



# PYA Compensation Study: Spotlight On Anesthesiology

February 2021

## Introduction

The demand for surgeries has increased over the last several decades as the population grows, ages, and more specialized surgical procedures have become available. With this increased demand comes a greater need for anesthesia services. Given the current shortage of newly trained anesthesiologists, demand for anesthesia services, and the increasing number of anesthesiologists who will be retiring in the near future, the need for more anesthesiology providers is a major concern across the U.S. Without an increased supply of anesthesiology physicians entering the market or a change in the flexibility of services that certified registered nurse anesthetists (“CRNAs”) are permitted to perform, patients could find themselves waiting longer for surgeries. PYA’s “Spotlight on Anesthesiology” looks at some current and future trends surrounding the specialty and how these trends may impact anesthesiology compensation.

## Demand for Anesthesiology Services

According to the United States Census Bureau, by the year 2030, all baby boomers will be older than 65 and one in every five United States residents will be at retirement age.<sup>1</sup> Due to the aging and growing population, the demand for medical care is expected to increase by approximately 16% from 2017 to 2032.<sup>2</sup> The increased demand for medical care has directly impacted the need for anesthesiologists and CRNAs. As one example, per Merritt Hawkins, anesthesiologists and CRNAs were ranked 10<sup>th</sup> and 12<sup>th</sup>, respectively, among the 2020 top 20 most recruited specialties in the country. Due to the specificity and scope of practice in which an anesthesiologist or CRNA operates, their respective roles are less interchangeable in terms of medical services when compared to other physicians and advanced practice providers (“APP”), who can often practice in multiple medical specialties. As a result of this, and in addition to other factors, the supply of anesthesiology providers directly impacts the supply of surgical and some non-surgical services.<sup>3</sup> Looking forward, the supply of anesthesiologists is not expected to keep up with the growing demand.

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1 <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>.

2 Association of American Medical Colleges, The Complexities of Physician Supply and Demand: Projections from 2017 to 2032. Retrieved from [https://www.aamc.org/system/files/c/2/31-2019\\_update\\_the\\_complexities\\_of\\_physician\\_supply\\_and\\_demand\\_-\\_projections\\_from\\_2017-2032.pdf](https://www.aamc.org/system/files/c/2/31-2019_update_the_complexities_of_physician_supply_and_demand_-_projections_from_2017-2032.pdf).

3 Merritt Hawkins and Associates 2019 Review of Physician and Advanced Practitioner Recruiting Incentives.

# Supply of Anesthesiologists and CRNAs

According to a 2019 report based on a Centers for Medicare and Medicaid Services (CMS) report, there are approximately 58,400 anesthesiologists in the U.S., representing one of the largest numbers of providers for any specialty.<sup>4</sup> Currently, baby boomers make up the largest percentage of active members of the American Society of Anesthesiologists (ASA) at 37.6%, and one-third of practicing physicians will be older than 65 in the next 10 years.<sup>5,6</sup> As a result, the number of retiring anesthesiologists is a serious global concern, and it may become harder to find qualified anesthesiologists to perform necessary services. Further, according to a recent study, only 1% of the participating medical students were interested in pursuing anesthesiology as a career.<sup>7</sup> Of the students who pick anesthesiology as a career, 20.6% of them regretted the choice because of burnout and other similar factors.<sup>8</sup>

Although the number of anesthesiologists is decreasing, the number of CRNAs continues to increase. The supply of CRNAs is projected to increase by approximately 38% between 2013 and 2025 and is expected to exceed demand by 2025.<sup>9</sup> According to the American Association of Nurse Anesthetists 2019 Member Profile Survey, CRNAs perform more than 49 million anesthetic procedures every year in the U.S.<sup>10</sup>

## CRNA Scope of Practice

In general, a CRNA practices under the supervision of an anesthesiologist or other qualified medical professional who can administer anesthesia. However, as of August 2020, 19 states and Guam have “opted out” of the CMS provision that requires CRNA supervision for services to be considered reimbursable under Medicaid and Medicare. The most recent state to opt out was Oklahoma in August 2020.<sup>11</sup> As a result, several studies have shown that there has been a recent increase in the use of CRNAs. As states consider and potentially continue to change the CRNA supervision requirements, more CRNAs will likely be utilized in order to meet the growing anesthesia demand.

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4 <http://www.transpopmed.org/articles/tpm/tpm-2019-7-106.php#ref-2>

5 <https://www.anesthesiologynews.com/PRN-/Article/08-19/Looming-Anesthesiologist-Shortage-Fuels-High-Market-Demand/55607?sub=A5405BDDEA%E2%80%A6>

6 <https://www.anesthesiallc.com/publications/anesthesia-provider-news-ealerts/1138-anesthesiologist-supply-and-demand-trends-within-the-specialty>

7 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5875208/>

8 <https://www.ama-assn.org/residents-students/specialty-profiles/residents-these-medical-specialties-have-most-regrets>

9 <https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/crna-fact-sheet.pdf>

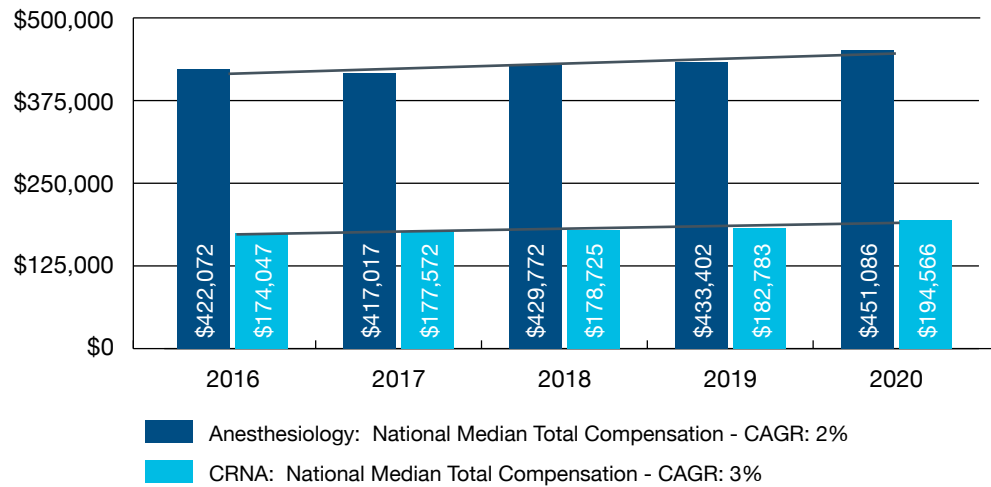
10 [https://www.aana.com/membership/become-a-crna/crna-fact-sheet#:~:text=Prolific%20Providers,AANA\)%202019%20Member%20Profile%20Survey](https://www.aana.com/membership/become-a-crna/crna-fact-sheet#:~:text=Prolific%20Providers,AANA)%202019%20Member%20Profile%20Survey)

11 [https://www.aana.com/docs/default-source/sga-aana-com-web-documents-\(all\)/801-fact-sheet-concerning-state-opt-outs-pdf.pdf?sfvrsn=450743b1\\_10](https://www.aana.com/docs/default-source/sga-aana-com-web-documents-(all)/801-fact-sheet-concerning-state-opt-outs-pdf.pdf?sfvrsn=450743b1_10)

# Compensation

Since anesthesiology demand is high and supply is only marginally growing, one might expect a significant increase in compensation over the last few years. However, as shown in **Figure 1** below, compensation for anesthesiologists and CRNAs has been growing at a compound annual growth rate (“CAGR”) of 2% and 3%, respectively, from 2016 to 2020.<sup>12</sup>

**Figure 1 - Trends in Total Compensation - Anesthesiologist and CRNA<sup>1,2</sup>**



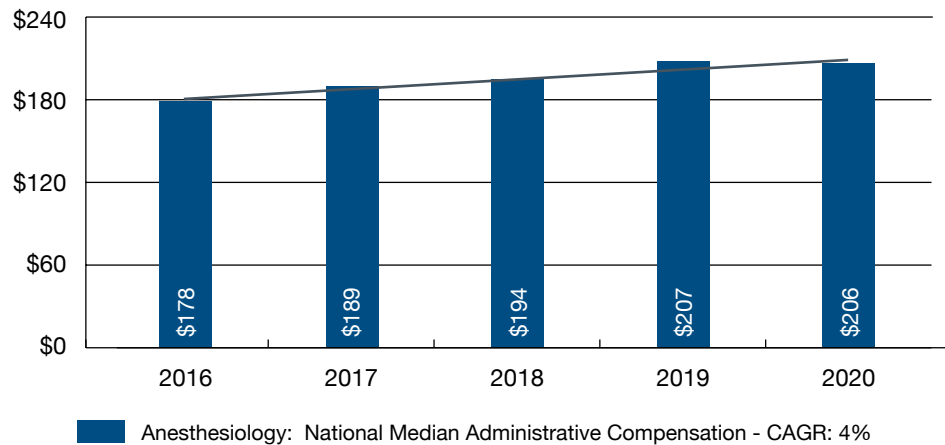
1. The total compensation received by the physician and CRNA reported as direct compensation which may include salary, bonus and/or incentive payments, research stipends, honoraria, profit-sharing, clinical medical directorships, call coverage, and voluntary salary reductions. The compensation reported excludes fringe benefits paid by the medical practice (e.g., retirement plan contributions and health insurance).  
Note: CAGR = Compound Average Growth Rate.
2. National benchmark data is calculated by averaging the AMGA *Compensation Survey*, MGMA *Compensation Survey*, and SullivanCotter survey data.

Although compensation is likely not growing at a rate fast enough to generate the needed supply, it is important for organizations to recognize the difference in compensation between CRNAs and anesthesiologists. Compensation for CRNAs falls below anesthesiology compensation. Therefore, when and if appropriate, medical practices and hospitals may consider evaluating their staffing model. However, as stated above, there are many federal and state-specific laws that regulate the services that a CRNA can perform, so a subject matter expert should be consulted before any significant changes in provider complement are made.

<sup>12</sup> Resources used include: AMGA Medical Group Compensation and Productivity Survey (“AMGA *Compensation Survey*”), MGMA Physician Compensation and Productivity Survey (“MGMA *Compensation Survey*”), and SullivanCotter Physician Compensation and Productivity Survey Report (“SullivanCotter”).

From 2016 to 2020, the national median administrative compensation also increased at a faster rate (4%) than total compensation, as illustrated in **Figure 2**.<sup>13</sup> Administrative compensation for anesthesiology physicians could be increasing at a faster rate to reflect the growing importance of medical director oversight as providers focus on quality of care, program growth, and regulatory changes, among the many other challenges organizations face.

**Figure 2 - Trends in Administrative Compensation - Anesthesiology<sup>1</sup>**



1. National benchmark data is calculated by averaging the MGMA *Medical Directorship Compensation* and SullivanCotter survey data.

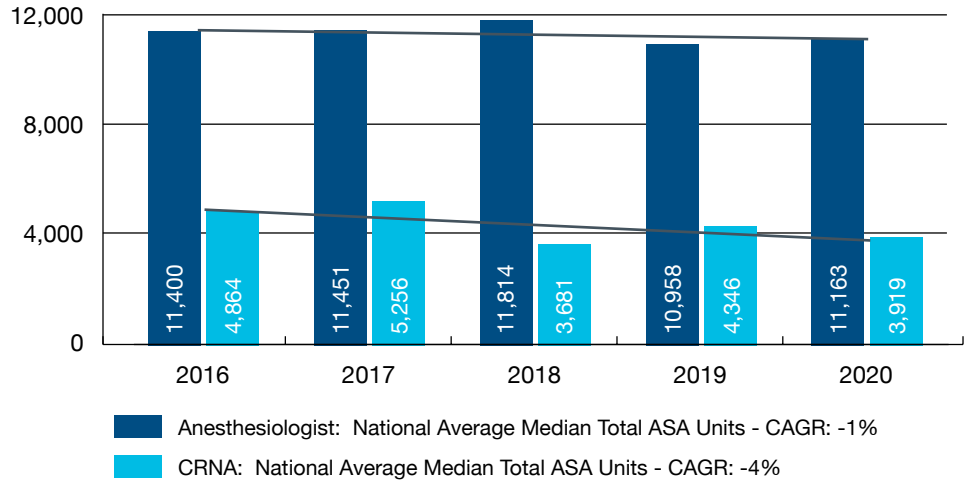
PYA also reviewed the trend in professional liability insurance and benefits for the specialty of anesthesiology. From 2016 to 2020, the CAGR for professional liability insurance and benefits was approximately 1.1% and 1.6%, respectively. Coupled with increases in compensation, the growth in professional liability insurance and benefits indicate that the cost of providing anesthesia services continues to increase.

## Productivity – ASA Units

To examine trends in physician and CRNA productivity, PYA reviewed national benchmark data relative to ASA units from 2016 to 2020. As shown in **Figure 3**, the ASA units for anesthesiologists had a CAGR of approximately -1%. During this same period, CRNA ASA units had a CAGR of approximately -4%. The decrease in productivity and increase in compensation, as shown in **Figures 1, 2, and 3** suggest that there are factors outside of productivity that may be driving the increase in anesthesiology and CRNA compensation.

13 Resources used include: MGMA Medical Directorship Compensation Survey (“MGMA *Medical Directorship Survey*”) and SullivanCotter.

**Figure 3 - Trends in Provider Productivity as Measured by ASA Units<sup>1</sup>**

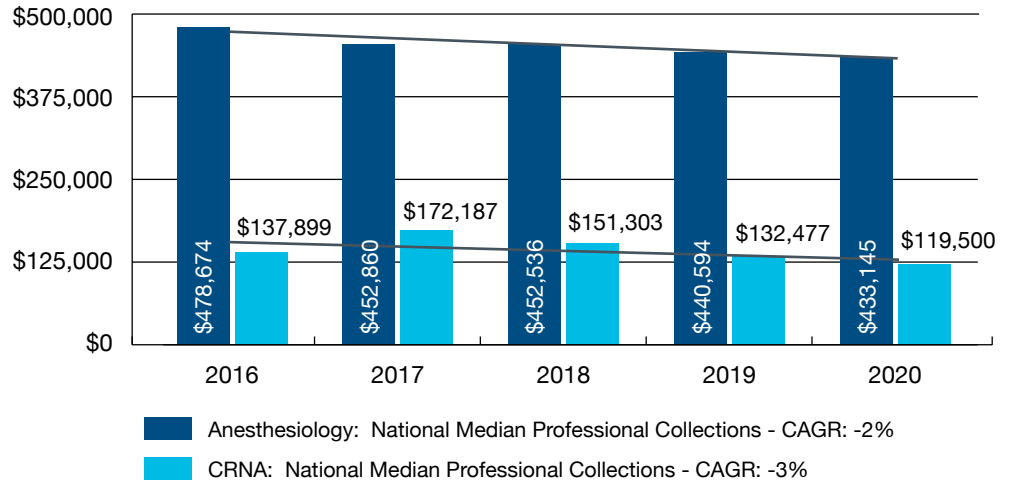


1. National benchmark data is calculated by averaging the AMGA Compensation Survey, MGMA Compensation Survey, and SullivanCotter survey data.

## Professional Collections

Based on professional collections benchmark data at the median from 2016 to 2020, the CAGR declined nearly 2% for anesthesiology and approximately 3% for CRNAs. The results are summarized in **Figure 4**, below.

**Figure 4 - Trends in Professional Collections - Anesthesiology and CRNA<sup>1</sup>**



1. National benchmark data is calculated by averaging the AMGA Compensation Survey, MGMA Compensation Survey, and SullivanCotter survey data.

A five-year summary of Medicare anesthesia conversation factor rates is also shown in **Table 1**. The conversion factor rates have varied year over year. Overall, the Medicare conversion factor CAGR from 2016 to 2021 is approximately -1%.

**Table 1**

Medicare Anesthesia Conversion Factor by Year	
2021	\$21.5600
2020	\$22.2016
2019	\$22.2730
2018	\$22.1887
2017	\$22.0454
2016	\$22.9935

## Conclusion

Benchmark data suggests clinical and administrative compensation for the specialty of anesthesiology have increased slightly over the last four years. On the contrary, anesthesiology provider productivity by ASA units and professional collections have decreased during this same period. This suggests physician compensation is influenced by factors other than solely productivity, including but not limited to provider supply and demand. Further, private practices and hospitals continue to experience rising costs to provide anesthesiology services besides the current challenges of COVID-19 and decreases in the Medicare conversation factor that will also play a key role in anesthesiology physician and CRNA compensation going forward. If the supply of anesthesiology physicians continues to dwindle, it is plausible that the gaps discussed herein between compensation and collections/productivity may continue to grow.

## About PYA

PYA provides independent and objective valuation and consulting services to a broad range of healthcare organizations. We support our clients' many advisory needs including those surrounding physician employment arrangements, medical directorships, professional services agreements, subsidy/financial assistance arrangements, call coverage, and other types of arrangements associated with various acquisitions and/or affiliations. PYA provides more than 1,200 fair market value opinions annually, supporting the work of hospitals, health systems, life sciences companies, and other such organizations negotiating compensation arrangements in many specialties, including anesthesiology.



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