



# **The State-Level Economic Impact of Office-Based Physicians**

## ***Report***

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**The American Medical Association**

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## Executive Summary

Office-based physicians are a critical component of the healthcare system, fundamentally assuring the health of the community in which they practice. Office-based physicians include both doctors of medicine (MDs) and doctors of osteopathy (DOs) who are primarily engaged in the independent practice of medicine. These practitioners operate private or group practices in offices and clinics and are focused on providing care to their patients.

While physicians are primarily focused on providing care to their patients, they also play a vital role in the state and local economy by creating jobs, purchasing goods and services and supporting state and community public programs through the tax revenues they create.

In these times of rapid change in the health care industry it is important to understand how changes affect office-based physicians. This report will provide data which can be used by key policymakers, legislators and thought leaders in medicine. It shows how strong physician practices not only ensure the health and well being of communities but also critically support local economies and enable jobs, growth and prosperity.

This report estimates the economic impact of office-based physicians measured across four variables: output, jobs, wages and benefits, and tax revenue. Economic impact includes both a direct component and an indirect component. The *direct* impact is the value of output, jobs, wages and benefits and taxes that are produced from patient care activities provided in physician offices. The *indirect* impact includes the output, jobs, wages and benefits, and taxes generated in the industries that are supported by physicians' offices. "Total" effects are the sum of the direct and indirect effects. Indirect effects within a state are limited to effects within its borders, whereas expanding the economic analysis area to the nation includes economic effects that reach into other states. For that reason the national economic impacts are larger than the sum of the total state economic impacts.

The report provides information on the economic impact of office-based physicians in all 50 states and the District of Columbia. Economic impact is reported at state level and national level. It also provides a snapshot of the economic impact of office-based physicians compared to other select industries at the state level.

The economic impact of office-based physicians varies across states and depends on the number of physicians in each state as well as the characteristics of the state's economy. There were 638,661 office-based physicians practicing within the fifty states and the District of Columbia as of October 2010.<sup>1</sup>

- **Total Output:** The state-level total output in the median state was \$10.3 billion in 2009. In the U.S., the office-based physician industry supported \$1.4 trillion in total economic

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<sup>1</sup> This count is based on AMA Masterfile data, October 2010, for physicians in the 50 states and the District of Columbia. The Masterfile identifies 599,334 physicians as office-based and an additional 71,670 as having an unknown type of professional activity. To avoid undercounting the number of office-based physicians, we imputed the office-based status for physicians with an unknown professional activity. Through this methodology an additional 39,327 physicians were identified as office-based, yielding a total number of 638,661. For further detail on methods, see Appendix A.

output in 2009. On average, each office-based physician supported \$2.2 million in output across the nation.

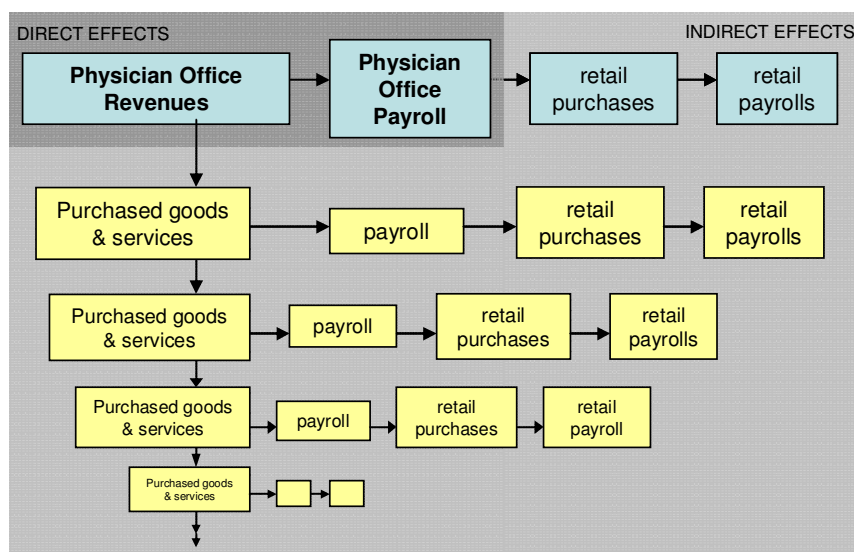
- **Jobs:** Physicians' offices employ support staff and often work with non-physician providers as well, increasing the total number of employees in the industry to well above the count of physicians alone. In the median state, the office-based physician industry supported a total of over 46,400 jobs within state borders. The office-based physician industry supported a total of 4.0 million jobs across the US. On average, each office-based physician supported 6.2 jobs across the nation, including his own.
- **Wages and Benefits:** Office-based physicians significantly contribute to wages and other benefits in their communities. In the median state, the physician office industry supported \$6.6 billion in state-level total wages and benefits. In the U.S., the office-based physician industry supported a total of \$833 billion in wages and benefits. On average, each office-based physician supported \$1.3 million in wages and benefits across the nation.
- **Tax Revenues:** The revenues and earnings generated by physicians' offices contribute to state and local taxes, which in turn support public works and community development. In the median state, physicians' offices contributed a state-level total of \$401 million to local and state tax revenues in 2009. In the U.S. the office-based physician industry supported \$63 billion in total state and local tax revenues in 2009. On average, each physician generated nearly \$100,000 in state and local tax revenue across the nation.

## Economic Impact Analyses

Economic impact analyses (EIAs) track the reach of revenues generated by an activity as they flow through the local economy, tracking jobs created, spending that supports local business, and new tax revenues. EIA’s include both direct and indirect benefits. *Direct* benefits, in the context of the office-based physician “industry” take the form of: 1) revenues generated in the course of the practice of medicine (i.e., the value of output); 2) the wages and benefits that go to physicians and practice employees who are hired to support the delivery of care; 3) the number of jobs created in the office-based physician industry; and 4) the taxes that are paid by physician offices and their owners and employees.

Economic activities and businesses that are supported by the physician’s practice outside of their own industry represent the *indirect* benefits of the physician office. These *business-to-business* effects include the supplies and equipment purchased by the physician, practice administrative services, cleaning and property maintenance services and clinical and laboratory services that support physician operations.

Figure 1: Economic Multipliers



Additional indirect benefits (sometimes called induced effects)<sup>2</sup> arise when the employees of physician practices and employees of vendors, in turn, spend their earnings to support local businesses, which pay their employees and pay taxes, and so on (see Figure 1). With each cycle of spending there is some “leakage”, i.e., some spending goes outside the community and, as a result, generates no additional local value.

The indirect and direct effects make up the “multiplier” that drives an economic impact analysis. Simply put, the total impact in a community is a *multiple* of the economic benefit that is generated directly from the practice of medicine. In the current context, the multiplier reflects the number of

<sup>2</sup> Induced effects are included as a portion of “indirect” effects in this report for ease of reading.

times that each dollar generated in the practice of medicine circulates through the local economy, supporting local jobs and spending.

An output multiplier is the number of dollars of total economic activity that are created by one dollar of new business revenue in a community.

There is a separate multiplier for three types of direct benefits mentioned above: output, jobs, and wages and benefits. An output multiplier is used to compute the total value (i.e., direct and indirect) of output created by an industry. This value indicates the total economic output generated in an economy for every \$1 million in direct output. A job multiplier computes the total number of full-time equivalent jobs supported for every \$1 million in direct output created by an industry. The multiplier for wages and benefits is based on direct wages and benefits. For every \$1 million in direct employee compensation the multiplier indicates the total value of supported wages and benefits.

Multipliers are specific to geographic areas and to particular industries and their values can vary widely. A multiplier of 1.0 would indicate that the total economic value of the industry is the same as the direct economic value, i.e. a dollar of revenue in the industry immediately leaves the community so that there is no cycling through the community for additional economic benefit. A multiplier will take on a value *greater* than 1.0 when a dollar earned by a business, e.g., a physician practice, is spent in the community, supporting jobs and other local businesses, which in turn pay their employees who, in turn buy more goods and services in the local community.

Multipliers are lower when business revenues are spent (leak) outside the community or are spent on goods or services that support fewer local jobs. Multipliers for small community areas will be smaller than for larger areas or a state because establishments in smaller areas often must look outside of their immediate communities to find inputs. A county's multiplier would be smaller than a state's multiplier and, likewise, a state's would be smaller than the nation's. It is often said that "health care is local". Indeed health care multipliers tend to be higher than those for many other industries precisely because physicians and their office staff tend to live in the community and their services support the local community.

### Data Sources

Three primary data sources were used to evaluate the economic impact of physician offices: the AMA Masterfile, MGMA Cost Survey, and IMPLAN. IMPLAN's economic impact multipliers were combined with MGMA's per-physician revenue and costs data and the Masterfile's number of physicians to estimate values for the direct, indirect and total economic impact of the office-based physician industry. For specific methods used, see Appendix A.

### Economic Impact: Results

This report estimates the direct, indirect and total impact of office-based physicians on the following four measures of economic activity: output (i.e., total sales revenues), jobs, wages and benefits (i.e., employee compensation), and tax revenues generated on the local and state levels. The direct and indirect economic benefits for each measure sum to the total benefit. Total effects are presented on both the state and national levels, i.e., two figures with one limiting the industry's effect within state borders and the other including total impact into other states.

## Output

The direct output of an industry is defined as the total sales revenue produced by that industry in any given year. For office-based physicians such “output” can be thought of as the total value of care (e.g., patient visits) provided plus the value of any other services provided by the physicians office (e.g., revenue from renting additional office space, parking fees). This value includes both medical and non-medical revenues generated by office-based physician practices.

**Table 1: Summary of State Output Multipliers**

Median	1.78
Mean	1.77
Range	1.39 - 2.14

Output multipliers were used to compute the value of indirect and total output created by physicians’ offices in each state. Indirect output captures the value of revenues generated by other businesses as a result of the office-based physician industry, e.g., the sale of equipment to the offices or the sale of laboratory services related to a physician visit. The mean output multiplier for office-based physicians across the 50 states and the District of Columbia is 1.77, meaning an additional \$0.77 of indirect output is generated in the state over and above each dollar of direct output created in the practice of medicine. The range of the state multiplier values is 1.39 to 2.14, as shown in Table 1. (See Appendix B for a full list of state-specific multipliers.) Including indirect effects outside of each state’s borders increases the multiplier. The national output multiplier for the office-based physician industry is 2.79.

The “total output” of office-based physicians sums the direct and indirect output generated by the industry. At the state-level, office-based physicians generated between \$960 million and \$138 billion in total output. The median state-level total output was \$10.2 billion. Again, state-level estimates only capture economic activity that occurs within state boundaries. Not surprisingly, the state-level total output was largest in California, reflecting the large number of office-based physicians and a well-developed state economy that allows business-to-business dollars to remain in the state. The total output of office-based physicians by state is reported in Table 5.

At the national level, office-based physicians generated \$1.4 trillion in total output in 2009. This estimate captures both the impact within states as well as economic activity that crosses states’ borders. On average, each physician supported over \$2.2 million in output in the nation. National-level total output is reported in Table 6.

## Jobs

Employment is a second means of evaluating an industry’s economic value. A total of 638,661 office-based physicians (MDs and DOs) were practicing within the United States as of October 2010. Physician offices employ support staff and often work with non-physician providers, increasing the total number of employees in the industry to well above the count of physicians alone. The number of jobs directly created by physician offices in the U.S. was 3.3 million employees, including self-employed positions.<sup>3</sup> This is the direct employment impact of the office-based physician industry.

<sup>3</sup> The direct employment figure includes physicians as well as non-physician staff, including administrative and non-physician provider personnel.

Employment multipliers are defined as the number of jobs created per one million dollars of output; these multipliers reflect the additional jobs that are created from the economic activity generated by physicians' practices. These are jobs above and beyond the clinical and administrative personnel that work inside the physician practices. The mean employment multiplier across states is 1.77, meaning that for each million dollars of direct output generated by the office-based physician industry, 0.77 of a full-time equivalent (FTE) job is supported in the economy outside the office-based physician industry. In other words, 0.77 additional jobs, above and beyond the clinical and administrative personnel that work inside the physician practices, were supported for each one million dollars of revenue generated by a physician office business. The range of the states' employment multiplier is 1.30 to 1.97, as shown in Table 2. The national employment multiplier is 2.42. This measure is higher than the state multipliers because it includes jobs stimulated across state borders.

**Table 2: Summary of State Employment Multipliers**

Median	1.78
Mean	1.77
Range	1.30 - 1.97

At the state level, the total number of jobs supported by office-based physicians ranged from 4,996 to over 458,000, with a median of 46,476. See Table 5 for the total jobs supported by office-based physicians by state. The total employment supported by the industry in the nation reached nearly 4.0 million in 2009; each physician supported an average of 6.2 employees in the nation (including his or her job). See Table 6 for national statistics.

### Wages and Benefits

Employee compensation, i.e., the wages and benefits<sup>4</sup> that are paid to local residents, is also an important measure of an industry's value to the local economy. The value of direct wages and benefits includes compensation and benefits paid to physicians, non-physician staff, practice owners and any other staff on payroll. The value of direct wages and benefits supported by the office-based physician industry in the U.S. was \$432.4 million.

The mean payroll multiplier across the 50 states is 1.43, meaning an additional \$0.43 in wages and benefits was generated for every dollar of direct employee compensation within the industry. The range of the state payroll multipliers is 1.23 to 1.62, as shown in Table 3. Including the indirect wages and benefits supported by the industry, the total amount of wages and benefits supported by office-based physicians at the state level ranged from \$676 million and \$106 billion, with a median of \$6.6 billion, as shown in Table 5. The national payroll multiplier is 1.93, taking the total value of wages and benefits supported by office based physicians to \$833.1 billion at the national level, as shown in Table 6.

**Table 3: Summary of State Payroll Multipliers**

Median	1.44
Mean	1.43
Range	1.23 - 1.62

### Taxes

Physicians' offices also generate tax revenues at the local and state levels.<sup>5</sup> The total tax contribution is computed by summing taxation on employee income, proprietor income, indirect business interactions, households, and corporations. Tax revenues are included from physician

<sup>4</sup> For ease of reading, "wages and benefits" is used to mean salaries and wages plus other forms of compensation paid to employees, e.g., benefits, for the remainder of this report. Values include wages and benefits to all support staff, non-physician practitioners and physicians.

<sup>5</sup> The industry also generates federal tax revenue, but the federal level is beyond the scope of this report.

offices (direct) and from other affective industries (indirect); i.e. these are the “total” tax revenues supported by the industry.

The state and local taxes incorporated in this study include:

- Social Security taxes: the state portions of Social Security taxes, both the employee and employer paid portions;
- Personal taxes: state and local income taxes, gift and estate taxes, motor vehicles taxes/fees, fishing/hunting and other license fees, property taxes, personal property taxes, and other fines/fees or donations;
- Business taxes: corporate profits and dividends taxes; and
- Indirect business taxes: property taxes, sales taxes, motor vehicle licensing, severance taxes, non-tax payments (e.g. rents and royalties, special assessments, fines, settlements and donations), and other taxes (including business licensing, documentary and stamp taxes).<sup>6</sup>

The total value of state and local taxes collected in the median state in 2009 was \$401 million. The range of tax revenues across the states was \$28 million to \$7.2 billion, as shown in Table 4. For state-level information on the total tax revenues generated by physician offices for 2009, see Table 5. The total state and local tax revenues in the nation summed to \$62.9 billion, averaging over \$98,400 per physician, as shown in Table 6.

**Table 4: State & Local Tax Revenues  
Generated by Office-based Physicians**  
((\$ millions. at the state level)

Median	\$401
Mean	\$825
Range	\$28 - \$7,216

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<sup>6</sup> Olsen DC. Using Social Accounts to Estimate Tax Impacts. MIG, Inc. Available through IMPLAN.com. (Paper originally given at the Mid-Continent Regional Science Association Meetings in Minneapolis, MN; June 11, 1999.)

**Table 5: Total Output, Jobs, Wages & Benefits, and Taxes Supported by the Office-Based Physician Industry by State**

State	Number of Physicians	Output (\$ in billions)	Jobs	Wages & Benefits (\$ in billions)	Taxes (\$ in millions)
Alabama	8,076	\$9.8	46,335	\$5.8	\$357.9
Alaska	1,323	\$1.9	7,510	\$1.3	\$89.0
Arizona	12,275	\$17.9	71,653	\$12.7	\$749.5
Arkansas	4,527	\$5.2	25,499	\$3.2	\$194.6
California	78,393	\$137.9	458,397	\$106.3	\$7,215.5
Colorado	10,895	\$16.0	62,737	\$11.3	\$681.3
Connecticut	9,085	\$14.0	51,962	\$10.6	\$653.6
Delaware	1,969	\$2.6	11,149	\$1.9	\$115.6
District of Columbia	3,071	\$3.8	16,369	\$2.8	\$122.2
Florida	39,432	\$64.5	232,754	\$38.7	\$2,275.9
Georgia	16,802	\$24.3	97,513	\$15.4	\$1,064.7
Hawaii	3,125	\$4.5	17,985	\$3.4	\$218.6
Idaho	2,475	\$3.0	14,123	\$1.9	\$120.7
Illinois	26,917	\$43.0	155,690	\$27.8	\$1,838.8
Indiana	11,549	\$14.7	66,409	\$9.6	\$581.4
Iowa	5,060	\$5.7	28,617	\$3.8	\$212.0
Kansas	4,994	\$6.1	28,416	\$4.0	\$231.9
Kentucky	7,996	\$9.7	45,273	\$6.1	\$392.4
Louisiana	8,569	\$11.0	48,859	\$6.6	\$400.8
Maine	3,117	\$4.0	17,845	\$2.7	\$178.0
Maryland	14,908	\$21.6	84,180	\$14.7	\$1,098.7
Massachusetts	19,550	\$31.7	112,224	\$23.5	\$1,552.5
Michigan	21,091	\$31.2	121,419	\$20.1	\$1,430.7
Minnesota	11,688	\$16.3	67,483	\$12.1	\$760.6
Mississippi	4,256	\$5.0	24,217	\$3.0	\$192.0
Missouri	11,567	\$15.6	66,537	\$9.7	\$601.1
Montana	1,853	\$2.3	10,697	\$1.4	\$94.8
Nebraska	3,275	\$4.0	18,623	\$2.7	\$140.3
Nevada	4,535	\$5.9	25,784	\$4.7	\$198.0
New Hampshire	2,973	\$4.0	17,237	\$2.9	\$146.6
New Jersey	20,982	\$34.2	120,835	\$24.2	\$1,512.5
New Mexico	3,654	\$4.4	20,283	\$3.0	\$183.1
New York	50,655	\$81.9	287,378	\$61.8	\$4,924.4
North Carolina	17,979	\$24.5	103,634	\$15.7	\$1,049.7
North Dakota	1,272	\$1.4	7,048	\$0.9	\$42.3
Ohio	24,107	\$33.9	139,373	\$21.5	\$1,606.1
Oklahoma	6,169	\$7.5	35,208	\$4.6	\$266.4

**Table 5, continued: Total Output, Jobs, Wages & Benefits, and Taxes Supported by the Office-Based Physician Industry by State**

State	Number of Physicians	Output (\$ in billions)	Jobs	Wages & Benefits (\$ in billions)	Taxes (\$ in millions)
Oregon	8,727	\$12.0	50,247	\$9.2	\$588.9
Pennsylvania	29,381	\$44.7	169,846	\$28.3	\$1,877.3
Rhode Island	2,672	\$4.0	15,322	\$2.9	\$185.6
South Carolina	8,116	\$10.3	46,476	\$6.7	\$421.1
South Dakota	1,515	\$1.8	8,693	\$1.2	\$54.0
Tennessee	12,834	\$17.5	75,191	\$10.7	\$542.7
Texas	42,613	\$63.6	249,010	\$39.4	\$2,085.6
Utah	4,537	\$6.6	26,091	\$4.2	\$264.5
Vermont	1,439	\$1.8	8,145	\$1.3	\$71.9
Virginia	15,930	\$21.5	90,464	\$14.2	\$953.6
Washington	14,461	\$21.0	82,300	\$15.6	\$675.7
West Virginia	3,575	\$3.9	19,855	\$2.4	\$139.8
Wisconsin	11,802	\$15.3	68,435	\$10.9	\$703.5
Wyoming	896	\$1.0	4,996	\$0.7	\$28.3

**Table 6: Total National-level Output, Jobs, Wages & Benefits, and Taxes Supported by the Office-Based Physician Industry**

	National Output	National Jobs	National Wages & Benefits	National Total of State and Local Tax Revenue
Total Value	\$1.4 trillion	4.0 million	\$833.1 billion	\$62.9 billion
Total Value Per Physician <sup>7</sup>	\$2.2 million	6.2	\$1.3 million	\$98,411

<sup>7</sup> Per physician values were calculated as the total national value divided by the number of physician in the nation, 638,661 (See footnote 1 for more information on this figure).

# Appendix A: Methodological Overview

Three primary data sources were used to evaluate the economic impact of physician offices: the AMA Masterfile, MGMA Cost Survey, and IMPLAN.

- The AMA Masterfile provided data by geographic area regarding the number of patient-care, office-based physicians practicing within each geographic area.
- MGMA’s Cost Survey report provided data on the financial characteristics of physician practices; specifically, total medical revenue and total payroll costs per full-time physician. Revenues and costs are based on 2009 calendar year data.
- IMPLAN, the input-output modeling system developed by the Minnesota Implan Group, estimates output, labor compensation (wages and benefits), and employment multipliers for each industry by selected geographic area using a social accounting system. IMPLAN also provides data on tax revenues generated by individual industries by geographic area.

## I. AMA Masterfile

The AMA Physician Masterfile was used to estimate the number of office-based physicians in each state.

Each record within the Masterfile corresponds to one physician. Our dataset was current as of October 2010 and contained information on a total of 1.3 million physicians. Data analyses were conducted with SAS 9.1.

### Office-based physicians

Before beginning our count, we first limited the Masterfile data to office-based physicians, the population of interest for this analysis. We found that 57.7% of physicians (599,334) had an office-based practice as their “major professional activity”. However, an additional 6.9% (71,670) of the records did not have a major professional activity identified. The variable “major professional activity” had the distribution shown at right.

<b>Masterfile: Major Professional Activity Distribution</b>	
57.7%	Office-based practice
18.8%	Hospital-based practice (e.g., residents, full-time staff)
4.3%	Other professional activity (e.g., research)
12.3%	Inactive (i.e., those who work < 20 hours a week)
<u>6.9%</u>	Not classified
100%	

Because presumably some portion of the 6.9% of unclassified physicians are in office-based practice, excluding them would underestimate the number in office-based practice and including all unclassified as office-based physicians would overestimate that number. To address this issue, we imputed whether each unclassified physician is office-based or not using a logit analysis; results from this exercise identified the probability that a physician is office-based versus not office-based. Explanatory variables for this model included age, sex, specialty, board certification, international medical graduate (IMG) status, and AMA membership.

Our results showed that, all else remaining constant, females were less likely to be office-based than males, AMA members were less likely to be office-based, and board certified physicians were more likely to be office-based. As a result of this imputation, an additional 39,327

physicians were classified as office-based, increasing the total number to 638,661 (62% of physicians in the Masterfile).

### **Location**

Because we are classifying physicians by geographic area, we next clarified where a physician is located based on a set of three possible location variables: office address, home address, or preferred mailing address. As reflected in the Masterfile, a physician might have an office in one state but live in another. Although the preferred address variable has greater reliability due to AMA confirmations for mailing purposes, the office location variable was selected because the office is the location of economic activity.<sup>8</sup>

Each record was assigned by office location to a state.

## **II. MGMA Cost Survey**

The MGMA data was used to estimate per-physician employment, payroll and revenue for 2009. All MGMA data were on the national level. To adjust payroll and revenue to specific geographic areas, we adjusted by the wage index and Medicare Geographic Adjustment Factor, respectively.

### **Variable selection and manipulation**

MGMA variables compiled included data on employment (e.g., the sum of physician FTEs, nonphysician provider FTEs, and support staff FTEs); total medical and non-medical revenue; and payroll (e.g., total support staff cost per physician, total provider cost per physician).

From these data points, we calculated:

1. Total employment per physician (sum of physician, nonphysician provider and support staff FTEs);
2. Total payroll per physician (sum of support staff cost per physician and total provider cost per physician); and
3. Revenue per physician (total medical revenue plus non-medical revenue divided by physician FTEs).

### **MGMA data limitations**

Problems with the MGMA data include that the data are 1) likely biased towards larger practices that are MGMA members; 2) not identified by the type of office (i.e., whether office-based); and 3) not geographically representative.

We cannot adjust for the possible data bias toward larger practices, but we attempted to compensate for the other data limitations, as described below.

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<sup>8</sup> A sensitivity analysis was performed using the preferred address compared to the office address. For each state we calculated the absolute value of the difference in the counts between using the office versus using the preferred location. The national sum of these differences as a percentage of all office-based physicians (pre-imputation) was 1.3 percent.

### No office-based variable

MGMA data do not separate physicians by office type, i.e., whether a physician is office or hospital-based. The closest MGMA variable defines legal ownership of a practice, i.e., whether a practice's majority owner is a hospital or integrated delivery system (IDS) or not. We examined whether the measures we are interested in varied depending on whether the practice was hospital owned or not; comparisons were made across physician specialties (per the Physician Masterfile's classifications) and in aggregate. While some trends were mostly consistent across most specialties (e.g., higher revenue in non-hospital owned practices), we are not able to make assumptions about the relationship between office-based and hospital-owned physician offices. Therefore we did not divide the MGMA data by ownership. The result of this may be some bias because staffing patterns at hospital-based practices, for example, may be different than office-based practices.

### Geographic adjustment

Physician practice revenues and payroll vary according to geographic variation in price levels and costs of services. The MGMA cost survey, however, only has sufficient sample size to make estimates at the state level for a few of the larger states. In lieu of using the MGMA data to make state-level estimates, we therefore calculated estimates at the national level and adjusted revenue and dollar-denominated measures using local medical wage and price indices obtained from other sources. We made adjustments in two ways:

- Payroll spending was adjusted by Medicare's FY 2010 Wage Index; and
- Practice revenues were adjusted by the Medicare's CY 2010 Geographic Adjustment Factor (GAF).

Medicare uses its geographic wage index to adjust payments to inpatient hospital facilities and other institutional providers. The index is defined for each MSA and rural area of states.

Medicare also uses its three geographic practice cost indices (GPCIs) to adjust payments to physicians. For analytic purposes, these three GPCIs are summarized into the Geographic Adjustment Factor (GAF), which is the sum of the physician work GPCI weighted at about 52 percent, the practice expense GPCI weighted at about 44 percent, and the malpractice GPCI weighted at about four percent. Medicare constructs GAFs for 89 payment localities, which (unlike MSAs) are not defined based on a consistent set of principles. Localities are states and sub-state regions. In 2010, GAFs ranged from 0.88 to 1.29, reflecting significant variation in price levels across the US. The highest GAF value of 1.29 (Alaska) was trimmed to 3 standard deviations above the mean; only this one state was affected by this trim.

To recognize that payroll spending varies by local wage levels, the mean per-physician payroll in a state was calculated as the national mean for payroll multiplied by the local Medicare geographic wage index. To recognize that practice revenues vary by local cost factors, the mean practice medical revenue in a state was calculated as the national mean for revenue times the local Medicare Geographic Adjustment Factor.

Because our analysis is at the state level, we need value of the wage index and GAF at that level. To construct state-level files, we downloaded a county-level CBSA crosswalk file from CMS and a county-level file with 2009 population from U.S. Census Bureau. The population variable was

merged on the county-level CBSA crosswalk file. The wage index was merged on by MSA variable. A locality-county crosswalk was created; GAF values were entered by hand.

These steps resulted in a county-level file containing: CBSA code; county FIPS code; CBSA name; population; wage index used in 2010; and GAF used in 2010. We weighted each wage index at the county level by its population and calculated a weighted average for the state. We did the same for the GAF.

### III. IMPLAN

IMPLAN data contains industry-based employment, revenue, payroll, multipliers, and tax data by state. Multipliers are specific to geographic areas and to a particular industry. Multipliers for “offices of physicians, dentists, and other health practitioners” link to Masterfile data by geographic area.

#### *Multipliers*

IMPLAN multipliers can be customized by county or by groups of counties. Multipliers were calculated by state, constructed by their respective counties. Upon creation of each model’s geographies, the software calculates multipliers for employment and output (both based on millions of dollars of output) and payroll (based on millions of dollars of payroll).

#### *Tax Analyses*

IMPLAN software also estimates the impact of economic activity on state and local tax revenues, including income, sales, and property taxes. Tax impacts in each model (i.e., geographic area) have a linear relationship with industry output.

### IV. Data Aggregation

Combining data across the three source datasets allowed the calculation of the following measures by geographic area:

1. Direct impacts of physician office-based practices (medical and non-medical revenues, total employment and total payroll per physician from the MGMA file multiplied by counts from the Masterfile);
2. Indirect impacts of physician office-based practices (IMPLAN multipliers x respective MGMA direct impacts x counts from the Masterfile);
3. Total impacts of physician office-based practices (direct and indirect impacts summed for revenue, employment and payroll);
4. Tax benefits from physician office-based practices.

Direct, indirect and total impacts were calculated in aggregate at the state and national levels. Tax revenues were also calculated at the state and national levels.

# **Appendix B: Output, Employment, and Payroll Multipliers**

**Table B: Output, Employment, and Payroll Multipliers by State**

State	Output Multiplier	Employment Multiplier	Payroll Multiplier
Alabama	1.65	1.78	1.35
Alaska	1.64	1.55	1.35
Arizona	1.91	1.93	1.51
Arkansas	1.60	1.69	1.33
California	2.14	1.89	1.62
Colorado	1.94	1.83	1.54
Connecticut	1.79	1.71	1.47
Delaware	1.71	1.73	1.41
District of Columbia	1.39	1.30	1.25
Florida	2.03	1.97	1.58
Georgia	1.90	1.87	1.51
Hawaii	1.82	1.80	1.45
Idaho	1.67	1.75	1.36
Illinois	2.01	1.85	1.58
Indiana	1.71	1.81	1.38
Iowa	1.59	1.70	1.32
Kansas	1.68	1.74	1.37
Kentucky	1.64	1.71	1.35
Louisiana	1.68	1.72	1.37
Maine	1.79	1.82	1.44
Maryland	1.77	1.68	1.44
Massachusetts	1.94	1.83	1.55
Michigan	1.91	1.83	1.51
Minnesota	1.91	1.94	1.50
Mississippi	1.58	1.71	1.31
Missouri	1.79	1.84	1.44
Montana	1.70	1.79	1.37
Nebraska	1.67	1.72	1.37
Nevada	1.66	1.68	1.37
New Hampshire	1.79	1.88	1.45
New Jersey	1.89	1.74	1.51
New Mexico	1.62	1.61	1.35
New York	1.91	1.68	1.54
North Carolina	1.82	1.88	1.45
North Dakota	1.52	1.58	1.28
Ohio	1.85	1.86	1.47
Oklahoma	1.68	1.76	1.37

State	Output Multiplier	Employment Multiplier	Payroll Multiplier
Oregon	1.85	1.82	1.47
Pennsylvania	1.94	1.87	1.53
Rhode Island	1.87	1.81	1.51
South Carolina	1.72	1.80	1.39
South Dakota	1.62	1.80	1.33
Tennessee	1.84	1.97	1.46
Texas	1.95	1.91	1.50
Utah	1.90	1.77	1.50
Vermont	1.71	1.71	1.40
Virginia	1.76	1.73	1.42
Washington	1.92	1.76	1.50
West Virginia	1.51	1.57	1.28
Wisconsin	1.78	1.93	1.42
Wyoming	1.45	1.48	1.23

## **Appendix C: The Office-based Physician Industry vs. Comparator Industries**

The economic impact of the office-based physician industry can also be viewed in comparison to other industries both within and outside the health care industry. This report compares the economic impact of office-based physicians to the following industries:

1. Higher education (junior college, university, and professional schools),
2. Nursing home and residential care facilities,
3. Inpatient hospitals,
4. Legal services, and
5. Home health.

### **Output**

The office-based physician industry is largely made up of small physician groups or solo practitioners, but in aggregate they are comparable to the hospital industry across all fifty states. With few exceptions, states' office-based physician industries generated greater economic impact than the education, home health, legal, and nursing home industry in 2009. The most notable exception to this is the legal industry in the District of Columbia, with a total economic impact more than five times greater than that of the office-based physicians industry. See Table C-2 for state level information.

### **Jobs**

Including support staff and non-physician providers, the national number of employees in the office-based physician industry (direct jobs) was approximately 3.3 million in 2009. Compared to the employment impact of the five comparator industries, with few exceptions across some states, the office-based physician industry employed more people than the legal, education, or home health industries, but fewer people than the hospital industry. The office-based physician industry's employment was comparable to that in the nursing homes industry across all fifty states, with the nursing home industry employing a total of approximately 3 million full-time employees. See Table C-3 for state level information.

### **Wages and Benefits**

The office-based physician industry supports higher total wages and benefits than nearly all comparator industries across the states, with the most notable exception again being the legal industry in the District of Columbia. This is important because it indicates that the office-based physician industry compensates its employees well, so that they are in turn more able to purchase services from other industries in the state, and therefore stimulate their state economy. See Table C-4 for state level information.

Table C-1: Comparator Industry Output Multipliers

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Alabama	1.65	1.69	1.76	1.61	1.72	1.72
Alaska	1.64	1.68	1.84	1.59	1.70	1.69
Arizona	1.91	1.97	2.04	1.86	2.01	1.99
Arkansas	1.60	1.66	1.70	1.57	1.66	1.67
California	2.14	2.11	2.26	2.05	2.23	2.14
Colorado	1.94	2.03	2.15	1.88	2.06	2.01
Connecticut	1.79	1.85	1.92	1.75	1.89	1.83
Delaware	1.71	1.75	1.82	1.69	1.79	1.77
District of Columbia	1.39	1.48	1.53	1.38	1.46	1.37
Florida	2.03	2.08	2.09	1.96	2.15	2.09
Georgia	1.90	1.98	1.98	1.85	2.00	1.98
Hawaii	1.82	1.86	2.00	1.77	1.93	1.89
Idaho	1.67	1.74	1.83	1.63	1.72	1.73
Illinois	2.01	2.04	2.11	1.95	2.12	2.07
Indiana	1.71	1.73	1.75	1.66	1.76	1.74
Iowa	1.59	1.63	1.64	1.55	1.61	1.64
Kansas	1.68	1.71	1.77	1.63	1.72	1.73
Kentucky	1.64	1.69	1.72	1.60	1.69	1.69
Louisiana	1.68	1.72	1.74	1.65	1.74	1.75
Maine	1.79	1.85	1.90	1.73	1.85	1.86
Maryland	1.77	1.82	1.90	1.73	1.89	1.82
Massachusetts	1.94	1.98	2.07	1.88	2.05	1.97
Michigan	1.91	1.96	2.07	1.85	2.02	1.98
Minnesota	1.91	1.97	2.06	1.85	2.03	1.99
Mississippi	1.58	1.60	1.64	1.55	1.61	1.64
Missouri	1.79	1.84	1.89	1.74	1.86	1.85
Montana	1.70	1.78	1.89	1.65	1.77	1.75
Nebraska	1.67	1.70	1.74	1.62	1.72	1.73
Nevada	1.66	1.73	1.78	1.63	1.75	1.72
New Hampshire	1.79	1.84	1.91	1.75	1.88	1.86
New Jersey	1.89	1.92	1.99	1.83	2.00	1.88
New Mexico	1.62	1.65	1.75	1.58	1.66	1.67
New York	1.91	1.97	2.06	1.85	2.00	1.94
North Carolina	1.82	1.86	1.89	1.77	1.90	1.88
North Dakota	1.52	1.56	1.62	1.49	1.53	1.56
Ohio	1.85	1.91	1.95	1.80	1.92	1.90

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Oklahoma	1.68	1.73	1.79	1.64	1.72	1.74
Oregon	1.85	1.91	2.06	1.80	1.95	1.92
Pennsylvania	1.94	1.96	2.04	1.87	2.02	1.99
Rhode Island	1.87	1.91	1.95	1.82	1.95	1.93
South Carolina	1.72	1.76	1.81	1.68	1.79	1.78
South Dakota	1.62	1.68	1.71	1.58	1.65	1.67
Tennessee	1.84	1.89	1.92	1.78	1.92	1.90
Texas	1.95	1.99	2.06	1.88	2.04	2.03
Utah	1.90	1.93	2.03	1.82	1.98	1.95
Vermont	1.71	1.75	1.84	1.64	1.73	1.77
Virginia	1.76	1.84	1.95	1.72	1.88	1.83
Washington	1.92	1.97	2.17	1.86	2.04	1.99
West Virginia	1.51	1.52	1.56	1.47	1.51	1.53
Wisconsin	1.78	1.82	1.88	1.73	1.86	1.86
Wyoming	1.45	1.49	1.59	1.42	1.50	1.49

**Table C-2: Total Output of Comparator Industries by State (in millions)**

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Alabama	\$9,760	\$4,565	\$1,105	\$1,413	\$8,365	\$2,825
Alaska	\$1,934	\$462	\$125	\$152	\$1,928	\$233
Arizona	\$17,900	\$7,811	\$2,724	\$2,137	\$17,693	\$3,419
Arkansas	\$5,168	\$1,820	\$582	\$461	\$6,886	\$1,702
California	\$137,932	\$82,808	\$26,252	\$10,484	\$117,310	\$23,606
Colorado	\$16,046	\$8,301	\$2,018	\$1,445	\$12,203	\$3,329
Connecticut	\$14,020	\$6,632	\$5,642	\$2,144	\$13,645	\$5,596
Delaware	\$2,615	\$2,804	\$326	\$336	\$3,874	\$743
District of Columbia	\$3,775	\$20,471	\$3,864	\$221	\$4,517	\$478
Florida	\$64,549	\$41,682	\$7,905	\$8,937	\$56,022	\$15,446
Georgia	\$24,312	\$13,578	\$6,326	\$2,529	\$25,786	\$4,416
Hawaii	\$4,539	\$1,553	\$451	\$285	\$3,261	\$680
Idaho	\$3,050	\$1,186	\$600	\$429	\$3,087	\$802
Illinois	\$43,041	\$35,313	\$13,543	\$4,005	\$53,797	\$10,977
Indiana	\$14,727	\$4,738	\$3,982	\$1,583	\$19,145	\$5,104
Iowa	\$5,712	\$2,203	\$1,890	\$657	\$6,778	\$3,112
Kansas	\$6,074	\$2,020	\$921	\$627	\$7,300	\$2,403
Kentucky	\$9,650	\$3,055	\$1,602	\$1,133	\$12,136	\$3,038
Louisiana	\$11,036	\$7,018	\$1,919	\$2,333	\$11,315	\$2,623
Maine	\$4,050	\$1,402	\$914	\$442	\$6,262	\$1,642
Maryland	\$21,614	\$7,460	\$4,801	\$1,523	\$20,977	\$5,725
Massachusetts	\$31,683	\$15,860	\$21,116	\$4,075	\$44,151	\$9,473
Michigan	\$31,228	\$12,852	\$3,651	\$4,093	\$42,098	\$7,578
Minnesota	\$16,283	\$9,292	\$4,310	\$1,479	\$20,372	\$6,828
Mississippi	\$4,964	\$2,611	\$485	\$924	\$4,877	\$1,461
Missouri	\$15,553	\$8,204	\$6,559	\$1,731	\$21,228	\$4,534
Montana	\$2,313	\$951	\$142	\$224	\$3,769	\$667
Nebraska	\$3,950	\$1,427	\$1,496	\$328	\$5,686	\$1,782
Nevada	\$5,926	\$4,315	\$160	\$597	\$4,681	\$786
New Hampshire	\$4,037	\$1,823	\$2,014	\$483	\$5,582	\$1,229
New Jersey	\$34,243	\$18,448	\$4,300	\$4,023	\$33,599	\$7,889
New Mexico	\$4,376	\$1,536	\$347	\$712	\$3,852	\$856
New York	\$81,930	\$82,334	\$33,993	\$13,510	\$82,386	\$22,855
North Carolina	\$24,473	\$8,379	\$6,034	\$3,473	\$22,121	\$7,154
North Dakota	\$1,370	\$415	\$151	\$65	\$2,694	\$796
Ohio	\$33,899	\$13,619	\$6,086	\$4,560	\$45,936	\$12,382

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Oklahoma	\$7,497	\$4,259	\$992	\$1,629	\$8,844	\$2,216
Oregon	\$11,971	\$5,042	\$1,919	\$471	\$11,793	\$3,254
Pennsylvania	\$44,677	\$25,265	\$23,384	\$5,209	\$60,918	\$16,898
Rhode Island	\$4,008	\$1,567	\$2,253	\$481	\$5,204	\$1,520
South Carolina	\$10,277	\$4,760	\$1,704	\$892	\$6,761	\$2,473
South Dakota	\$1,778	\$453	\$503	\$87	\$3,379	\$758
Tennessee	\$17,473	\$5,711	\$3,708	\$2,639	\$22,454	\$4,822
Texas	\$63,556	\$40,949	\$9,375	\$15,627	\$66,314	\$13,225
Utah	\$6,569	\$3,619	\$1,870	\$690	\$6,221	\$1,529
Vermont	\$1,806	\$752	\$918	\$258	\$2,397	\$532
Virginia	\$21,516	\$9,688	\$3,621	\$1,896	\$21,197	\$5,337
Washington	\$21,048	\$8,296	\$2,513	\$1,612	\$17,296	\$5,149
West Virginia	\$3,944	\$1,457	\$502	\$537	\$5,778	\$1,074
Wisconsin	\$15,294	\$6,093	\$4,269	\$1,045	\$21,113	\$5,092
Wyoming	\$960	\$385	\$19	\$38	\$554	\$296

**Table C-3: Total Jobs by Comparator Industries by State**

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Alabama	46,335	23,685	10,541	13,026	49,474	41,104
Alaska	7,510	2,735	1,202	1,869	10,063	2,965
Arizona	71,653	31,845	19,478	20,244	80,451	40,876
Arkansas	25,499	11,082	6,166	5,066	43,301	27,489
California	458,397	271,157	157,678	76,961	433,006	245,244
Colorado	62,737	32,417	14,966	14,702	56,495	37,066
Connecticut	51,962	26,508	34,203	16,282	62,489	58,202
Delaware	11,149	9,353	2,407	2,901	18,308	9,008
District of Columbia	16,369	54,239	29,868	3,503	24,296	6,875
Florida	232,754	161,628	55,302	71,225	262,351	174,280
Georgia	97,513	55,781	41,503	22,016	128,345	57,298
Hawaii	17,985	7,316	3,300	3,306	15,041	7,889
Idaho	14,123	6,515	5,578	6,120	17,949	12,581
Illinois	155,690	107,884	82,765	34,422	243,788	126,089
Indiana	66,409	26,828	36,061	16,351	108,911	70,414
Iowa	28,617	13,673	18,917	7,773	42,358	50,482
Kansas	28,416	11,433	9,454	7,653	42,174	37,088
Kentucky	45,273	18,136	16,214	9,838	71,802	40,426
Louisiana	48,859	34,798	15,577	22,467	64,728	40,901
Maine	17,845	7,841	7,301	4,478	32,262	22,073
Maryland	84,180	32,089	30,666	12,940	102,189	67,513
Massachusetts	112,224	55,345	127,152	31,361	186,638	93,766
Michigan	121,419	49,777	28,443	37,867	203,063	94,464
Minnesota	67,483	35,611	32,406	17,796	94,695	91,163
Mississippi	24,217	15,148	5,012	8,453	31,433	23,096
Missouri	66,537	36,315	48,863	18,529	112,824	65,980
Montana	10,697	5,905	1,352	2,947	20,783	9,742
Nebraska	18,623	8,049	13,316	3,452	33,535	26,437
Nevada	25,784	19,329	1,312	4,645	22,951	9,831
New Hampshire	17,237	8,540	13,478	4,653	28,230	14,059
New Jersey	120,835	69,481	28,487	37,055	149,822	83,079
New Mexico	20,283	8,886	3,557	11,036	21,323	12,454
New York	287,378	246,184	208,643	120,381	358,507	229,570
North Carolina	103,634	41,476	45,608	47,910	114,661	99,706
North Dakota	7,048	2,662	1,663	869	17,285	13,728

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Ohio	139,373	63,122	47,339	52,542	237,124	160,559
Oklahoma	35,208	21,966	9,621	19,863	51,581	33,593
Oregon	50,247	24,400	16,157	4,252	55,946	41,505
Pennsylvania	169,846	94,069	147,962	41,368	285,203	185,482
Rhode Island	15,322	7,465	14,924	4,693	25,734	17,707
South Carolina	46,476	24,904	16,053	10,356	38,157	35,509
South Dakota	8,693	3,375	5,160	999	20,300	12,364
Tennessee	75,191	27,287	26,572	17,496	109,056	54,070
Texas	249,010	151,227	64,376	220,172	293,940	159,836
Utah	26,091	15,102	14,476	6,017	32,404	20,831
Vermont	8,145	4,245	7,595	2,715	12,724	6,736
Virginia	90,464	39,954	27,964	22,723	110,111	65,958
Washington	82,300	36,586	18,257	12,696	73,823	58,236
West Virginia	19,855	9,733	5,960	6,854	36,557	17,518
Wisconsin	68,435	28,068	32,804	11,439	113,115	70,371
Wyoming	4,996	2,691	219	528	3,285	4,425

**Table C-4: Total Wages and Benefits of Comparator Industries by State (in millions)**

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Alabama	\$5,814	\$1,542	\$392	\$549	\$3,280	\$1,458
Alaska	\$1,342	\$132	\$39	\$55	\$834	\$120
Arizona	\$12,696	\$2,526	\$1,060	\$856	\$7,447	\$1,748
Arkansas	\$3,198	\$541	\$199	\$193	\$2,739	\$890
California	\$106,292	\$25,629	\$10,184	\$3,637	\$49,924	\$11,568
Colorado	\$11,278	\$2,746	\$716	\$562	\$5,001	\$1,736
Connecticut	\$10,635	\$1,911	\$2,504	\$801	\$6,140	\$3,190
Delaware	\$1,932	\$924	\$134	\$143	\$1,765	\$414
District of Columbia	\$2,815	\$7,676	\$1,843	\$105	\$2,202	\$295
Florida	\$38,728	\$14,188	\$3,007	\$3,583	\$22,055	\$7,669
Georgia	\$15,371	\$4,385	\$2,563	\$993	\$10,363	\$2,173
Hawaii	\$3,400	\$481	\$173	\$109	\$1,394	\$350
Idaho	\$1,946	\$309	\$208	\$154	\$1,242	\$410
Illinois	\$27,792	\$10,946	\$5,645	\$1,567	\$22,023	\$5,483
Indiana	\$9,650	\$1,377	\$1,501	\$603	\$7,746	\$2,704
Iowa	\$3,829	\$618	\$712	\$271	\$2,797	\$1,687
Kansas	\$3,966	\$605	\$307	\$250	\$2,938	\$1,271
Kentucky	\$6,073	\$907	\$563	\$463	\$4,964	\$1,533
Louisiana	\$6,589	\$2,062	\$778	\$838	\$4,509	\$1,324
Maine	\$2,749	\$433	\$343	\$176	\$2,639	\$855
Maryland	\$14,729	\$2,613	\$2,049	\$598	\$8,977	\$3,098
Massachusetts	\$23,473	\$5,347	\$9,018	\$1,587	\$19,518	\$5,062
Michigan	\$20,134	\$4,150	\$1,296	\$1,627	\$17,188	\$3,844
Minnesota	\$12,055	\$3,060	\$1,595	\$643	\$8,446	\$3,459
Mississippi	\$2,959	\$771	\$178	\$350	\$1,933	\$764
Missouri	\$9,744	\$2,634	\$2,668	\$696	\$8,682	\$2,317
Montana	\$1,424	\$272	\$45	\$80	\$1,514	\$340
Nebraska	\$2,696	\$482	\$580	\$138	\$2,305	\$954
Nevada	\$4,684	\$1,440	\$63	\$243	\$2,114	\$435
New Hampshire	\$2,868	\$554	\$843	\$196	\$2,329	\$663
New Jersey	\$24,154	\$6,203	\$1,782	\$1,469	\$14,494	\$4,235
New Mexico	\$2,990	\$550	\$114	\$298	\$1,662	\$452
New York	\$61,763	\$26,050	\$14,282	\$4,863	\$36,134	\$12,262
North Carolina	\$15,718	\$2,700	\$2,371	\$1,391	\$9,022	\$3,632
North Dakota	\$855	\$138	\$51	\$30	\$1,110	\$429
Ohio	\$21,489	\$4,191	\$2,305	\$1,819	\$18,708	\$6,397

State	Office-based Physician Industry	Legal Industry	Colleges	Home Health Industry	Hospital Industry	Nursing Home Industry
Oklahoma	\$4,643	\$1,303	\$344	\$629	\$3,575	\$1,126
Oregon	\$9,168	\$1,439	\$643	\$182	\$4,926	\$1,469
Pennsylvania	\$28,333	\$8,145	\$9,771	\$2,046	\$24,153	\$8,717
Rhode Island	\$2,905	\$457	\$960	\$192	\$2,172	\$806
South Carolina	\$6,710	\$1,518	\$602	\$359	\$2,706	\$1,301
South Dakota	\$1,173	\$130	\$175	\$35	\$1,354	\$400
Tennessee	\$10,695	\$1,603	\$1,482	\$877	\$8,625	\$2,214
Texas	\$39,392	\$12,597	\$3,457	\$5,767	\$24,082	\$6,403
Utah	\$4,215	\$1,079	\$677	\$269	\$2,405	\$759
Vermont	\$1,294	\$228	\$349	\$102	\$1,032	\$285
Virginia	\$14,196	\$3,570	\$1,334	\$790	\$8,676	\$2,725
Washington	\$15,630	\$2,647	\$856	\$586	\$7,349	\$2,468
West Virginia	\$2,389	\$417	\$167	\$204	\$2,477	\$603
Wisconsin	\$10,886	\$1,923	\$1,686	\$454	\$8,574	\$2,630
Wyoming	\$676	\$115	\$6	\$15	\$213	\$160