State of the Primary Care Workforce, 2025

December 2025

Primary care is a fundamental part of the nation's health care system. Better access to and use of primary care has been shown to improve treatment of chronic conditions and increase life expectancy. However, it is well-documented that significant challenges face the workforce providing this care (Hoffer, 2024). These include shortages and maldistribution of primary care providers (PCPs), low compensation compared to other health occupations, increasing burnout and job dissatisfaction, and an aging workforce.

The primary care workforce is defined in this report as physicians, nurse practitioners (NPs), and physician assistants (PAs) practicing in primary care specialties: family medicine, general pediatric medicine, general internal medicine, and geriatric medicine. While the majority of the nation's hospitalists—providers who mainly provide care to hospitalized patients—are trained in primary care specialties, they are excluded from provider counts in this report (except where noted) as these clinicians are not engaged in activities that meet the definition of primary care (Institute of Medicine, 1996). All physicians, NPs, and PAs in this report refer to the primary care workforce unless noted.

About the National Center for Health Workforce Analysis

The National Center for Health Workforce Analysis informs public and private sector decision makers on health workforce issues by expanding and improving health workforce data, disseminating workforce data to the public, and improving and updating projections of the supply and demand for health workers.

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The purpose of this report is to update and discuss HRSA's most recent projected estimates of the future supply of primary care occupations and provide context for that workforce by examining their current state with the most recent data available.

Highlights

- In 2023, there were 340,319 primary care physicians (includes MDs and DOs and excludes residents) in the U.S. In 2024, there were an estimated 374,970 NPs and 29,433 PAs in primary care.
- There is a projected shortage of 70,610 full-time equivalent (FTE) primary care physicians by 2038, which will be particularly acute in nonmetro areas.
- A substantial and increasing amount of behavioral health and obstetrics and gynecology (OB-GYN) services are being provided by PCPs.
- Primary care physicians, NPs, and PAs earn less than counterparts in other specialties.
- Burnout has increased in many health care occupations, but especially among primary care physicians. Almost half of primary care physicians reported feeling burnout in 2023.
- Primary care physicians are using telehealth more than prior to 2020. Telehealth has helped improve management, health outcomes, and cost savings for chronic diseases.
- The demographics and geographic location of the U.S population are projected to change dramatically over the course of this century. The primary care workforce will have to change with it to continue to deliver high-quality care.

Describing the primary care workforce

PCPs are often the first point of contact for patients seeking medical care. They play a vital role in preventive care, early detection and treatment of diseases, management of chronic conditions, and acute care in both inpatient and outpatient settings (AAFP, n.d.; CMS, 2023). PCPs also play a crucial role in the provision of behavioral health and women's health services (Bowman et al., 2025; Warring, 2023). Overall, this workforce is vital for the U.S. population to remain healthy, manage diseases, and prevent illnesses and deaths (Starfield et al., 2005).

Enumeration

In 2023, 340,319 primary care physicians were actively working, representing 34.3% of all U.S. active physicians (AMA, 2023). From 2016 to 2023, the number of active primary care physicians not in residency increased by 8.1%, in contrast to a 16.8% increase among other (including unknown) physician specialties (AAMC, n.d.; AAMC, 2022). Table 1 presents the breakdown of active primary care physicians by specialty.

Table 1. Number and Percent of Active Primary Care Physicians by Specialty, 2023

Specialty	Total Active Physicians	Percentage
Family medicine [a]	124,049	36.5%
Internists [b]	130,483	38.3%
Geriatricians	6,431	1.9%
Pediatricians [c]	79,356	23.3%
All primary care physicians	340,319	100%

Note. Adapted from the *American Medical Association's (AMA) Physician Professional Data*, 2023. Data includes both active MDs and DOs and excludes residents. In 2023, there were 54,274 primary care residents. [a] Excludes geriatrics subspecialties. [b] Includes all internal medicine subspecialties, except cardiology, endocrinology, gastroenterology, geriatrics, hematology and oncology, infectious disease, nephrology, pulmonology, and rheumatology. [c] Excludes neonatal and perinatal medicine subspecialties.

One striking finding is the low number and percentage of geriatricians in the U.S. This is notable due to the well-documented large number of U.S. adults aged 65 and older, who might require the care of a geriatrician. Additionally, in 2024, there is an estimated 374,970 NPs and 29,433 PAs specializing in primary care (AANP, 2025; NCCPA, 2025). PAs with a secondary position in primary care were not included in this estimate. While NPs and PAs do not have the same level of training and autonomy as primary care physicians, they do deliver primary care services.

Demographics

The primary care physician workforce varies demographically depending on the specialty (Table 2).

Table 2. Demographics of Primary Care Physicians by Specialty, 2023

Demographics	Family Medicine	Internists	Geriatricians	Pediatricians
Men	56.4%	60.4%	43.5%	35.4%
Women	43.6%	39.6%	56.5%	64.6%
Ages 34 and younger	7.8%	8.7%	5.2%	7.9%
Ages 35 to 44	22.4%	22.6%	27.2%	26.2%
Ages 45 to 54	24.8%	22.6%	31.1%	25.9%
Ages 55 to 64	23.0%	24.1%	21.1%	21.9%
Ages 65 and older	22.0%	22.1%	15.5%	18.1%
White (Non-Hispanic)	57.9%	44.0%	40.4%	55.7%
Black or African American (Non-Hispanic)	6.2%	6.7%	6.8%	6.6%
Asian (Non-Hispanic)	15.3%	26.1%	33.7%	15.3%
Hispanic or Latino	7.4%	6.5%	9.1%	8.0%
Other [a]	13.2%	16.7%	10.0%	14.4%

Note. Sex and age data are adapted from the *American Medical Association's (AMA) Physician Professional Data*, 2023. Data includes both active MDs and DOs and excludes unknown sex and age, and residents. In 2023, there were 54,274 primary care residents. Other data in the table are from the *Association of American Medical Colleges' (AAMC) U.S. physician workforce data dashboard,* 2023 (https://www.aamc.org/data-reports/report/us-physician-workforce-data-dashboard). [a] Includes Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, Multiracial (non-Hispanic), Other, and Unknown.

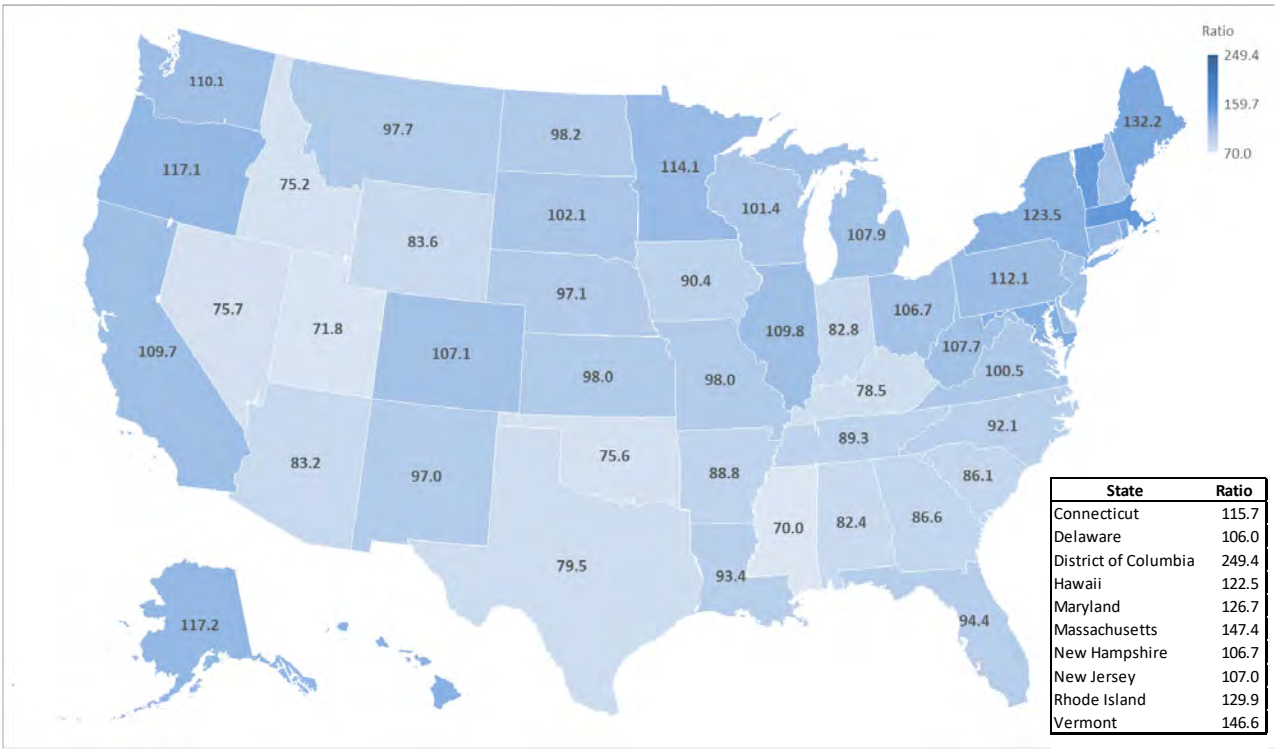
Women make up most geriatricians and pediatricians while there are more male family medicine physicians and internists. Further, 35% or more of primary care physicians are age 55 and older.

For all NPs (not just primary care), 88% are women, 78% are non-Hispanic White, and the median age is 43.1 (BLS, 2025). PAs (not just primary care) are predominately non-Hispanic White (71%), 39 years and younger (59%), and female (66%) (HRSA, 2024).

Distribution

The distribution of primary care physicians differs by level of urbanization. In general, rural areas have lower primary care physician ratios than urban areas (Economic Research Service, 2023; Fraze et al, 2022; Zhang et al., 2020). In 2023, 7.2% of U.S. counties did not have a primary care physician at all and the national ratio of primary care physicians was 101.0 per 100,000 population (AMA, 2023; Census, 2024). Whether or not this is considered adequate at the national level, the range of ratios across the states shows an uneven distribution of these physicians (*Figure 1 and Table A in Appendix*). Often a national maldistribution is interpreted as a shortage at the state (or lower) geographic level.

Figure 1. Ratios of Primary Care Physicians per 100,000 Population by U.S. State, 2023



State	Ratio
Connecticut	115.7
Delaware	106.0
District of Columbia	249.4
Hawaii	122.5
Maryland	126.7
Massachusetts	147.4
New Hampshire	106.7
New Jersey	107.0
Rhode Island	129.9
Vermont	146.6

Note. Adapted from the *American Medical Association's (AMA) Physician Professional Data*, 2023, and the 2023 state population estimates from the *Annual estimates of the resident population for the United States, regions, states, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2024*, by the U.S. Census Bureau, 2024 (https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html). Data includes both active MDs and DOs and excludes residents. In 2023, there were 54,274 primary care residents.

NPs and PAs are important in providing primary care in rural areas. Approximately half of PAs were interested in practicing in rural locations (44%), Medically Underserved Areas (MUAs) (58%), or Health Professional Shortage Areas (HPSAs) (54%) (AAPA, 2022a, 2022b).

Current and Projected Shortages

As of December 2, 2025, there are 8,466 designated primary care HPSAs in the United States, with 92 million residents (approximately 27% of the U.S. population) (Census, n.d.; HRSA, n.d.). According to the most recent data, 63.1% of designated primary care HPSAs are in rural areas. Based on a minimum adequate population-to-primary care physician ratio of 3,500 to 1, HRSA estimates that the United States needs 15,628 additional physicians to remove all primary care shortage designations.

As for the future, HRSA projects a national shortage of 70,610 full-time equivalent (FTE) primary care physicians by the year 2038 (HRSA, 2025). To determine if the number of physicians in a specialty will be adequate, the projected supply is divided by the projected demand. As seen in Table 3, all primary care physician specialties will experience some level of shortage ranging from 76% adequacy (family medicine physicians) to 86% adequacy (pediatricians) in 2038. The projected supply of family medicine physicians in 2038 will be sufficient to meet only 76% of demand in that year; stated simply,

there will be a 24% shortage of these physicians. There are also significant differences in projected shortages between metro and nonmetro areas (HRSA, 2025).

Table 3. Projected Shortage and Percent Adequacy of Primary Care Physicians by Specialty in 2038, Number and Percent Adequacy

Physician Specialty	Metro	Nonmetro	All United States
Family medicine	32,400 (76%)	6,660 (71%)	39,060 (76%)
Geriatricians	1,150 (87%)	420 (45%)	1,570 (84%)
Internists	14,240 (87%)	6,420 (47%)	20,660 (83%)
Pediatricians	6,750 (89%)	2,570 (57%)	9,320 (86%)
Total	54,540 (83%)	16,070 (61%)	70,610 (80%)

Note. Adapted from the *National Center for Health Workforce Analysis (NCHWA)'s Workforce projections*, by the Health Resources and Services Administration, 2025 (https://data.hrsa.gov/topics/health-workforce/workforce-projections). Shortage is calculated as projected supply minus projected demand. Demand and supply estimates are in full-time equivalents (FTEs), defined as working 40 hours a week. FTE estimates may differ from estimates of the head counts of the health workforce. Percent adequacy is calculated as projected supply divided by projected demand.

A major factor contributing to the projected shortage of primary care physicians in the future is the age of primary care physicians. The primary care physician workforce is older than other occupations, which means higher rates will be leaving the labor force in the coming decades.

NPs and PAs may to some degree alleviate the issues associated with the shortage of primary care physicians. There is a projected surplus of nurse practitioners (72,910 FTEs) and small projected surplus of PAs (6,660 FTEs) in 2038 (HRSA, 2025).

Challenges for the Primary Care Workforce

Compensation

One of the main challenges to attract new clinicians to the primary care workforce is low compensation relative to other clinicians. Primary care is among the lowest paid physician fields. Table 4 shows 2024 annual average salaries for selected physician specialties.

Table 4. Earnings for Selected Physician Specialties, 2024

Physician Specialty	Annual Salary
Orthopedics	$564,000
Plastic surgery	$544,000
General surgery	$434,000
Obstetrics and gynecology	$372,000
Psychiatry	$341,000
Internal medicine [a]	$294,000
Family medicine [a]	$281,000
Pediatrics [a]	$265,000

Note. Adapted from the *Physician compensation report 2025*, by Medscape, 2025 (https://www.medscape.com/slideshow/2025-compensation-overview-6018103).

[a] Indicates primary care specialties. Geriatrics was not included in the report.

The substantial gap in compensation between primary care physicians and specialist physicians may be one of the explanatory factors for medical students choosing residency in specialties other than primary care (Kruse, 2013). Further, salaries for NPs and PAs working in primary care are lower than the average salaries of their counterparts outside of primary care. The average NP salary in 2023 was $135,000, while the average salary in 2023 for NPs working in primary care was $120,000 (Hamlin, 2023; Medscape, 2024b). The median PA salary in 2024 was $134,000, while the median salary in 2024 for PAs working in primary care was $125,850 (AAPA, 2025).

Burnout

Primary care physicians have high rates of burnout, with burnout increasing in recent years (AAFP, 2023; Horstman, 2024). Recent studies show that rates of burnout for physicians increased from 42% in 2020 to 47% and 53% in 2021 and 2022, respectively, before declining slightly to 49% in 2023 (Medscape, 2024a). Compared to other physician specialties, two of the four primary care specialties are among the five specialties reporting the highest level of burnout (Table 5).

Table 5. Percentage of Physicians Reporting Burnout in Selected Specialties, 2023

Physician Specialty	Percent of Physicians who Reported Burnout
Emergency medicine	63%
Obstetrics and gynecology	53%
Oncology	53%
Pediatrics[a]	51%
Family medicine[a]	51%
Internal medicine[a]	50%
General surgery	45%
Psychiatry	39%

Note. Adapted from the *Physician burnout & depression report 2024: We have much work to do*, by Medscape, 2024a (https://www.medscape.com/slideshow/2024-lifestyle-burnout-6016865#3).

[a] Indicates primary care specialties. Geriatrics was not included in the report.

High burnout rates and low satisfaction with work-life balance have been consistently reported by primary care physicians in the past decade. Studies that surveyed U.S. physicians between 2011 and 2023 found that physicians are more likely to be burned out and less satisfied with work-life integration than the general working U.S. population; however, primary care physicians, particularly family medicine physicians and internists, were more likely to be burned out compared to other physicians (Shanafelt et al., 2015, 2022, 2025).

Common factors contributing to physician burnout are workload, a large number of patients, difficulty balancing patient needs and clerical duties, and lack of autonomy (AMA, 2025; Horstman, 2024). In addition, violence in the workplace contributes negatively to health care workforce wellbeing (Pompeii et al., 2020; Shanafelt et al., 2022). The health care workforce experiences higher rates of workplace violence than workers in other industries (BLS, n.d.; Lombardi et al., 2024).

Telehealth

Since 2020, health care providers increased their use of telehealth resources (Center for Telehealth and e-Health Law, n.d.). A study evaluating the use of telehealth in 2019 and 2021 for office-based physicians found that primary care physician use of telehealth technology increased from around 20% in 2019 to over 90% in 2021 (Myrick et al., 2022). Likewise, Medicare Part B claims data indicate telehealth utilization increased from 910,490 telehealth visits between March 2019 and February 2020 to 28.3 million telehealth visits between March 2020 and February 2021 (CMS, 2022). Telehealth utilization has declined in recent years but remain well above pre-2020 levels (6.7 million telehealth visits in calendar year 2024) (CMS, 2025). Telehealth improves communication between care providers, reduces travel and wait time for patients, and helps increase access to care – particularly in shortage areas and for patients with limited mobility (Zeami et al., 2024; HHS, 2025). Telehealth is a highly effective instrument in enhancing patient engagement and improving management, health outcomes, and cost savings for chronic diseases (Ezeamii et al., 2024).

Population factors impacting the primary care workforce

The U.S. population grew rapidly from 1980 to 2020, increasing 46% (227 million to 331 million) (Census, 2021). The future U.S. population is predicted to increase 10% (331 million to 366 million) from 2020 to 2100 (Census, 2021, 2025a). The number of primary care physicians is increasing at approximately the same rate as the population they serve. It is estimated that in 2038, the national ratio of FTE primary care physicians will be 81.9 per 100,000 individuals as compared to 82.1 in 2023 (Census, 2025a; HRSA, 2025).

Census data reveal significant geographic shifts in the United States population. Among the 2.1 million U.S. residents who changed their region of residence in 2023, 63.0% moved to the South and West regions (Census, 2025b). This will have a potentially huge impact on the distribution needs for the primary care workforce now and into the future.

Demographics

The 65 and older population is projected to increase 84% (from 58 million to 106 million) between 2022 and 2100, with 29% of Americans being 65 years and older in 2100 (Census, 2025a). This trend will have significant implications for the health care industry as the demand for services related to an older population will surge (Age Wave et al., 2024).

Between 2022 and 2100, the population of women in the United States is projected to grow nearly 10% (from approximately 168 million to 185 million) (Census, 2025a). Since many primary care physicians provide women's health services, particularly in rural areas, this growth will add to the future demand for primary care physicians (GAO, 2022; Lee et al., 2020; Zephyrin et al., 2020).

Improving population health via the primary care workforce

Access to and Use of Primary Care Providers

Health care access is generally defined as the ability to obtain health care services in a convenient and affordable way. Studies have shown that better access to primary care providers leads to improved health outcomes for the population (HHS, 2023; Starfield et al., 2005). Barriers to accessing primary care providers in the United States include shortages and geographical maldistribution of providers, transportation issues, lack of health insurance, and limited office hours (Jabbarpour et al., 2025; Office of Disease Prevention and Health Promotion, n.d.).

The percentage of the U.S. population having a usual source of care has declined in recent years (Huffstetler et al., 2023; Jabbarpour et al., 2025). The usual source of care is a medical professional or facility where an individual regularly accesses medical care and is typically a primary care provider (AHRQ, n.d.; Lee et al., 2023). This is partially why behavioral health care and OB-GYN services are becoming an increasingly large part of primary care visits (National Academies of Sciences, Engineering, and Medicine, 2021). A recent study found that the share of primary care visits that addressed mental and behavioral concerns increased by 49% from the period between 2006-2007 and 2016-2018. Primary care physicians often screen patients during their primary care visits for behavioral health issues and prescribe and manage medications to treat depression, substance abuse, and attention deficit hyperactivity disorder (Rotenstein et al., 2023). Similarly, primary care physicians now deliver many OB-GYN services. A 2023 study estimated that primary care physicians conducted 39% of preventive gynecological and women's health visits for women aged 18-44 (Attanasio et al., 2023). Women residing in rural areas, having a low socioeconomic status, and being over the age of 45 were more likely to see family medicine physicians or internists for OB-GYN services (Lee et al., 2020; Raffoul et al., 2016; Simon & Uddin, 2017).

Chronic Health Conditions

Approximately 60% of adult Americans live with a chronic disease, with 40% of adult Americans having two or more chronic conditions (Abir, 2025). With such a high percentage of the U.S. population living with chronic diseases, access to preventive care services, early detection, and regular management of chronic conditions are crucial. Experts acknowledge that episodic health care services, delivered in hospitals, are often insufficient in alleviating the impact of chronic disease on Americans' health. This suggests that primary care and a community-based approach are needed to ensure easy and affordable access to health care and improved patient outcomes (Pearl & Madvig, 2020; Savoy et al., 2017; Smith et al., 2021; Tandan et al., 2024; Zhang et al., 2025).

Life Expectancy

People with better access to primary care live longer. A study of data from 2005-2015 found that an increase of 10 primary care physicians per 100,000 population was associated with a substantial increase in life expectancy (51.5 days), more than twice as large as the increase resulting from 10 additional specialist physicians per 100,000 population (19.2 days) (Basu et al., 2019). With an estimated average life expectancy at birth of 77.5 years, the U.S. ranks 30th out of 38 Organization for

Economic Co-operation and Development (OECD) countries in 2022 (Table 6) (OECD, 2024). The U.S. also ranks lower in maternal mortality and infant mortality.

Table 6. Life Expectancy at Birth, Maternal Mortality and Infant Mortality in the U.S. and OECD Countries, 2022

Country	Life Expectancy at Birth [a]	Maternal Mortality [b]	Infant Mortality [c]
Australia	83.2	4.7	3.2
Canada	81.3	8.5	4.7
United Kingdom	80.9	N/A	4.0
Japan	84.1	4.3	1.8
United States	77.5	22.3	5.6
OECD countries average [d]	80.6	8.6	3.7

Note. Adapted from the *OECD data explorer*, by the Organization for Economic Co-operation and Development (OECD), 2024 (https://data-explorer.oecd.org/).

[a] Life expectancy at birth in years across all 38 OECD countries. The numbers for the United Kingdom and Japan are estimated using the unweighted average of life expectancy of men and women within these countries. [b] Deaths per 100,000 live births. [c] Infant deaths per 1,000 live births. [d] Includes all OECD countries with data in 2022.

Conclusions

The importance of primary care cannot be overstated. Primary care is often the first contact a patient will have with the health care workforce and sets the trajectory for a positive or negative patient experience and outcome. A high-functioning primary care system treats illnesses and injuries before they become severe, provides ongoing care to mitigate chronic conditions, identifies when more specialized care is required, and connects the patient with a clinician. When primary care does not function as intended, patient issues can compound and become increasingly more difficult to treat and resolve.

The U.S. primary care system faces several challenges in the coming years. Barriers to health care access and shortages of providers result in uneven use of services. Because the primary care workforce is not distributed equally among geographic areas, many rural areas face low rates of physicians. Lower compensation compared to nonprimary care specialties and heightened stress and burnout are challenges in attracting and retaining new clinicians. The population of the United States will change in the future as will the methods to care for it.

The primary care projections incorporate new data from the American Medical Association (AMA) and the Accreditation Council for Graduate Medical Education (ACGME) as well as updated attrition information. See the HWSM technical documentation for details on the methodology and datasets used to generate these projections. For full data on the workforce projections, see the Workforce Projections Dashboard. You can also download the data from the dashboard in spreadsheet form.

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Appendix

Table A. Ratios of Primary Care Physicians per 100,000 Population by U.S. State, 2023

State	Ratio	State	Ratio	State	Ratio
Alabama	82.4	Kentucky	78.5	North Dakota	98.2
Alaska	117.2	Louisiana	93.4	Ohio	106.7
Arizona	83.2	Maine	132.2	Oklahoma	75.6
Arkansas	88.8	Maryland	126.7	Oregon	117.1
California	109.7	Massachusetts	147.4	Pennsylvania	112.1
Colorado	107.1	Michigan	107.9	Rhode Island	129.9
Connecticut	115.7	Minnesota	114.1	South Carolina	86.1
Delaware	106.0	Mississippi	70.0	South Dakota	102.1
District of Columbia	249.4	Missouri	98.0	Tennessee	89.3
Florida	94.4	Montana	97.7	Texas	79.5
Georgia	86.6	Nebraska	97.1	Utah	71.8
Hawaii	122.5	Nevada	75.7	Vermont	146.6
Idaho	75.2	New Hampshire	106.7	Virginia	100.5
Illinois	109.8	New Jersey	107.0	Washington	110.1
Indiana	82.8	New Mexico	97.0	West Virginia	107.7
Iowa	90.4	New York	123.5	Wisconsin	101.4
Kansas	98.0	North Carolina	92.1	Wyoming	83.6

Note. Adapted from the *American Medical Association's (AMA) Physician Professional Data*, 2023, and the 2023 state population estimates from the *Annual estimates of the resident population for the United States, regions, states, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2024*, by the U.S. Census Bureau, 2024 (https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html). Data includes both active MDs and DOs and excludes residents. In 2023, there were 54,274 primary care residents.