

2019 NEUROLOGY COMPENSATION AND PRODUCTIVITY REPORT



INTRODUCTION

The AAN's 2019 *Neurology Compensation and Productivity Report* marks the sixth year this comprehensive benchmarking survey has been conducted, with an impressive response rate of 3,270, further validating that this report has become an essential resource for neurologists, advanced practice providers, and practice administrators in all settings and employment types. The leadership of the AAN greatly appreciates all the time and effort that respondents, staff, and volunteers devoted to this project; we sincerely thank you for the important role you have played in helping us develop this valuable tool for neurology.

We hope that you find these results helpful in navigating today's rapidly changing health care environment. You may wish to use them to benchmark your practice by comparing productivity, salary, and practice characteristics in a variety of ways that will help you identify practice efficiencies as well as areas of potential growth. The dashboard gives you the ability to stratify several data points allowing you to take a deeper dive to further understand the characteristics of the better performers. By analyzing ratios, such as compensation-to-work and revenue-to-work ratios, you will be able to use those benchmarks to analyze your own center's productivity and reimbursement metrics. You can then parse out numbers to develop actionable steps for improvements, whether they be through identification of inefficiencies in operations, payer agreement(s), or any other material anomalies which need to be addressed.

The Survey Work Group has applied tremendous efforts in developing this survey to be of utmost use to neurologists, neurology APP's, and their practice administrators. The survey itself has gone through several iterations. Most of the improvements have come from direct feedback provided by respondents and from AAN Section chairs. We continue to strive for an increase in the number of respondents at the subspecialty level. We urge you to continue to participate in the future so you can compare your year-to-year progress in achieving your goals. Please encourage your peers to complete the survey, as well, so it can remain the largest survey dedicated solely to neurology compensation and productivity. The more robust data we make available, the better neurologists, APPs, and administrators can position themselves for success.

Thank you for your interest in the 2019 *Neurology Compensation and Productivity Report*. We look forward to your continued participation in the survey.

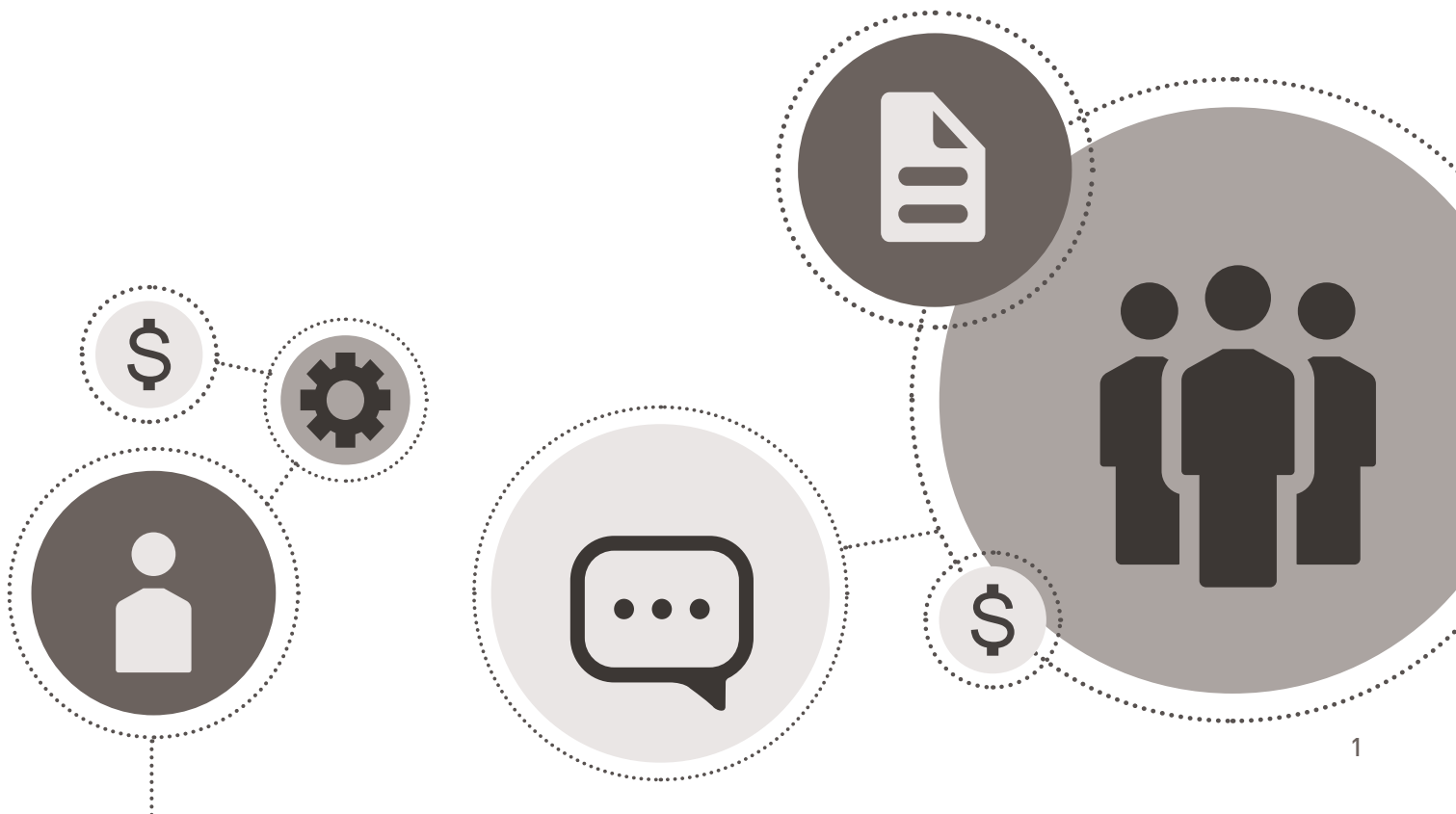
Sincerely,

James C. Stevens, MD, FAAN

President, American Academy of Neurology

David A. Evans, MBA

Chair, Neurology Compensation and Productivity Survey Work Group



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The AAN does not represent or warrant the accuracy of the data in this report or any outcomes based on the use of the data. And, because the AAN does not provide any legal or financial advice, this report should not be construed to offer such advice.

Your Practice Data Is Important for Neurology's Future—and Yours! Data for the Neurology Compensation and Productivity Report relies on a large number of respondents in order to maintain a representative sample size. Your contribution to this data is vital. Take part in the survey and you will help the AAN continue its efforts of providing the most robust compensation data available to neurologists like you.

For more information, visit [AAN.com/Benchmark](https://aan.com/Benchmark) or contact benchmark@aan.com.

COMPENSATION

Median Compensation by Subspecialty

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Behavioral Neurology & Neuropsychiatry | 15 | \$86,505 | \$94,611 | \$105,299 |
| Child Neurology | 32 | \$89,458 | \$102,316 | \$115,658 |
| Epilepsy | 40 | \$93,241 | \$110,402 | \$130,684 |
| General Neurology | 123 | \$90,000 | \$102,890 | \$120,000 |
| Headache Medicine | 27 | \$83,205 | \$89,586 | \$110,562 |
| Movement Disorders | 30 | \$91,800 | \$102,225 | \$120,660 |
| Neurocritical Care | 31 | \$98,698 | \$107,797 | \$118,965 |
| Neurohospitalist | 19 | \$100,000 | \$107,787 | \$118,000 |
| Neuroimmunology & Multiple Sclerosis | 25 | \$89,075 | \$104,000 | \$141,600 |
| Neuromuscular Medicine | 20 | \$90,733 | \$102,580 | \$121,950 |
| Vascular Neurology & Stroke | 35 | \$76,529 | \$103,000 | \$109,112 |
| Neurologist | | | | |
| Behavioral Neurology & Neuropsychiatry | 94 | \$166,464 | \$215,749 | \$274,247 |
| Child Neurology | 248 | \$190,000 | \$220,000 | \$274,000 |
| Clinical Neurophysiology | 64 | \$197,761 | \$263,500 | \$355,000 |
| Endovascular & Interventional Neurology | 33 | \$450,000 | \$540,000 | \$675,000 |
| Epilepsy | 283 | \$199,000 | \$232,861 | \$299,000 |
| General Neurology | 463 | \$200,000 | \$260,000 | \$341,753 |
| Geriatric Neurology | 32 | \$179,947 | \$212,732 | \$273,305 |
| Headache Medicine | 71 | \$190,962 | \$235,000 | \$302,644 |
| Movement Disorders | 195 | \$188,131 | \$225,000 | \$280,000 |
| Neural Repair & Rehabilitation | 17 | \$194,478 | \$209,667 | \$240,000 |
| Neuro-oncology | 50 | \$200,000 | \$230,000 | \$315,750 |
| Neuro-ophthalmology | 27 | \$190,000 | \$227,029 | \$311,835 |
| Neurocritical Care | 130 | \$217,500 | \$264,599 | \$333,263 |
| Neurohospitalist | 112 | \$230,230 | \$285,000 | \$343,202 |
| Neuroimmunology & Multiple Sclerosis | 118 | \$188,482 | \$229,849 | \$283,225 |
| Neuromuscular Medicine | 211 | \$192,616 | \$239,336 | \$300,000 |
| Other | 45 | \$109,054 | \$187,204 | \$271,063 |
| Pain Medicine | 15 | \$225,000 | \$297,000 | \$520,000 |
| Sleep Medicine | 63 | \$187,280 | \$237,404 | \$289,395 |
| Vascular Neurology & Stroke | 257 | \$200,000 | \$235,755 | \$305,000 |

COMPENSATION *CONTINUED*

Median Compensation by Practice Setting

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Academic medical center-based group | 260 | \$92,577 | \$105,337 | \$121,756 |
| Hospital-based group | 24 | \$96,084 | \$108,000 | \$117,140 |
| Multispecialty group | 39 | \$92,111 | \$105,000 | \$120,508 |
| Neurology group | 110 | \$83,475 | \$98,431 | \$115,316 |
| Neurologist | | | | |
| Academic medical center-based group | 1,672 | \$189,694 | \$225,000 | \$280,000 |
| Government-based group | 32 | \$166,500 | \$218,393 | \$244,000 |
| Hospital-based group | 262 | \$270,000 | \$320,500 | \$405,000 |
| Multispecialty group | 151 | \$245,905 | \$310,000 | \$410,000 |
| Neurology group | 242 | \$215,607 | \$273,931 | \$350,000 |
| Other | 17 | \$212,000 | \$250,000 | \$300,000 |
| Solo practice | 68 | \$169,500 | \$255,009 | \$400,000 |

Median Compensation by Gender

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Female | 392 | \$90,280 | \$103,665 | \$119,235 |
| Male | 43 | \$91,693 | \$102,012 | \$120,000 |
| Neurologist | | | | |
| Female | 887 | \$185,000 | \$223,619 | \$278,426 |
| Male | 1,507 | \$200,241 | \$255,377 | \$332,889 |

Median Compensation by Community Population

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Large Metropolitan | 28 | \$98,101 | \$106,394 | \$119,394 |
| Medium Metropolitan | 35 | \$93,000 | \$100,000 | \$115,000 |
| Small Metropolitan | 23 | \$95,000 | \$116,280 | \$123,000 |
| Neurologist | | | | |
| Large Metropolitan | 418 | \$202,000 | \$257,000 | \$330,000 |
| Medium Metropolitan | 342 | \$210,000 | \$264,372 | \$350,000 |
| Rural | 64 | \$250,000 | \$310,000 | \$400,000 |
| Small Metropolitan | 274 | \$208,000 | \$279,161 | \$350,000 |
| Do not know | 18 | \$200,000 | \$262,500 | \$300,000 |

COMPENSATION *CONTINUED*

Median Compensation by Region

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Midwest | 96 | \$90,000 | \$101,245 | \$120,254 |
| Northeast | 148 | \$88,996 | \$101,593 | \$114,996 |
| South | 147 | \$95,522 | \$106,385 | \$127,000 |
| West | 53 | \$89,408 | \$105,000 | \$120,000 |
| Neurologist | | | | |
| Midwest | 446 | \$206,550 | \$260,489 | \$330,443 |
| Northeast | 927 | \$189,123 | \$231,456 | \$297,949 |
| South | 751 | \$196,985 | \$238,525 | \$320,000 |
| West | 466 | \$197,120 | \$237,934 | \$300,000 |

Median Compensation by Years in Practice

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|-----------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| 1-2 Years | 68 | \$75,345 | \$92,421 | \$100,000 |
| 3-7 Years | 122 | \$92,916 | \$103,665 | \$120,000 |
| 8-12 Years | 71 | \$91,800 | \$109,112 | \$120,000 |
| 13-17 Years | 35 | \$102,000 | \$115,000 | \$127,545 |
| 18-22 Years | 29 | \$103,803 | \$115,000 | \$125,000 |
| 23+ Years | 30 | \$105,000 | \$122,981 | \$204,235 |
| Neurologist | | | | |
| 1-2 Years | 211 | \$173,639 | \$216,498 | \$278,426 |
| 3-7 Years | 610 | \$184,696 | \$225,000 | \$292,443 |
| 8-12 Years | 372 | \$204,659 | \$245,187 | \$319,135 |
| 13-17 Years | 236 | \$208,870 | \$253,093 | \$330,000 |
| 18-22 Years | 214 | \$210,000 | \$275,000 | \$350,000 |
| 23+ Years | 486 | \$208,000 | \$260,592 | \$344,974 |

Median wRVUs by Subspecialty

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Behavioral Neurology & Neuropsychiatry | 11 | 1,619 | 3,679 | 4,191 |
| Child Neurology | 29 | 897 | 1,481 | 3,449 |
| Epilepsy | 36 | 397 | 1,277 | 2,181 |
| General Neurology | 53 | 1,048 | 1,959 | 2,760 |
| Headache Medicine | 23 | 1,034 | 2,512 | 3,821 |
| Movement Disorders | 28 | 265 | 1,153 | 2,119 |
| Neurocritical Care | 25 | 455 | 1,105 | 1,414 |
| Neuroimmunology & Multiple Sclerosis | 19 | 137 | 831 | 1,743 |
| Neuromuscular Medicine | 16 | 512 | 1,206 | 3,042 |
| Vascular Neurology & Stroke | 25 | 214 | 998 | 1,361 |
| Neurologist | | | | |
| Behavioral Neurology & Neuropsychiatry | 77 | 890 | 2,000 | 3,167 |
| Child Neurology | 176 | 1,253 | 2,635 | 4,313 |
| Clinical Neurophysiology | 42 | 1,340 | 2,982 | 5,623 |
| Endovascular & Interventional Neurology | 27 | 5,500 | 8,253 | 10,000 |
| Epilepsy | 252 | 1,682 | 3,491 | 5,565 |
| General Neurology | 298 | 2,007 | 3,699 | 5,440 |
| Geriatric Neurology | 26 | 1,283 | 2,158 | 3,310 |
| Headache Medicine | 61 | 1,611 | 3,117 | 4,576 |
| Movement Disorders | 167 | 1,485 | 2,555 | 4,200 |
| Neural Repair & Rehabilitation | 14 | 851 | 1,581 | 3,516 |
| Neuro-oncology | 39 | 1,393 | 2,551 | 3,804 |
| Neuro-ophthalmology | 24 | 854 | 3,075 | 5,022 |
| Neurocritical Care | 98 | 2,173 | 3,433 | 5,000 |
| Neurohospitalist | 78 | 2,118 | 3,285 | 5,200 |
| Neuroimmunology & Multiple Sclerosis | 94 | 1,398 | 2,596 | 3,894 |
| Neuromuscular Medicine | 180 | 1,573 | 2,997 | 4,183 |
| Other | 37 | 556 | 2,260 | 4,193 |
| Sleep Medicine | 51 | 2,423 | 3,780 | 4,662 |
| Vascular Neurology & Stroke | 205 | 1,488 | 2,720 | 4,166 |

Median wRVUs by Practice Setting

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Academic medical center-based group | 216 | 419 | 1,066 | 1,912 |
| Neurology group | 81 | 1,966 | 3,382 | 4,380 |

Work RVUs *CONTINUED*

Median wRVUs by Practice Setting

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Academic medical center-based group | 216 | 419 | 1,066 | 1,912 |
| Neurology group | 81 | 1,966 | 3,382 | 4,380 |

| | | | | |
|-------------------------------------|-------|-------|-------|-------|
| Neurologist | | | | |
| Academic medical center-based group | 1,449 | 1,305 | 2,591 | 4,000 |
| Hospital-based group | 181 | 3,701 | 5,000 | 6,900 |
| Multispecialty group | 87 | 4,066 | 5,011 | 6,991 |
| Neurology group | 153 | 3,600 | 5,302 | 6,784 |
| Solo practice | 10 | 5,000 | 5,925 | 8,121 |

Median wRVUs by Gender

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Female | 279 | 700 | 1,479 | 2,619 |
| Male | 25 | 458 | 1,314 | 3,201 |
| Neurologist | | | | |
| Female | 683 | 1,465 | 2,894 | 4,408 |
| Male | 1,154 | 1,693 | 3,247 | 5,000 |

Median wRVUs by Community Population

| | Count | 25 th Percentile | Median | 75 th Percentile |
|--|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) – response too low to show results | | | | |
| Neurologist | | | | |
| Large Metropolitan | 242 | 2,566 | 4,000 | 5,551 |
| Medium Metropolitan | 195 | 3,200 | 4,500 | 7,000 |
| Rural | 35 | 3,142 | 4,400 | 6,000 |
| Small Metropolitan | 169 | 3,214 | 4,800 | 6,320 |
| Do not know | 10 | 4,700 | 5,325 | 7,000 |

Work RVUs *CONTINUED*

Median wRVUs by Region

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| Midwest | 57 | 746 | 1,261 | 2,200 |
| Northeast | 135 | 287 | 1,105 | 3,531 |
| South | 88 | 1,188 | 1,853 | 2,612 |
| West | 32 | 682 | 1,296 | 2,026 |
| Neurologist | | | | |
| Midwest | 342 | 1,973 | 3,416 | 5,500 |
| Northeast | 746 | 1,103 | 2,660 | 4,224 |
| South | 563 | 2,078 | 3,500 | 5,300 |
| West | 350 | 1,372 | 2,430 | 4,100 |

Median wRVUs by Years in Practice

| | Count | 25 th Percentile | Median | 75 th Percentile |
|---|-------|-----------------------------|--------|-----------------------------|
| Advanced Practice Provider (APP) | | | | |
| 1-2 Years | 41 | 1,034 | 1,818 | 3,736 |
| 3-7 Years | 81 | 700 | 1,619 | 3,283 |
| 8-12 Years | 43 | 759 | 1,593 | 2,672 |
| 13-17 Years | 20 | 243 | 1,835 | 3,094 |
| 18-22 Years | 19 | 1,056 | 2,034 | 3,373 |
| 23+ Years | 25 | 876 | 1,525 | 2,200 |
| Neurologist | | | | |
| 1-2 Years | 144 | 1,306 | 3,131 | 4,446 |
| 3-7 Years | 442 | 2,058 | 3,504 | 5,100 |
| 8-12 Years | 284 | 2,301 | 3,800 | 5,420 |
| 13-17 Years | 176 | 2,000 | 3,361 | 5,354 |
| 18-22 Years | 148 | 1,526 | 2,997 | 5,104 |
| 23+ Years | 369 | 1,396 | 2,850 | 4,538 |

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Overview

The 2019 Neurology Compensation and Productivity Survey reports on physician and practice performance from 2018 data. The number of survey respondents was 3,270, making this the largest and most comprehensive compensation report for neurologists in the United States. Data was collected through an online survey, which included approximately 75 questions. The questions aimed to capture an extensive list of compensation, productivity, and performance measures for neurologists, advanced practice providers (APPs), and practice administrators. In order to participate in the survey, respondents had to be members of the AAN who currently practice in the United States or were practice administrators in the United States submitting on behalf of their neurologists or APPs. The survey offered two distinct response tracks: neurologist/APP or practice administrator. Of the 3,270 respondents, 2,723 identified as neurologists, 474 identified as APPs, and 71 identified as practice administrators. The two tracks types answered different questions: Neurologists and APPs answered questions regarding personal compensation and productivity information, while practice administrators reported on practice performance.

Survey Methods

- **Data Collection:** Invitations were emailed on March 11, 2019, to eligible AAN members in the US. Participation in the survey was completely electronic through an online survey portal. Data collection closed on May 25, 2019.
- **Instrument:** Since the survey's inaugural year in 2013, the question set has been reviewed and modified annually by the Practice Management and Technology Subcommittee and its Neurology Compensation and Productivity Survey Work Group to ensure the survey remains relevant. The instrument has been redesigned to include skip logic sophistication to minimize response fatigue.
- **Response:** Invitations were emailed to 15,702 AAN members, including physicians, advanced practice providers (APPs), and practice managers. Overall, 3,742 surveys were started with 3,270 respondents completing and submitting their results. The data reflects the results from these respondents and may or may not be representative of the relevant population.
- **Data Analysis:** Any data point with fewer than 10 responses will be displayed in the dashboard with the message "No data found – your filters may be too exclusive" or with an icon to protect anonymity.
- **Dashboard Widget Response Numbers:** The number of responses vary across widgets depending on who answered the respective question. Respondents could skip questions throughout the survey and were not posed questions irrelevant to their role.

Definitions

- **Annual Compensation:** The amount of compensation reported in Box 5 of the W2 and/or Box 19 of the K1. If received both, the sum of the W2 and K1 (this includes 401K) was to be reported.
- **Work RVUs:** Physician work RVUs are reported based on the 2018 Medicare Fee Schedule for all medical services performed by the provider.
- **Race and Ethnicity:** The 2019 survey utilizes the Office of Management and Budget's rule on race and ethnicity classification for federal agencies. The survey included the minimum categories for data collection outlined in that document.

Formulas

- **Compensation per Neurologist Work RVU:** Total Neurologist Compensation/Neurologist Work RVU.

Explanation of Terms Used


- **Mean:** The value representing a central tendency among all responses computed as an arithmetic average
- **Minimum:** The value representing the smallest quantity in a range of values
- **Maximum:** The value representing the largest quantity in a range of values
- **FTE:** Full-time Equivalent
- **wRVU:** Physician Work Relative Value Unit
- **Rural:** Population less than 50,000

- **Small Metropolitan:** Population from 50,000 to 250,000
- **Medium Metropolitan:** Population from 250,001 to 1,000,000
- **Large Metropolitan:** Population of more than 1,000,000

Regional Designations

The 2019 survey uses the United States Census Bureau's census regions and divisions of the United States to determine regional designations.

- **Northeast:** CT, MA, ME, NH, NJ, NY, PA, RI, VT.
- **Midwest:** IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI.
- **South:** AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV.
- **West:** AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.



We were able to reference compensation data to agree upon fair market salary for our region and practice setting as well as set reasonable RVU productivity parameters.

—Dr. Michael Markowski