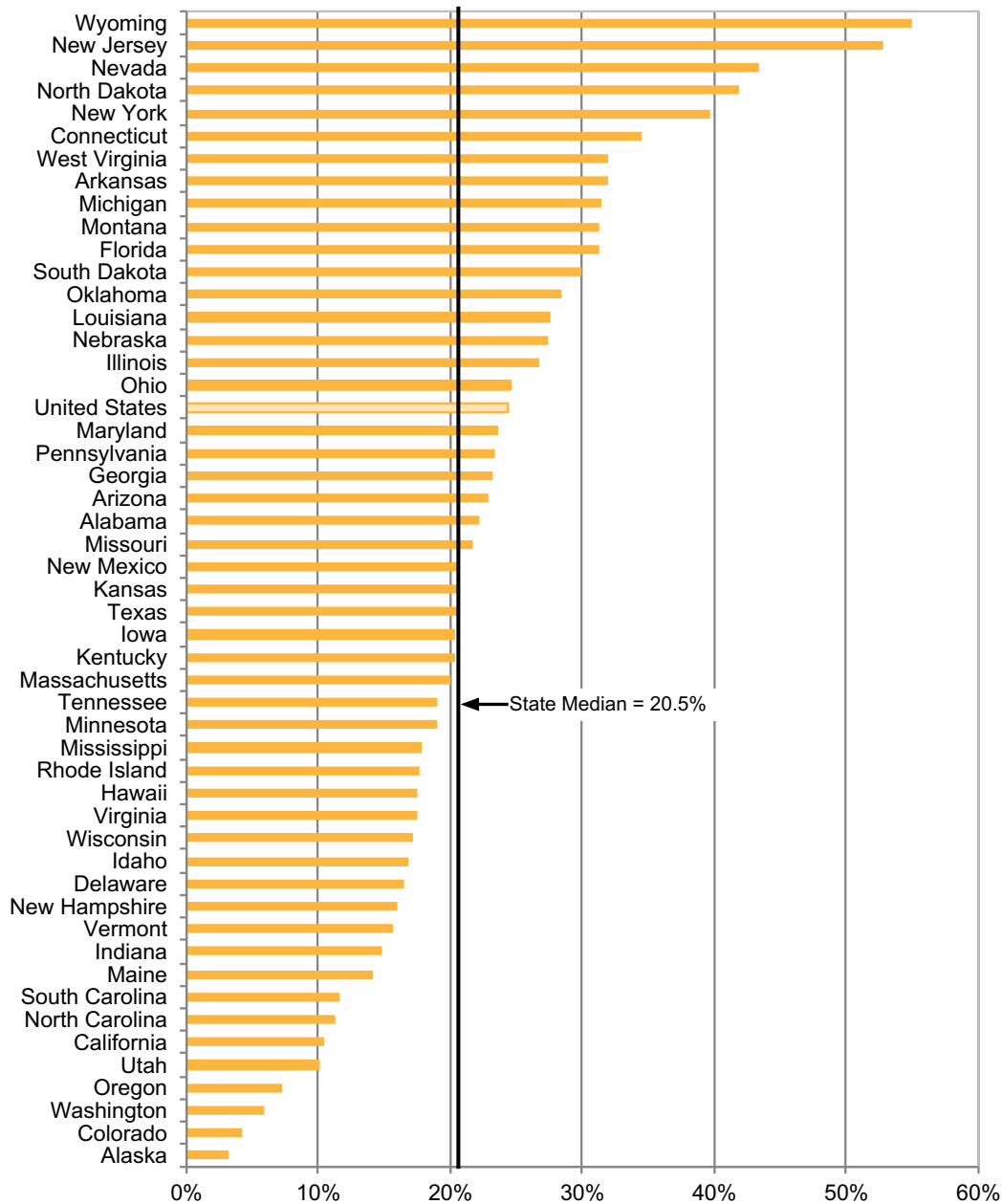
Sources: July 1, 2016, population estimates are from the U.S. Census Bureau (released December 31, 2016). Resident physician data are from the National GME Census in GME Track® as of August 2017.

Note: N.R. = not ranked.

\* Includes MDs from international medical schools.

### 3. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Programs by School Type

Figure 3.3. Percentage of residents and fellows on duty as of December 31, 2016, in ACGME-accredited programs who are international medical graduates (IMGs).



Source: National GME Census in GME Track<sup>®</sup> as of August 2017.

Table 3.3. Residents and Fellows on Duty as of December 31, 2016, in ACGME-Accredited Programs by School Type

	Total Residents/ Fellows*	U.S. MD		DO		IMG		
		Number	Percent	Number	Percent	Number	Percent	Rank
United States	122,002	79,678	65.3%	12,462	10.2%	29,711	24.4%	N.R.
Alabama	1,392	994	71.4%	88	6.3%	310	22.3%	22
Alaska	32	24	75.0%	7	21.9%	1	3.1%	50
Arizona	1,704	1,088	63.8%	223	13.1%	390	22.9%	21
Arkansas	768	459	59.8%	64	8.3%	245	31.9%	8
California	10,429	8,595	82.4%	722	6.9%	1,093	10.5%	45
Colorado	1,370	1,192	87.0%	119	8.7%	58	4.2%	49
Connecticut	2,344	1,342	57.3%	188	8.0%	808	34.5%	6
Delaware	357	208	58.3%	90	25.2%	59	16.5%	38
District of Columbia	1,646	1,106	67.2%	70	4.3%	469	28.5%	N.R.
Florida	4,652	2,734	58.8%	462	9.9%	1,451	31.2%	11
Georgia	2,375	1,625	68.4%	200	8.4%	550	23.2%	20
Hawaii	400	252	63.0%	77	19.3%	70	17.5%	34
Idaho	113	75	66.4%	19	16.8%	19	16.8%	37
Illinois	6,092	3,817	62.7%	647	10.6%	1,625	26.7%	16
Indiana	1,433	1,086	75.8%	136	9.5%	211	14.7%	41
Iowa	882	503	57.0%	199	22.6%	180	20.4%	27
Kansas	826	500	60.5%	156	18.9%	170	20.6%	25
Kentucky	1,180	809	68.6%	129	10.9%	240	20.3%	28
Louisiana	2,074	1,392	67.1%	111	5.4%	571	27.5%	14
Maine	334	191	57.2%	94	28.1%	47	14.1%	42
Maryland	2,814	2,002	71.1%	145	5.2%	664	23.6%	18
Massachusetts	5,630	4,234	75.2%	239	4.2%	1,124	20.0%	29
Michigan	5,655	2,748	48.6%	1,129	20.0%	1,775	31.4%	9
Minnesota	2,285	1,669	73.0%	177	7.7%	434	19.0%	31
Mississippi	648	436	67.3%	97	15.0%	115	17.7%	32
Missouri	2,873	1,932	67.2%	317	11.0%	623	21.7%	23
Montana	80	36	45.0%	19	23.8%	25	31.3%	10
Nebraska	779	483	62.0%	83	10.7%	213	27.3%	15
Nevada	455	204	44.8%	54	11.9%	197	43.3%	3
New Hampshire	409	319	78.0%	25	6.1%	65	15.9%	39
New Jersey	2,865	976	34.1%	376	13.1%	1,513	52.8%	2
New Mexico	583	402	69.0%	61	10.5%	120	20.6%	24
New York	16,276	8,590	52.8%	1,195	7.3%	6,469	39.7%	5
North Carolina	3,308	2,689	81.3%	241	7.3%	373	11.3%	44
North Dakota	136	71	52.2%	8	5.9%	57	41.9%	4
Ohio	6,104	3,705	60.7%	894	14.6%	1,499	24.6%	17
Oklahoma	873	484	55.4%	141	16.2%	248	28.4%	13
Oregon	953	773	81.1%	111	11.6%	69	7.2%	47
Pennsylvania	8,139	4,952	60.8%	1,275	15.7%	1,897	23.3%	19
Puerto Rico	782	570	72.9%	0	0.0%	212	27.1%	N.R.
Rhode Island	841	628	74.7%	63	7.5%	148	17.6%	33
South Carolina	1,344	1,042	77.5%	146	10.9%	156	11.6%	43
South Dakota	147	76	51.7%	27	18.4%	44	29.9%	12
Tennessee	2,506	1,825	72.8%	203	8.1%	478	19.1%	30
Texas	7,997	5,513	68.9%	843	10.5%	1,635	20.4%	26
Utah	768	651	84.8%	40	5.2%	77	10.0%	46
Vermont	312	246	78.8%	16	5.1%	49	15.7%	40
Virginia	2,174	1,581	72.7%	212	9.8%	380	17.5%	35
Washington	1,975	1,654	83.7%	201	10.2%	115	5.8%	48
West Virginia	748	407	54.4%	102	13.6%	239	32.0%	7
Wisconsin	1,881	1,352	71.9%	208	11.1%	321	17.1%	36
Wyoming	40	5	12.5%	13	32.5%	22	55.0%	1

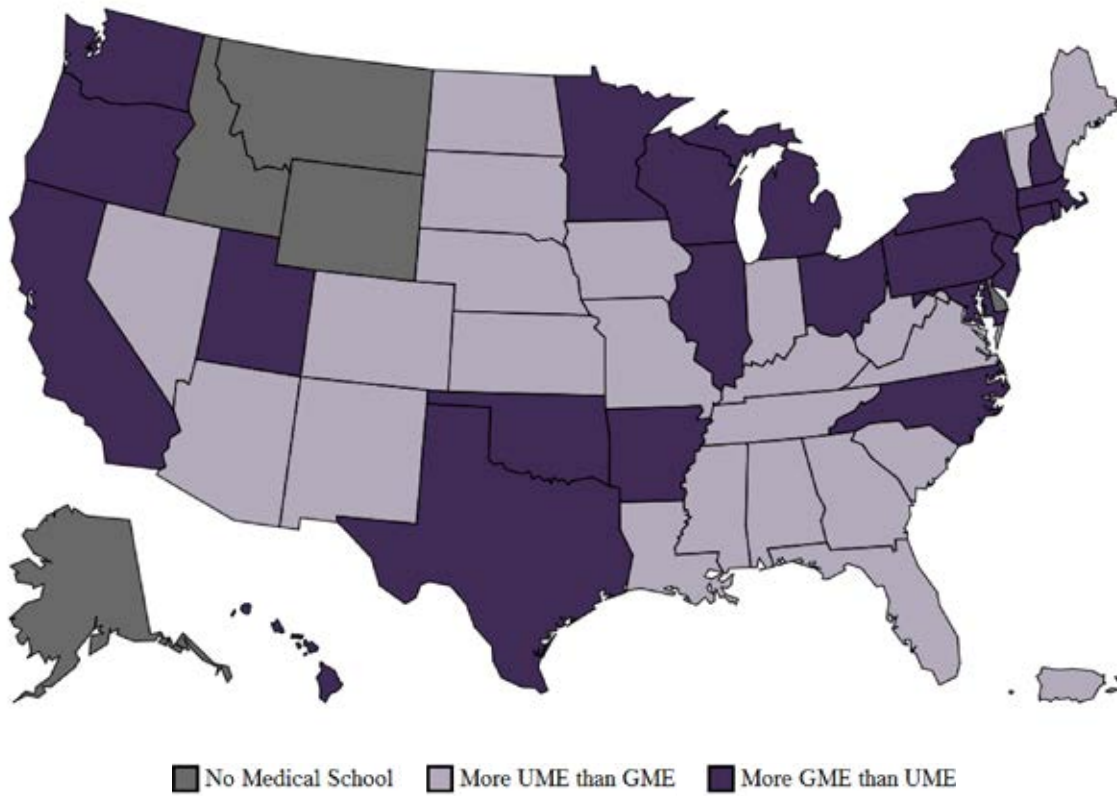
Source: National GME Census in GME Track<sup>®</sup> as of August 2017.

Note: N.R. = not ranked.

\* Total includes 151 physicians who are graduates of Canadian schools.

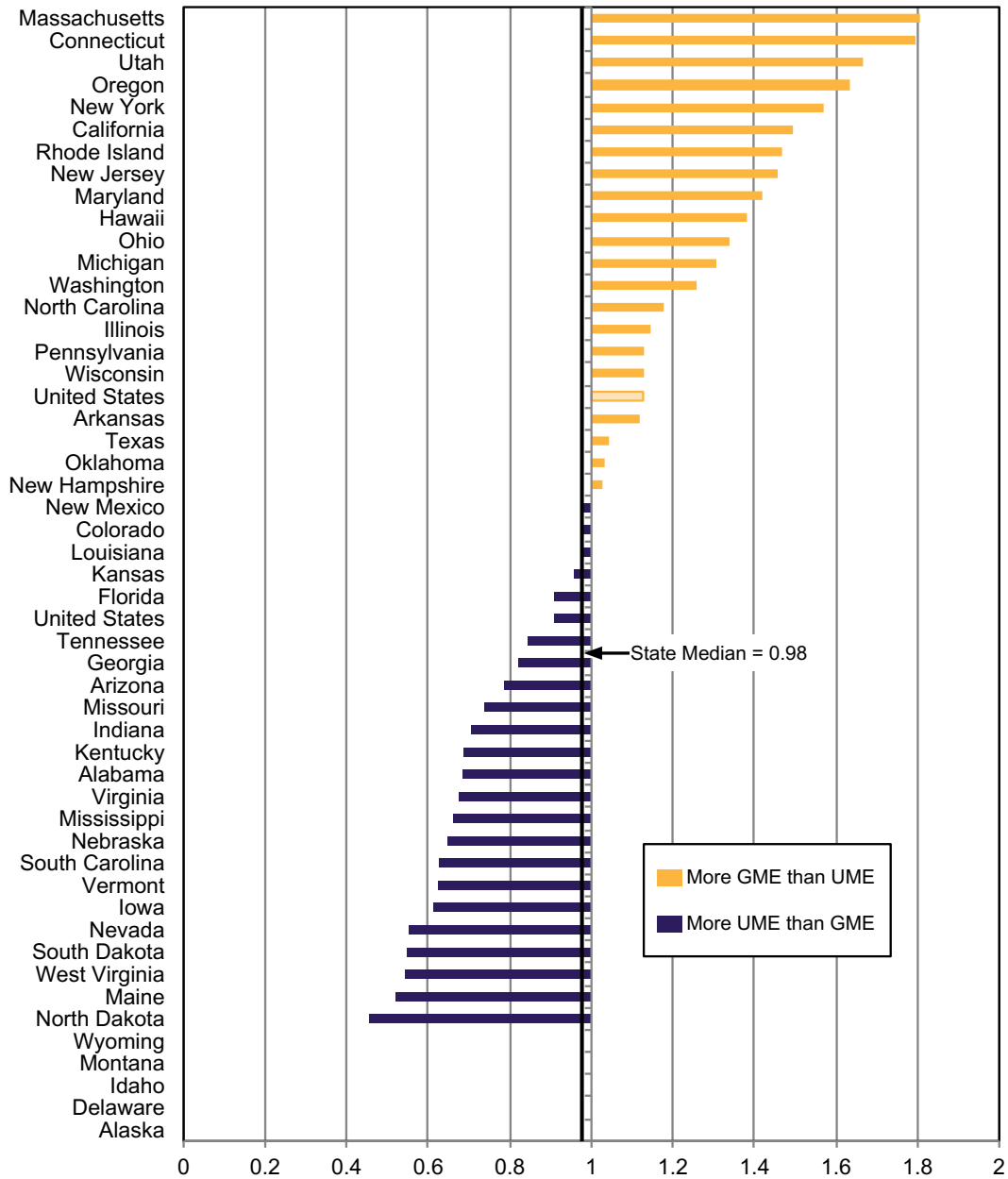
#### 4. Ratio of Graduate Medical Education (GME) to Undergraduate Medical Education (UME), Academic Year 2015–2016

Map 3.4. Ratio of graduate medical education (GME) to undergraduate medical education (UME),  
academic year 2015–2016.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of August 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. Data for residents in Accreditation Council for Graduate Medical Education (ACGME) programs are from JAMA. 2016;316(21):2291-2310. Data for residents in Osteopathic Graduate Medical Education (OGME) programs are from JAOA 2017;117(4):262-267.

Figure 3.4. Ratio of graduate medical education (GME) to undergraduate medical education (UME), academic year 2015–2016.



Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of August 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. Data for residents in Accreditation Council for Graduate Medical Education (ACGME) programs are from JAMA 2016;316(21):229-2310. Data for residents in osteopathic graduate medical education (OGME) programs are from JAOA 2017;117(4):262-267.

Note: GME data in this figure are from academic year 2015–2016, which differs from other tables and figures in this report. OGME data for 2016–2017 were not available at the time of publication. California UME enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University’s Northwest campus in Lebanon, Oregon.



**Table 3.4. Ratio of Graduate Medical Education (GME) to Undergraduate Medical Education (UME), Academic Year 2015–2016**

	Students Enrolled in UME			Residents and Fellows in GME			GME to UME	
	Total	MD-Granting Institution	DO-Granting Institution	Total	ACGME Programs	OGME Programs	Ratio	Rank
United States	114,395	86,910	27,485	128,894	119,808	9,086	1.1	N.R.
Alabama	2,020	1,094	926	1,382	1,372	10	0.7	34
Alaska	---	---	---	51	37	14	---	---
Arizona	2,269	843	1,426	1,781	1,671	110	0.8	30
Arkansas	702	702	---	786	764	22	1.1	19
California	7,387	5,540	1,847	11,035	10,713	322	1.5	7
Colorado	1,416	786	630	1,383	1,294	89	1.0	24
Connecticut	1,308	1,308	---	2,345	2,300	45	1.8	3
Delaware	---	---	---	319	293	26	---	---
District of Columbia	2,063	2,063	---	1,839	1,839	---	0.9	N.R.
Florida	5,676	3,883	1,793	5,162	4,225	937	0.9	27
Georgia	2,911	2,377	534	2,391	2,336	55	0.8	29
Hawaii	270	270	---	373	373	---	1.4	11
Idaho	---	---	---	119	113	6	---	---
Illinois	5,649	4,842	807	6,468	6,044	424	1.1	16
Indiana	2,069	1,448	621	1,460	1,433	27	0.7	32
Iowa	1,549	663	886	949	891	58	0.6	40
Kansas	876	876	---	838	819	19	1.0	26
Kentucky	1,737	1,210	527	1,191	1,130	61	0.7	33
Louisiana	2,121	2,121	---	2,065	2,065	---	1.0	25
Maine	690	---	690	359	323	36	0.5	44
Maryland	1,950	1,950	---	2,762	2,762	---	1.4	10
Massachusetts	3,088	3,088	---	5,581	5,552	29	1.8	2
Michigan	5,169	3,856	1,313	6,765	5,075	1,690	1.3	13
Minnesota	1,215	1,215	---	2,317	2,310	7	1.9	1
Mississippi	1,000	592	408	660	621	39	0.7	36
Missouri	4,031	2,270	1,761	2,968	2,810	158	0.7	31
Montana	---	---	---	84	74	10	---	---
Nebraska	1,160	1,160	---	751	751	---	0.6	37
Nevada	826	280	546	457	371	86	0.6	41
New Hampshire	393	393	---	404	404	---	1.0	22
New Jersey	2,429	1,753	676	3,544	2,870	674	1.5	9
New Mexico	603	441	162	591	591	---	1.0	23
New York	10,743	8,427	2,316	16,878	15,980	898	1.6	6
North Carolina	2,841	2,204	637	3,351	3,267	84	1.2	15
North Dakota	296	296	---	135	135	---	0.5	45
Ohio	5,112	4,297	815	6,849	6,003	846	1.3	12
Oklahoma	1,116	670	446	1,150	823	327	1.0	21
Oregon	621	621	---	1,014	899	115	1.6	5
Pennsylvania	8,206	5,625	2,581	9,278	8,150	1,128	1.1	17
Puerto Rico	1,394	1,394	---	790	790	---	0.6	N.R.
Rhode Island	568	568	---	832	782	50	1.5	8
South Carolina	2,117	1,473	644	1,324	1,306	18	0.6	38
South Dakota	258	258	---	141	141	---	0.5	42
Tennessee	2,832	1,883	949	2,389	2,363	26	0.8	28
Texas	7,632	6,716	916	7,962	7,800	162	1.0	20
Utah	474	474	---	789	785	4	1.7	4
Vermont	478	478	---	298	298	---	0.6	39
Virginia	3,546	2,333	1,213	2,394	2,233	161	0.7	35
Washington	1,657	1,089	568	2,080	1,978	102	1.3	14
West Virginia	1,618	771	847	880	741	139	0.5	43
Wisconsin	1,703	1,703	---	1,921	1,857	64	1.1	18
Wyoming	---	---	---	49	41	8	---	---

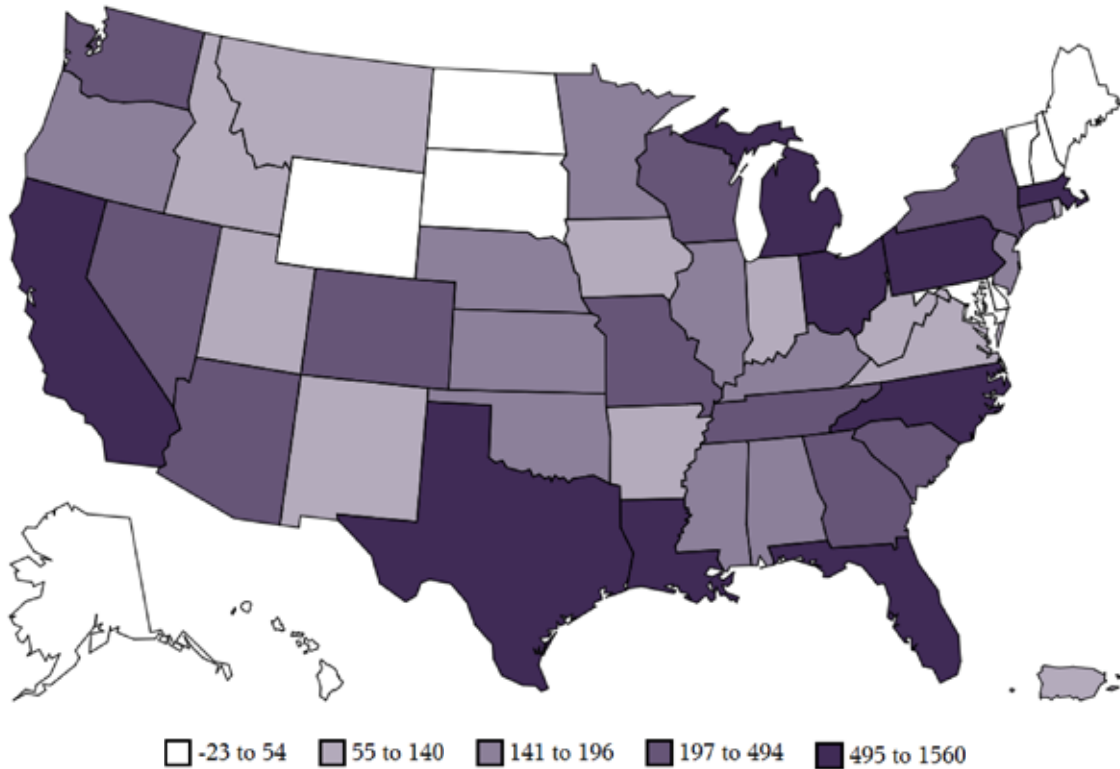
Sources: Medical school enrollment data from MD-granting institutions were obtained from the Association of American Medical Colleges (AAMC) Student Records System (SRS) and are as of August 2017. Enrollment data from DO-granting institutions were obtained from the American Association of Colleges of Osteopathic Medicine (AACOM) and are as of July 2017. Data for residents in Accreditation Council for Graduate Medical Education (ACGME) programs are from JAMA. 2016;316(21):2291-2310. Data for residents in Osteopathic Graduate Medical Education (OGME) programs are from JAOA 2017;117(4):262-267.

Note: GME data in this table are from academic year 2015-2016, which differs from other tables. OGME data for 2016-2017 were not available at the time of publication. California UME enrollment data for DO-granting institutions includes enrollment at all Western University campuses, including enrollment at Western University's Northwest campus in Lebanon, Oregon.

Note: N.R. = not ranked. --- = the data are not applicable. Some states did not have a school or a GME program in the 2015-2016 academic year.

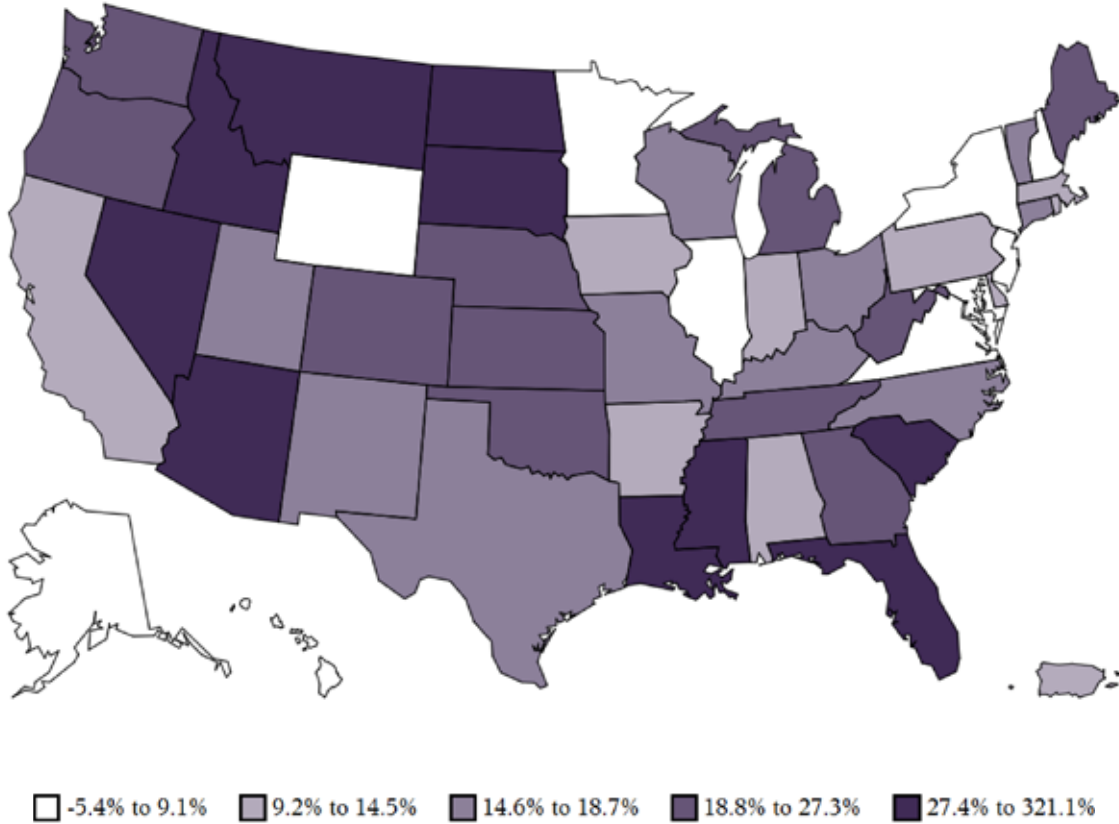
## 5. Change in Number of Residents and Fellows in ACGME-Accredited Programs, 2006–2016

Map 3.5.1. Change in the number of residents and fellows in ACGME-accredited programs, 2006–2016.



Source: 2006 and 2016 National GME Census in GME Track® as of August 2017.

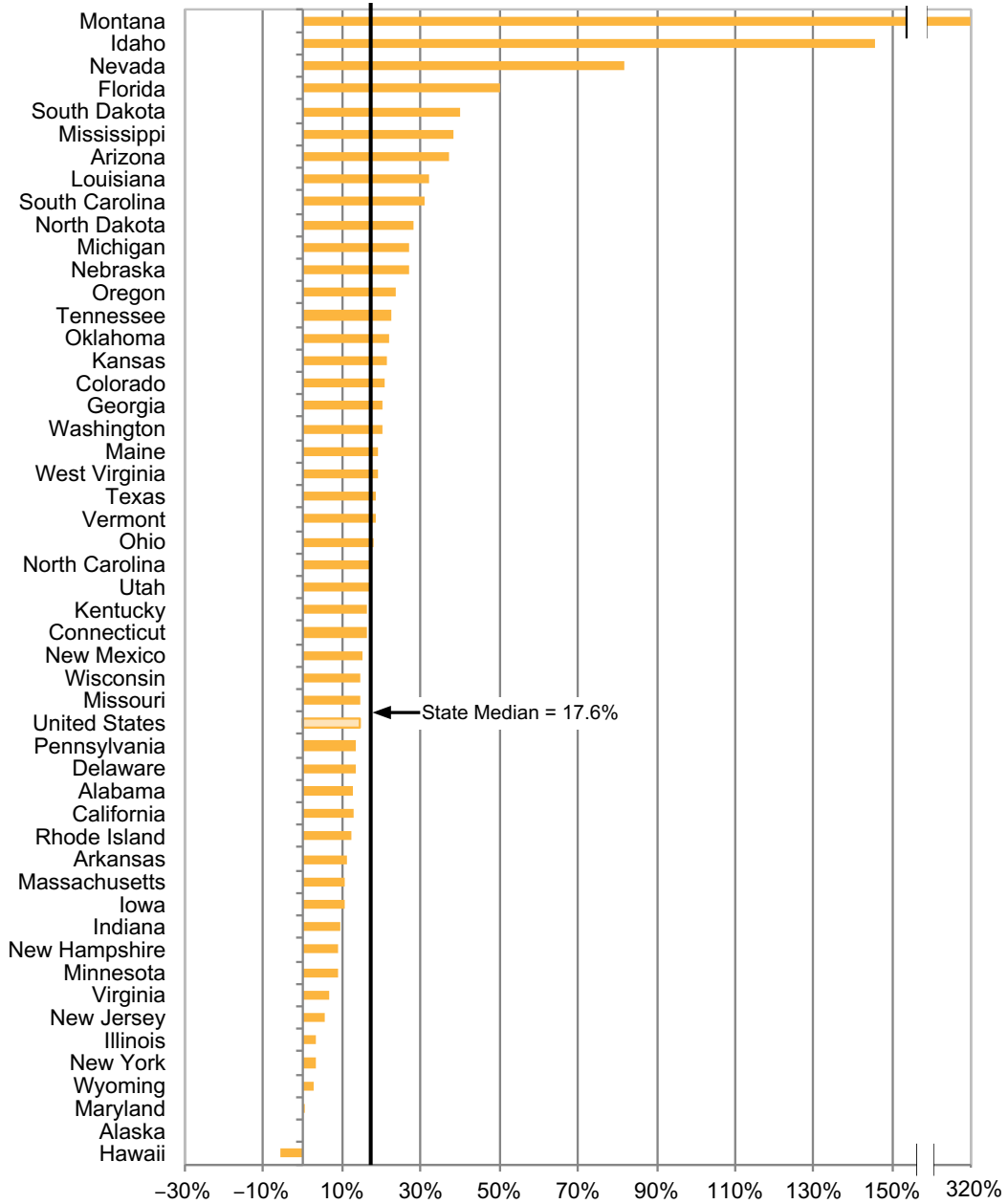
Map 3.5.2 Percentage change in number of residents and fellows in ACGME-accredited programs, 2006–2016.



Source: 2006 and 2016 National GME Census in GME Track® as of August 2017.



Figure 3.5. Percentage change in number of residents and fellows in ACGME-accredited programs, 2006–2016.



Source: 2006 and 2016 National GME Census in GME Track<sup>®</sup> as of August 2017.

Table 3.5. Change in Number of Residents and Fellows in ACGME-Accredited Programs, 2006–2016

	Total Residents and Fellows in ACGME-Accredited Programs				
	2006	2016	Number Change	Percent Change	Rank
United States	106,553	122,002	15,449	14.5%	N.R.
Alabama	1,234	1,392	158	12.8%	34
Alaska	32	32	0	0.0%	49
Arizona	1,240	1,704	464	37.4%	7
Arkansas	689	768	79	11.5%	37
California	9,249	10,429	1,180	12.8%	35
Colorado	1,132	1,370	238	21.0%	17
Connecticut	2,016	2,344	328	16.3%	28
Delaware	315	357	42	13.3%	33
District of Columbia	1,605	1,646	41	2.6%	N.R.
Florida	3,092	4,652	1,560	50.5%	4
Georgia	1,973	2,375	402	20.4%	18
Hawaii	423	400	-23	-5.4%	50
Idaho	46	113	67	145.7%	2
Illinois	5,896	6,092	196	3.3%	45
Indiana	1,308	1,433	125	9.6%	40
Iowa	799	882	83	10.4%	39
Kansas	682	826	144	21.1%	16
Kentucky	1,014	1,180	166	16.4%	27
Louisiana	1,569	2,074	505	32.2%	8
Maine	280	334	54	19.3%	20
Maryland	2,804	2,814	10	0.4%	48
Massachusetts	5,092	5,630	538	10.6%	38
Michigan	4,442	5,655	1,213	27.3%	11
Minnesota	2,096	2,285	189	9.0%	42
Mississippi	469	648	179	38.2%	6
Missouri	2,508	2,873	365	14.6%	31
Montana	19	80	61	321.1%	1
Nebraska	614	779	165	26.9%	12
Nevada	250	455	205	82.0%	3
New Hampshire	375	409	34	9.1%	41
New Jersey	2,708	2,865	157	5.8%	44
New Mexico	505	583	78	15.4%	29
New York	15,782	16,276	494	3.1%	46
North Carolina	2,811	3,308	497	17.7%	25
North Dakota	106	136	30	28.3%	10
Ohio	5,166	6,104	938	18.2%	24
Oklahoma	716	873	157	21.9%	15
Oregon	772	953	181	23.4%	13
Pennsylvania	7,161	8,139	978	13.7%	32
Puerto Rico	715	782	67	9.4%	N.R.
Rhode Island	748	841	93	12.4%	36
South Carolina	1,025	1,344	319	31.1%	9
South Dakota	105	147	42	40.0%	5
Tennessee	2,047	2,506	459	22.4%	14
Texas	6,740	7,997	1,257	18.6%	22
Utah	653	768	115	17.6%	26
Vermont	263	312	49	18.6%	23
Virginia	2,034	2,174	140	6.9%	43
Washington	1,642	1,975	333	20.3%	19
West Virginia	629	748	119	18.9%	21
Wisconsin	1,638	1,881	243	14.8%	30
Wyoming	39	40	1	2.6%	47

Source: 2006 and 2016 National GME Census in GME Track<sup>®</sup> as of August 2017.

Note: N.R. = not ranked.

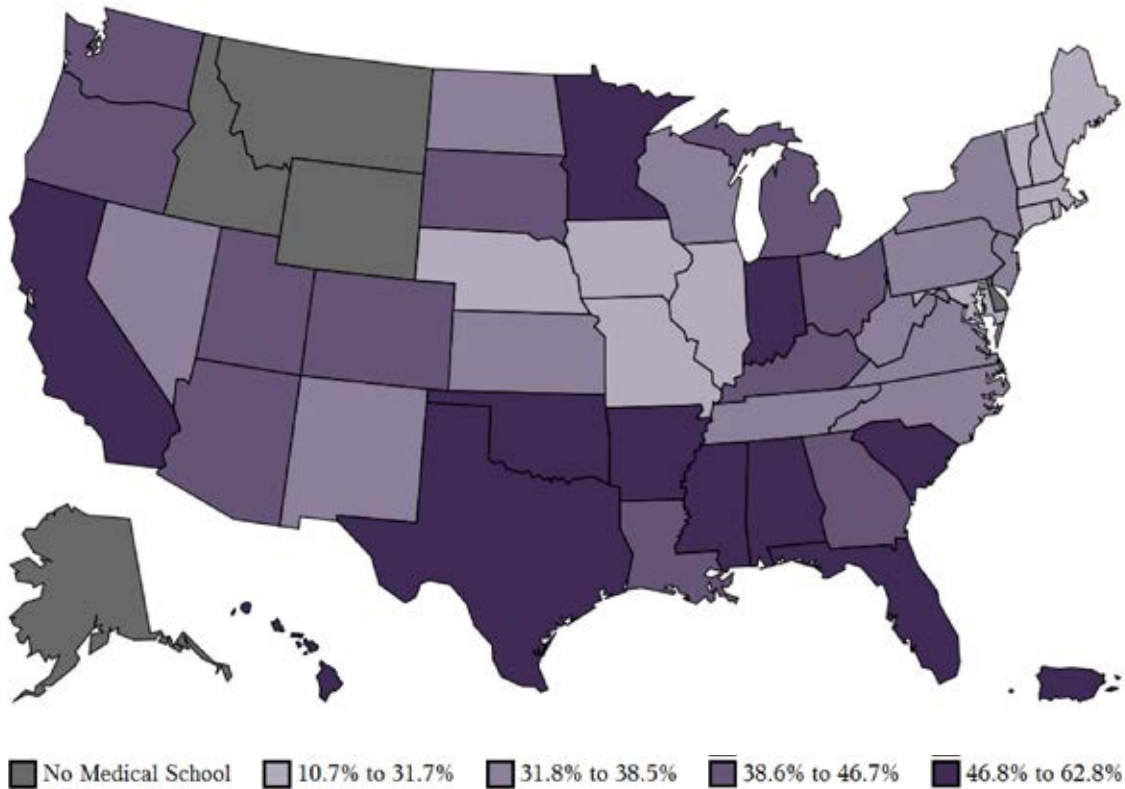
## Section 4: Retention

### Key Findings

- In 2016, 38.5% of physicians were active in the same state where they received their UME. Seven of the top 10 states in terms of UME retention were in the South (see Map 4.1, Figure 4.1, and Table 4.1).
- In 2016, 46.6% of the physicians who graduated from a public school were active in the same state where they completed UME (see Figure 4.2 and Table 4.2).
- In 2016, 47.5% of physicians were active in the state where they completed their most recent GME. Five of the top 10 states with the highest GME retention rates were in the West (see Map 4.3, Figure 4.3, and Table 4.3).
- Retention rates were highest among physicians who completed both UME and GME in the same state. Two-thirds (67.1%) of the physicians who completed UME and GME in the same state remained in the state to practice. In terms of overall retention (that is, both UME and GME were completed in the same state), 8 of the top 10 states were in the South and West (see Figure 4.4 and Table 4.4).

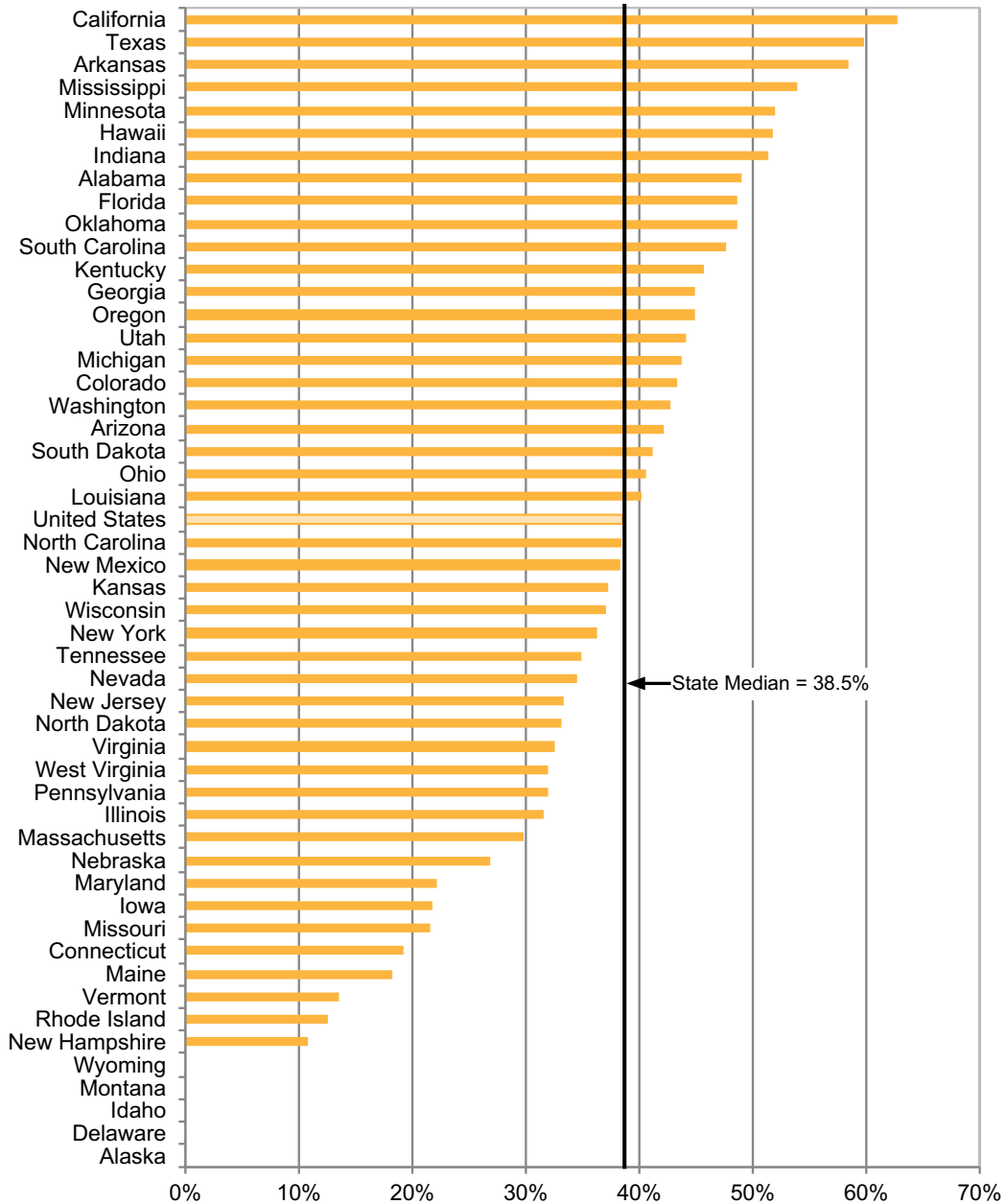
## 1. Physicians Retained from Undergraduate Medical Education (UME), 2016

Map 4.1. Percentage of physicians retained from undergraduate medical education (UME), 2016.



Source: AMA Physician Masterfile (December 31, 2016).

Figure 4.1. Percentage of physicians retained from undergraduate medical education (UME), 2016.



Source: AMA Physician Masterfile (December 31, 2016).

Note: The University of Washington recruits students from Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) for admission to its WWAMI regional medical education program. However, retention numbers for the state of Washington do not include 906 graduates from the University of Washington who are active in the other four WWAMI states. When those graduates are included, the UME retention rate for the WWAMI region is 57.7%.

Table 4.1. Physicians Retained from Undergraduate Medical Education (UME), 2016

	Active Physicians Who Graduated From MD- or DO-Granting Institution In State	Active Physicians Who Graduated From MD- or DO-Granting Institution In State and Are Active In State		
		Number	Percent	Rank
United States	651,618	251,075	38.5%	N.R.
Alabama	7,895	3,873	49.1%	8
Alaska	---	---	---	---
Arizona	4,639	1,960	42.3%	19
Arkansas	4,931	2,883	58.5%	3
California	42,672	26,785	62.8%	1
Colorado	5,068	2,201	43.4%	17
Connecticut	6,746	1,294	19.2%	41
Delaware	---	---	---	---
District of Columbia	16,787	1,065	6.3%	N.R.
Florida	17,411	8,467	48.6%	9
Georgia	12,909	5,788	44.8%	13
Hawaii	2,012	1,042	51.8%	6
Idaho	---	---	---	---
Illinois	43,620	13,754	31.5%	35
Indiana	10,266	5,279	51.4%	7
Iowa	12,501	2,728	21.8%	39
Kansas	6,503	2,424	37.3%	25
Kentucky	9,248	4,232	45.8%	12
Louisiana	15,706	6,315	40.2%	22
Maine	2,510	460	18.3%	42
Maryland	15,293	3,389	22.2%	38
Massachusetts	21,950	6,540	29.8%	36
Michigan	24,436	10,696	43.8%	16
Minnesota	10,393	5,396	51.9%	5
Mississippi	4,116	2,217	53.9%	4
Missouri	28,338	6,089	21.5%	40
Montana	---	---	---	---
Nebraska	9,046	2,430	26.9%	37
Nevada	1,873	648	34.6%	29
New Hampshire	2,140	229	10.7%	45
New Jersey	11,997	4,003	33.4%	30
New Mexico	2,485	950	38.2%	24
New York	71,844	26,067	36.3%	27
North Carolina	15,307	5,886	38.5%	23
North Dakota	1,718	570	33.2%	31
Ohio	32,104	13,030	40.6%	21
Oklahoma	8,064	3,915	48.5%	10
Oregon	3,767	1,688	44.8%	14
Pennsylvania	50,399	16,072	31.9%	34
Puerto Rico	9,223	4,762	51.6%	N.R.
Rhode Island	2,653	332	12.5%	44
South Carolina	7,107	3,390	47.7%	11
South Dakota	1,611	663	41.2%	20
Tennessee	15,049	5,256	34.9%	28
Texas	41,567	24,881	59.9%	2
Utah	3,705	1,635	44.1%	15
Vermont	3,412	460	13.5%	43
Virginia	14,829	4,817	32.5%	32
Washington	6,128	2,621	42.8%	18
West Virginia	6,658	2,133	32.0%	33
Wisconsin	12,205	4,522	37.1%	26
Wyoming	---	---	---	---

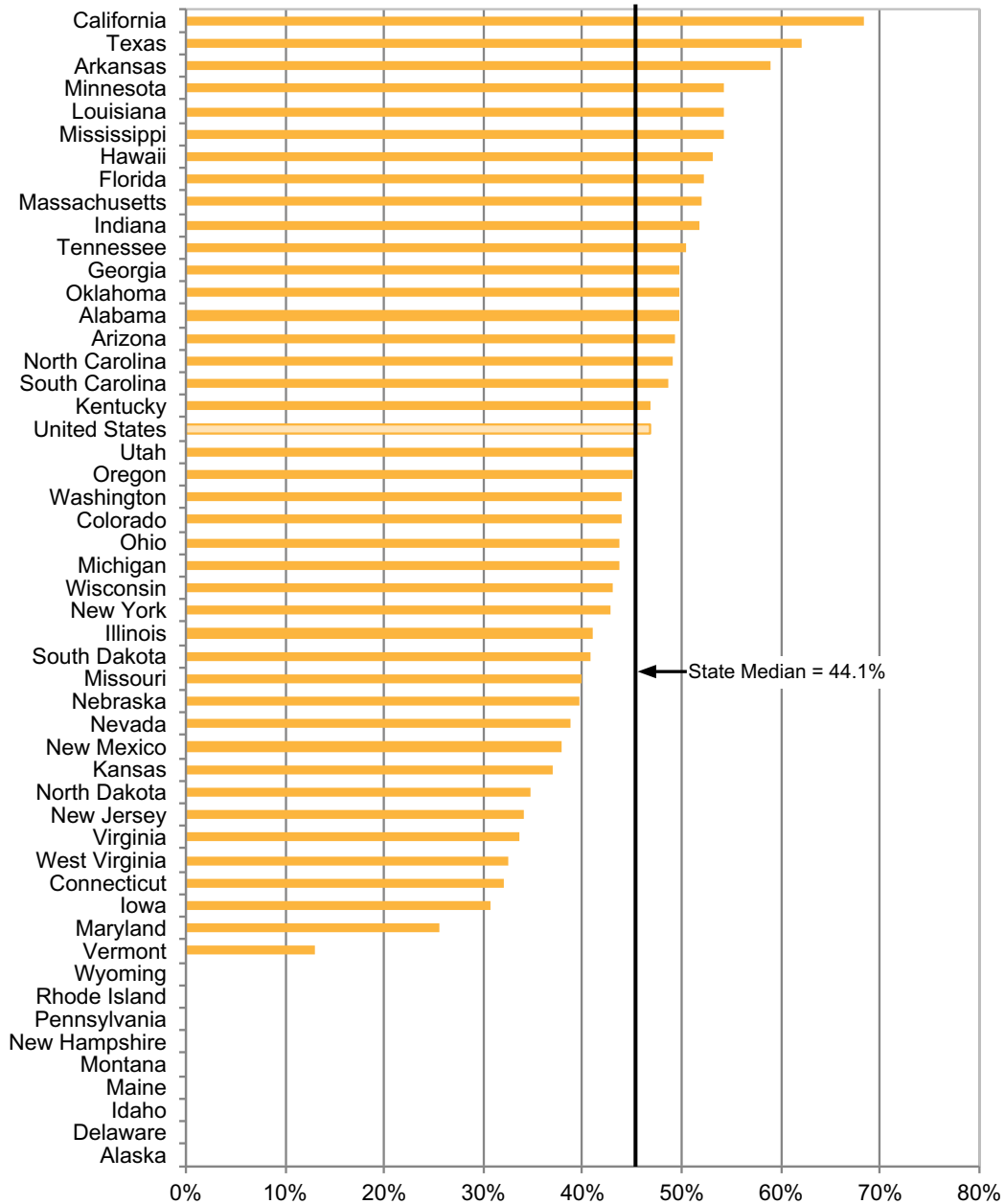
Source: AMA Physician Masterfile (December 31, 2016).

Note: The University of Washington recruits students from Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) for admission to its WWAMI regional medical education program. However, retention numbers for the state of Washington do not include 906 graduates from the University of Washington who are active in the other four WWAMI states. When those graduates are included, the UME retention rate for the WWAMI region is 57.7%.

Note: N.R. = not ranked. --- = the data are not applicable. Some states do not have a MD-granting or DO-granting institution.

## 2. Physicians Retained from Public Undergraduate Medical Education (UME), 2016

Figure 4.2. Percentage of physicians retained from public undergraduate medical education (UME), 2016.



Source: AMA Physician Masterfile (December 31, 2016).

Note: The University of Washington recruits students from Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) for admission to its WWAMI regional medical education program. However, retention numbers for the state of Washington do not include 906 graduates from the University of Washington who are active in the other four WWAMI states. When those graduates are included, the UME retention rate for the WWAMI region is 57.7%.

Table 4.2. Physicians Retained from Public Undergraduate Medical Education, 2016

	Active Physicians Who Graduated from Public MD- or DO-Granting Institution In State	Active Physicians Who Graduated from Public MD- or DO-Granting Institution In State and Are Active In State		
		Number	Percent	Rank
United States	358,234	167,073	46.6%	N.R.
Alabama	7,895	3,873	49.1%	15
Alaska	---	---	---	---
Arizona	3,328	1,658	49.8%	13
Arkansas	4,931	2,883	58.5%	3
California	22,901	15,724	68.7%	1
Colorado	4,860	2,144	44.1%	21
Connecticut	2,752	875	31.8%	38
Delaware	---	---	---	---
District of Columbia	---	---	---	N.R.
Florida	7,884	4,075	51.7%	9
Georgia	6,488	3,194	49.2%	14
Hawaii	2,012	1,042	51.8%	8
Idaho	---	---	---	---
Illinois	13,536	5,507	40.7%	28
Indiana	10,266	5,279	51.4%	10
Iowa	5,945	1,794	30.2%	39
Kansas	6,503	2,424	37.3%	33
Kentucky	8,591	4,006	46.6%	18
Louisiana	9,757	5,309	54.4%	5
Maine	---	---	---	---
Maryland	10,635	2,649	24.9%	40
Massachusetts	3,210	1,674	52.1%	7
Michigan	24,436	10,696	43.8%	22
Minnesota	9,062	4,934	54.4%	4
Mississippi	4,116	2,217	53.9%	6
Missouri	6,637	2,655	40.0%	30
Montana	---	---	---	---
Nebraska	4,802	1,937	40.3%	29
Nevada	1,500	582	38.8%	31
New Hampshire	---	---	---	---
New Jersey	11,997	4,003	33.4%	34
New Mexico	2,485	950	38.2%	32
New York	22,719	9,711	42.7%	25
North Carolina	7,446	3,632	48.8%	16
North Dakota	1,718	570	33.2%	35
Ohio	26,671	11,556	43.3%	23
Oklahoma	7,747	3,886	50.2%	12
Oregon	3,763	1,688	44.9%	19
Pennsylvania	---	---	---	---
Puerto Rico	4,566	2,506	54.9%	N.R.
Rhode Island	---	---	---	---
South Carolina	7,106	3,390	47.7%	17
South Dakota	1,611	663	41.2%	27
Tennessee	8,065	4,067	50.4%	11
Texas	35,414	22,001	62.1%	2
Utah	3,705	1,635	44.1%	20
Vermont	3,412	460	13.5%	41
Virginia	14,169	4,680	33.0%	36
Washington	6,055	2,590	42.8%	24
West Virginia	6,658	2,133	32.0%	37
Wisconsin	5,446	2,327	42.7%	26
Wyoming	---	---	---	---

Source: AMA Physician Masterfile (December 31, 2016).

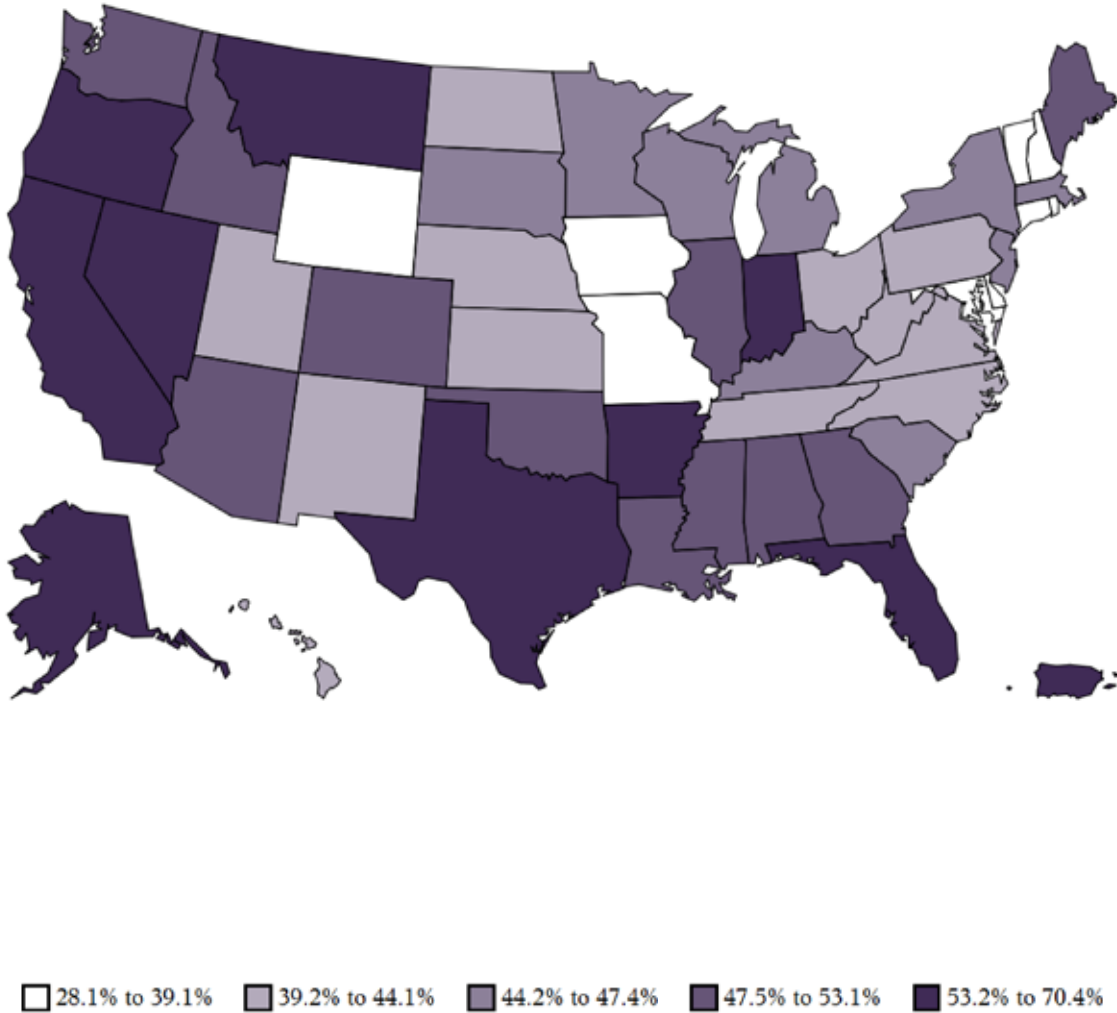
Note: The University of Washington recruits students from Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) for admission to its WWAMI regional medical education program. However, retention numbers for the state of Washington do not include 906 graduates from the University of Washington who are active in the other four WWAMI states. When those graduates are included, the UME retention rate for the WWAMI region is 57.7%.

Note: N.R. = not ranked. --- = the data are not applicable. Some states do not have an MD-granting or a DO-granting institution.



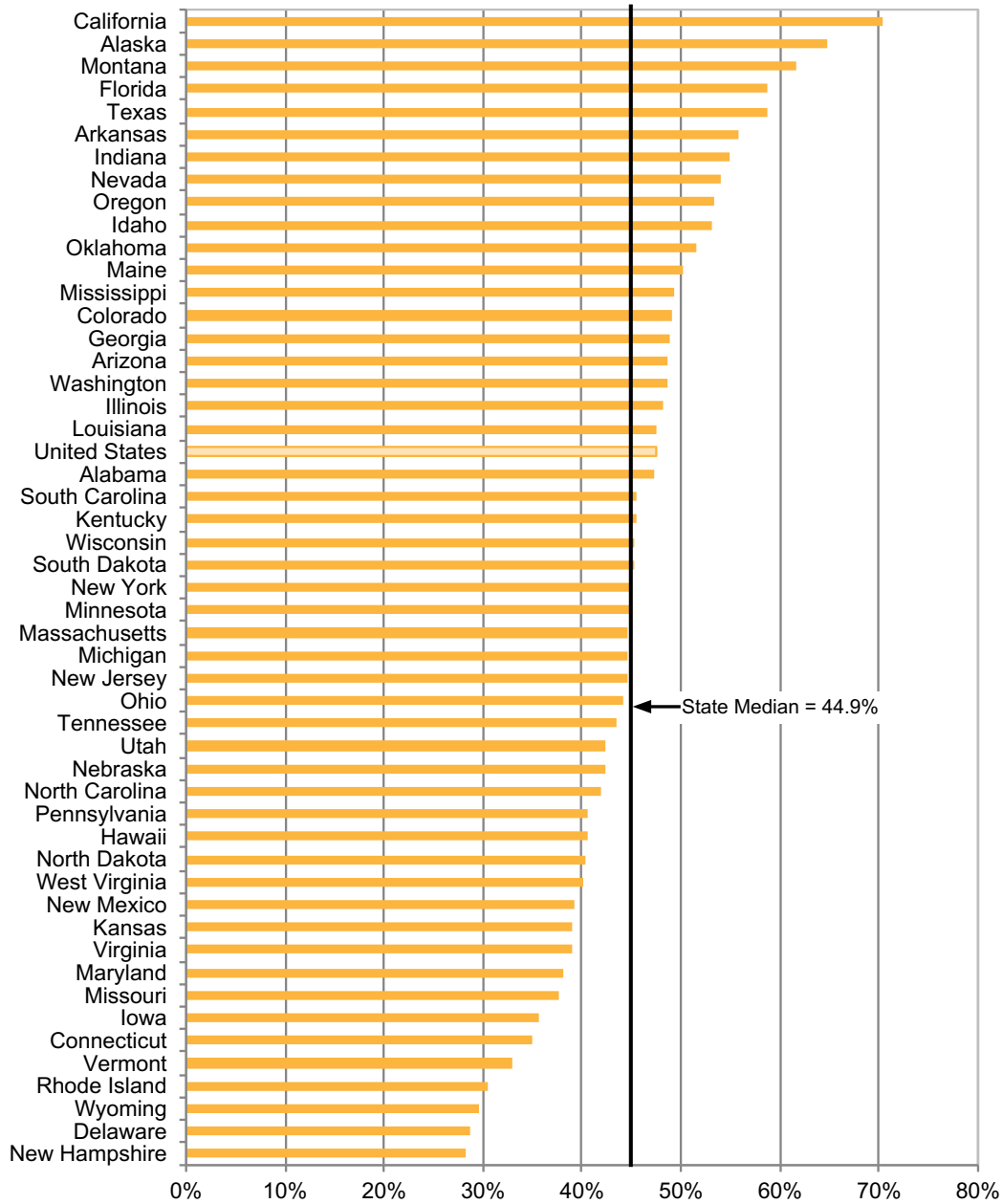
### 3. Physicians Retained from Graduate Medical Education (GME), 2016

Map 4.3. Percentage of physicians retained from graduate medical education (GME), 2016.



Source: AMA Physician Masterfile (December 31, 2016).

Figure 4.3. Percentage of physicians retained from graduate medical education (GME), 2016.



Source: AMA Physician Masterfile (December 31, 2016).

Table 4.3. Physicians Retained from Graduate Medical Education (GME), 2016

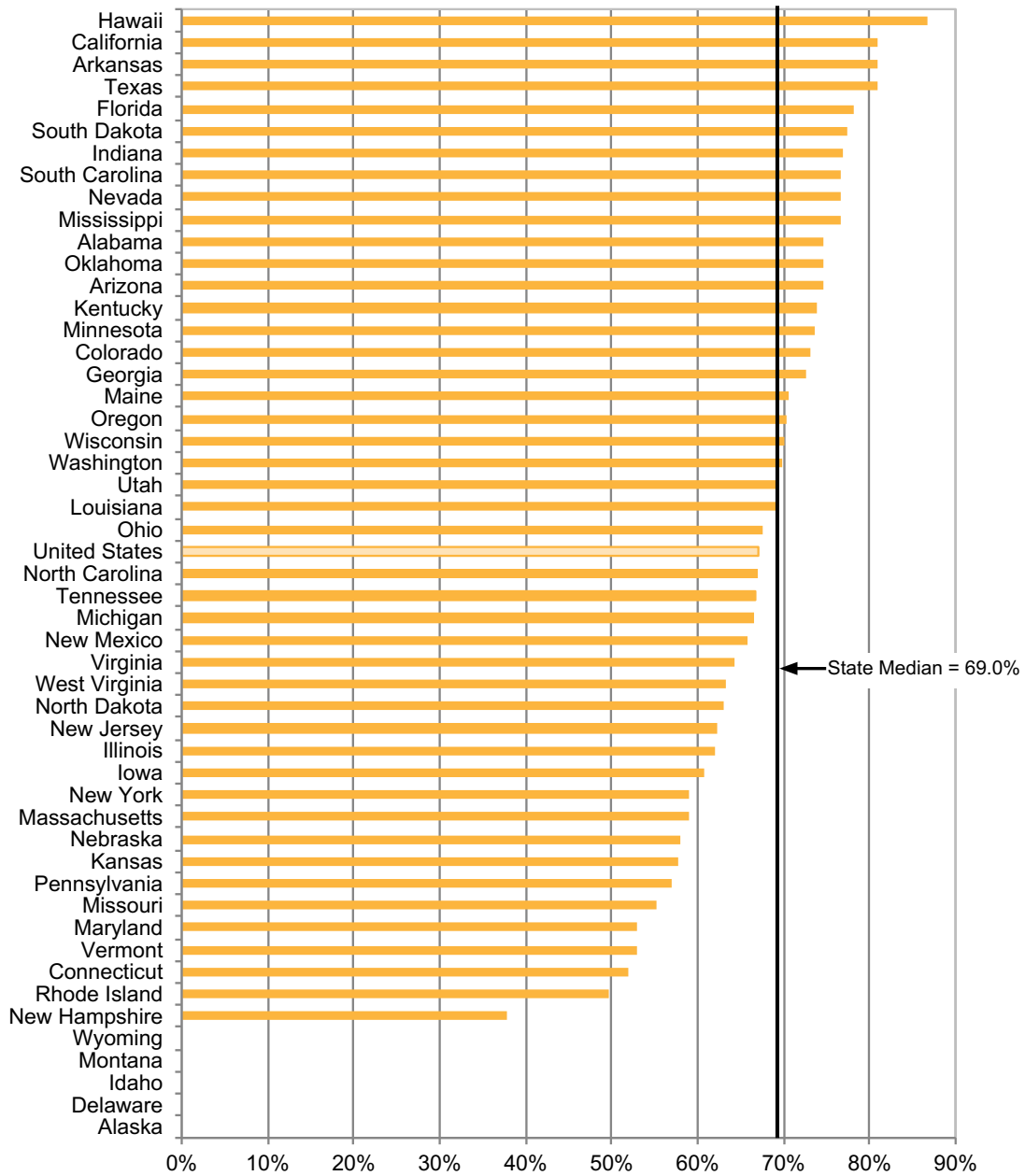
	Active Physicians Who Completed GME In State	Active Physicians Who Completed GME In State and Are Active In State		
		Number	Percent	Rank
United States	829,266	393,827	47.5%	N.R.
Alabama	9,011	4,267	47.4%	20
Alaska	162	105	64.8%	2
Arizona	8,642	4,208	48.7%	16
Arkansas	5,019	2,802	55.8%	6
California	82,262	57,893	70.4%	1
Colorado	10,104	4,968	49.2%	14
Connecticut	14,231	4,982	35.0%	45
Delaware	1,585	453	28.6%	49
District of Columbia	16,526	2,714	16.4%	N.R.
Florida	24,375	14,324	58.8%	4
Georgia	15,654	7,658	48.9%	15
Hawaii	3,070	1,245	40.6%	36
Idaho	418	222	53.1%	10
Illinois	44,382	21,371	48.2%	18
Indiana	10,691	5,871	54.9%	7
Iowa	6,840	2,442	35.7%	44
Kansas	5,918	2,312	39.1%	40
Kentucky	8,306	3,773	45.4%	22
Louisiana	13,699	6,511	47.5%	19
Maine	2,088	1,050	50.3%	12
Maryland	20,470	7,779	38.0%	42
Massachusetts	37,817	16,893	44.7%	27
Michigan	35,272	15,748	44.6%	28
Minnesota	18,797	8,411	44.7%	26
Mississippi	3,751	1,848	49.3%	13
Missouri	19,372	7,285	37.6%	43
Montana	125	77	61.6%	3
Nebraska	4,527	1,917	42.3%	33
Nevada	1,316	711	54.0%	8
New Hampshire	2,147	604	28.1%	50
New Jersey	19,137	8,516	44.5%	29
New Mexico	3,546	1,391	39.2%	39
New York	117,284	52,782	45.0%	25
North Carolina	20,451	8,578	41.9%	34
North Dakota	927	374	40.3%	37
Ohio	41,364	18,234	44.1%	30
Oklahoma	6,105	3,144	51.5%	11
Oregon	5,832	3,115	53.4%	9
Pennsylvania	55,255	22,452	40.6%	35
Puerto Rico	7,100	5,294	74.6%	N.R.
Rhode Island	4,813	1,465	30.4%	47
South Carolina	8,380	3,807	45.4%	21
South Dakota	795	359	45.2%	24
Tennessee	14,983	6,527	43.6%	31
Texas	51,026	29,942	58.7%	5
Utah	5,021	2,132	42.5%	32
Vermont	1,741	573	32.9%	46
Virginia	15,545	6,073	39.1%	41
Washington	12,632	6,138	48.6%	17
West Virginia	4,421	1,773	40.1%	38
Wisconsin	13,023	5,887	45.2%	23
Wyoming	408	121	29.7%	48

Source: AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked.

#### 4. Physicians Retained from Undergraduate Medical Education (UME) and Graduate Medical Education (GME) Combined, 2016

Figure 4.4. Percentage of physicians retained from undergraduate medical education (UME) and graduate medical education (GME) combined, 2016.



Source: AMA Physician Masterfile (December 31, 2016).

**Table 4.4. Physicians Retained from Undergraduate Medical Education (UME) and Graduate Medical Education (GME) Combined, 2016**

	Active Physicians Who Graduated from MD- or DO-Granting Institution In State and Completed GME In State	Active Physicians Who Graduated from MD- or DO-Granting Institution In State, Completed GME In State, and Are Active In State		
		Number	Percent	Rank
United States	246,079	165,023	67.1%	N.R.
Alabama	3,151	2,354	74.7%	11
Alaska	---	---	---	---
Arizona	1,446	1,078	74.6%	13
Arkansas	2,383	1,928	80.9%	3
California	26,181	21,211	81.0%	2
Colorado	1,764	1,288	73.0%	16
Connecticut	1,555	806	51.8%	43
Delaware	---	---	---	---
District of Columbia	3,461	716	20.7%	N.R.
Florida	5,768	4,511	78.2%	5
Georgia	4,327	3,143	72.6%	17
Hawaii	612	530	86.6%	1
Idaho	---	---	---	---
Illinois	15,714	9,744	62.0%	33
Indiana	4,735	3,642	76.9%	7
Iowa	2,373	1,441	60.7%	34
Kansas	2,360	1,362	57.7%	38
Kentucky	3,118	2,304	73.9%	14
Louisiana	6,224	4,297	69.0%	23
Maine	248	175	70.6%	18
Maryland	3,603	1,910	53.0%	41
Massachusetts	8,206	4,836	58.9%	36
Michigan	10,514	7,005	66.6%	27
Minnesota	5,165	3,806	73.7%	15
Mississippi	1,674	1,282	76.6%	10
Missouri	6,041	3,339	55.3%	40
Montana	---	---	---	---
Nebraska	2,296	1,329	57.9%	37
Nevada	257	197	76.7%	9
New Hampshire	188	71	37.8%	45
New Jersey	3,158	1,964	62.2%	32
New Mexico	725	477	65.8%	28
New York	35,200	20,766	59.0%	35
North Carolina	4,899	3,284	67.0%	25
North Dakota	330	208	63.0%	31
Ohio	13,447	9,080	67.5%	24
Oklahoma	2,775	2,073	74.7%	12
Oregon	1,056	743	70.4%	19
Pennsylvania	19,189	10,934	57.0%	39
Puerto Rico	4,123	3,155	76.5%	N.R.
Rhode Island	364	181	49.7%	44
South Carolina	2,507	1,922	76.7%	8
South Dakota	258	200	77.5%	6
Tennessee	4,749	3,168	66.7%	26
Texas	21,147	17,100	80.9%	4
Utah	934	645	69.1%	22
Vermont	346	183	52.9%	42
Virginia	3,907	2,513	64.3%	29
Washington	2,058	1,438	69.9%	21
West Virginia	1,938	1,224	63.2%	30
Wisconsin	3,728	2,615	70.1%	20
Wyoming	---	---	---	---

Source: AMA Physician Masterfile (December 31, 2016).

Note: N.R. = not ranked. --- = the data are not applicable. Some states do not have an MD-granting or a DO-granting institution.

## Summary

### Key Findings

Between 2008 and 2016, there was an increase in the median number of active physicians and active patient-care physicians per 100,000 population but very little increase in the median number of active primary care physicians and virtually no increase in the median number of general surgeons. From 2008 to 2016, the state medians for the percentage of physicians who are IMGs increased modestly, while the percentage of residents and fellows who are IMGs decreased modestly. While the median number of students enrolled in UME and GME has increased relative to the population, the median number of students enrolled in GME has not increased as quickly as the median number in UME. As a result, the median ratio of GME to UME decreased from 2008 to 2016, with a state median enrollment of fewer GME than UME students in 2016. In terms of state retention, retention rates remain highest for physicians who completed both UME and GME in the same state, but there has been very little change in the percentage of physicians retained from that group.

**Summary Table. State Medians for Physician Supply, Undergraduate Medical Education (UME), Graduate Medical Education (GME), and In-State Retention, 2008, 2010, 2012, 2014, and 2016**

	Median <sup>1</sup> 2008	Median <sup>2</sup> 2010	Median <sup>3</sup> 2012	Median <sup>4</sup> 2014	Median 2016
<b>Physician Supply</b>					
Active Physicians per 100,000 Population	239.6	244.2	244.5	251.0	257.6
Total Active Patient Care Physicians per 100,000 Population	213.5	215.1	217.6	225.6	227.2
Active Primary Care Physicians per 100,000 Population	89.9	91.0	90.3	90.4	90.8
Active Patient Care Primary Care Physicians per 100,000 Population	80.1	80.4	81.5	83.1	82.5
Active General Surgeons per 100,000 Population	8.0	8.1	7.8	7.8	7.7
Active Patient Care General Surgeons per 100,000 Population	7.1	7.0	7.0	7.1	6.9
Percentage of Active Physicians Who Are Female	28.0%	29.3%	30.8%	32.4%	33.8%
Percentage of Active Physicians Who Are International Medical Graduates (IMGs)	17.6%	17.8%	18.2%	18.7%	19.1%
Percentage of Active Physicians Who Are Age 60 or Older	23.4%	25.2%	26.5%	28.5%	30.3%
<b>Undergraduate Medical Education (UME)</b>					
Students Enrolled in an MD- or a DO-Granting Institution per 100,000 Population	25.4	27.9	29.1	30.4	32.7
Students Enrolled in a Public MD- or DO-Granting Institution per 100,000 Population	15.5	19.7	18.8	21.4	21.2
Percentage of MD Students Matriculating in State	64.4%	67.1%	67.7%	69.2%	65.6%
<b>Graduate Medical Education (GME)</b>					
Total Residents and Fellows in ACGME-Accredited Programs per 100,000 Population	26.8	26.2	26.8	27.4	28.1
Total Residents and Fellows in Primary Care ACGME-Accredited Programs per 100,000 Population	10.5	10.2	10.4	10.5	10.6
Percentage of Residents and Fellows in ACGME-Accredited Programs Who Are IMGs	22.9%	23.1%	22.4%	22.2%	20.5%
Ratio of GME to UME	1.11	1.09	1.05	1.05	0.98
<b>Retention</b>					
Percentage of Physicians Retained in State from UME	37.2%	39.2%	38.7%	38.6%	38.5%
Percentage of Physicians Retained in State from Public UME	42.4%	45.5%	44.9%	43.9%	44.1%
Percentage of Physicians Retained in State from GME	45.4%	45.7%	44.9%	44.5%	44.9%
Percentage of Physicians Retained in State from UME and GME Combined	66.5%	67.4%	68.1%	68.4%	69.0%

1. 2009 State Physician Workforce Data Book, AAMC, [aamc.org/download/47340/data/statedata2009.pdf](http://aamc.org/download/47340/data/statedata2009.pdf).

2. 2011 State Physician Workforce Data Book, AAMC, [aamc.org/download/263512/data/statedata2011.pdf](http://aamc.org/download/263512/data/statedata2011.pdf).

3. 2013 State Physician Workforce Data Book, AAMC, [https://members.aamc.org/eweb/upload/State%20Physician%20Workforce%20Data%20Book%202013%20\(PDF\).pdf](https://members.aamc.org/eweb/upload/State%20Physician%20Workforce%20Data%20Book%202013%20(PDF).pdf).

4. 2015 State Physician Workforce Data Book, AAMC, [aamc.org/2015statedatabook](http://aamc.org/2015statedatabook).



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