



About AMN Healthcare

AMN Healthcare (NYSE: AMN) is the national leader in healthcare talent solutions and is the largest healthcare staffing organization in the United States as rated by Staffing Industry Analysts. A comprehensive healthcare staffing provider, AMN Healthcare assists hospitals, medical groups, government entities and other healthcare facilities in the temporary and permanent staffing of nurses, physicians, executives, and academic leaders. AMN Healthcare also provides a suite of technical staffing solutions, including predictive staffing analytics, telemedicine, translation services, revenue cycle solutions and others.

Through our Center for Workforce Research, AMN Healthcare publishes multiple surveys and other research reports each year that provide original data and analysis on a variety of healthcare workforce-related topics, including healthcare professional compensation, supply and demand trends, practice metrics, provider morale and others.

AMN Healthcare's Revenue Cycle Solutions division specializes in a wide range of revenue cycle support services, including analysis, training and support of revenue cycle management, clinical documentation review, coding quality audits, DRG valuation audits and others. AMN Healthcare's Revenue Cycle Solutions division contributed to data and analysis included in this report.

Introduction

Through the tests and treatments they order, the drugs they prescribe, and the range of services they provide, physicians generate bills to third-party payors, including commercial insurance companies and government-subsidized health insurance providers such as Medicare.

In this report, AMN Healthcare tracks billing to commercial payors generated by 18 types of physicians as well as by two types of advanced practice professionals: nurse practitioners (NPs) and certified registered nurse anesthetists (CRNAs).

The data indicates billing by specialty/practice area at the 25th, 50th, and 75th percentiles, offering a range at the low end of the billing spectrum, the overall average, and the high end.

The report further includes projected average collections per specialty based on a presumed average collection rate of 50%, as is discussed in the Methodology section below.

Data and analysis included in the report offers insights into the revenue-generating potential of physicians, NPs and CRNAs, and examines why they are a key driver of healthcare economics. Data generated by the report may be of interest to those hospitals, medical groups and other entities that employ physicians and are seeking physician productivity benchmarks, as well as to physicians, policymakers, journalists and others who follow healthcare economic, staffing and related trends.



Methodology

To derive data referenced in the report, AMN Healthcare's Revenue Cycle Solutions divison analyzed claims and clearinghouse data representing approximately 95% of commercial claims submitted by physicians in 18 physician specialties, as well as commercial claims made by nurse practitioners (NPs) and certified registered nurse anesthetists (CRNAs). These claims were for services provided directly by physicians, NPs and CRNAs, and not for ancillary services their activities may have generated. Billing was tracked for the 12-month period from January 2021 through December 2021, the most recent year for which data was available at the time the report was initiated

The analysis employed trending models as a method to benchmark physician-coded data. This AMN Healthcare proprietary method used a set of algorithms to compare national physician charge rates by specialty.

The report also includes a projection of net collections on these claims based on a hypothetical collection rate of 50%. However, it should be noted that collection rates can vary widely between and within provider types. Physicians and physician employers may wish to factor their own collection rates into the gross billing numbers provided in this report to determine potential collection amounts they would realize, given similar gross billing.

Billing amounts tracked in this report do not include claims submitted to Medicare and other non-commercial payors. Physician and advanced practitioner billing to Medicare and other non-commercial payers typically represent a subset of the amount submitted to commercial payers – often averaging about one-third of commercial claims, in AMN Healthcare's experience. It should be considered that gross billing amounts tracked in this report would be significantly higher for most specialties if claims to Medicare and other non-commercial payors were included. AMN Healthcare is planning a separate report tracking billing submitted by physicians and advanced practice professionals to Medicare.

Key Findings

Following are several key findings of AMN Healthcare's 2023 Physician Billing Report:

- The average annual billing amount generated by all physicians and advanced practitioners tracked in the report to commercial payors is \$3.8 million.
- The highest average annual physician billing to commercial payors is \$11,669,016, generated by general surgeons.
- The lowest annual average physician billing to commercial payers is \$1,323,104, generated by pediatricians.
- Among advanced practitioners tracked in the survey, certified registered nurse anesthetists (CRNAs) generate an annual average of \$1,750,281 in billing to commercial payors.
- Nurse practitioners (NPs) generate an annual average of \$777,393 in billing to commercial payors.
- Physicians who practice in diagnostic, surgical, and internal medicine specialties typically generate higher average billing to commercial payors than do primary care physicians.
- The average billing amount to commercial payors generated by specialist physicians is \$4,650,750, compared to \$1,770,564 for primary care physicians (defined as family medicine physicians, general internal medicine physicians, and pediatricians).
- Given a collection rate of 50%, the average annual collections generated by all providers tracked in this report would be \$1.9 million.

Following are physician and advanced practitioner billing to commercial payors broken out by 25th, 50th and 75th, percentiles.

Billing to Commercial Payors

Specialty	Commercial Only/ 25th Percentile		
Anesthesiology - Anesthesiologist	\$2,081,377		
Anesthesiology - Certified Registered Nurse Anesthetist	\$1,135,713		
Cardiology - Cardiologist	\$1,656,811		
Critical Care (Intensivists)	\$2,576,721		
Dermatology	\$859,209		
Family Practice	\$803,472		
Gastroenterology	\$3,322,999		
Internal Medicine	\$1,064,798		
Neurology	\$1,525,773		
Nurse - Nurse Practitioner	\$453,880		
Obstetrics/Gynecology	\$2,121,990		
Otolaryngology	\$2,611,244		
Pediatric Medicine	\$897,515		
Psychiatry	\$886,404		
Pulmonary Disease	\$1,581,609		
Radiology	\$1,026,439		
Rheumatology	\$1,496,876		
Surgery - General Surgery	\$5,522,570		
Surgery - Orthopedic Surgery	\$5,490,788		
Urology	\$3,520,685		

Specialty	Commercial Only/ 50th Percentile		
Anesthesiology - Anesthesiologist	\$3,329,020		
Anesthesiology - Certified Registered Nurse Anesthetist	\$1,750,281		
Cardiology - Cardiologist	\$3,406,027		
Critical Care (Intensivists)	\$6,677,319		
Dermatology	\$1,458,214		
Family Practice	\$1,394,188		
Gastroenterology	\$5,530,221		
Internal Medicine	\$2,594,400		
Neurology	\$2,780,362		
Nurse - Nurse Practitioner	\$777,393		
Obstetrics/Gynecology	\$3,761,777		
Otolaryngology	\$4,190,555		
Pediatric Medicine	\$1,323,104		
Psychiatry	\$2,697,461		
Pulmonary Disease	\$3,123,235		
Radiology	\$2,031,501		
Rheumatology	\$3,410,281		
Surgery - General Surgery	\$11,669,016		
Surgery - Orthopedic Surgery	\$9,809,514		
Urology	\$5,886,763		

Specialty	Commercial Only/ 75th Percentile		
Anesthesiology - Anesthesiologist	\$6,244,861		
Anesthesiology - Certified Registered Nurse Anesthetist	\$2,771,572		
Cardiology - Cardiologist	\$7,268,480		
Critical Care (Intensivists)	\$15,831,036		
Dermatology	\$2,481,512		
Family Practice	\$2,763,937		
Gastroenterology	\$9,075,130		
Internal Medicine	\$19,163,212		
Neurology	\$5,745,130		
Nurse - Nurse Practitioner	\$1,311,922		

Specialty	Commercial Only/ 75th Percentile		
Obstetrics/Gynecology	\$6,759,790		
Otolaryngology	\$6,991,648		
Pediatric Medicine	\$2,094,103		
Psychiatry	\$10,004,930		
Pulmonary Disease	\$6,905,724		
Radiology	\$4,179,561		
Rheumatology	\$7,212,568		
Surgery - General Surgery	\$21,144,524		
Surgery - Orthopedic Surgery	\$17,454,972		
Urology	\$9.904,416		

Projected Average Collection Rate by Specialty

As was noted above, physician and advanced practitioner collection rates can vary widely between and among various specialties, depending on a wide range of factors. The numbers below are based on a hypothetical collection rate of 50% of the annual average amount of claims submitted per provider type. For example, the annual average billing amount submitted by anesthesiologists to commercial payers as tracked in this report is \$3,329,020. Given a collection rate of 50%, the average amount an anesthesiologist or his or her employer would expect to collect is \$1,664,510 (\$3,329,020 x .5). Physicians and physician employers may wish to factor their own collection rates into the gross billing numbers provided in this report to determine potential collection amounts they would realize given similar gross billing.

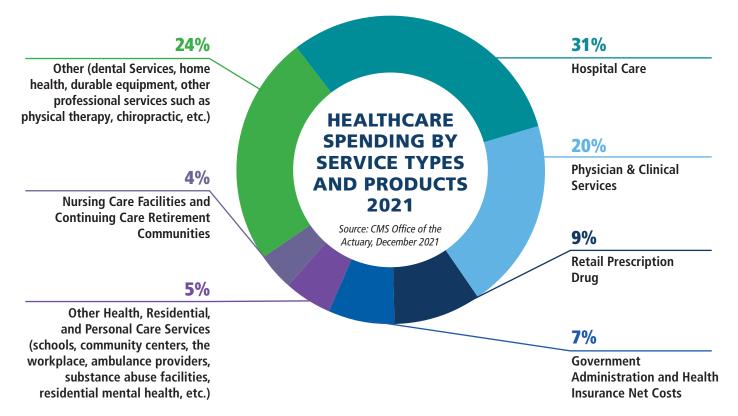
Provider Type	Annual Collections at a 50% Collection Rate		
Anesthesiology	\$1,665,510		
Certified Registered Nurse Anesthetist (CRNA)	\$875,140		
Cardiology	\$1,703,013		
Critical Care (Intensivist)	\$3,338,656		
Dermatology	\$729,107		
Family Medicine	\$697,094		
Gastroenterology	\$2,765,110		
Internal Medicine	\$1,297,200		
Neurology	\$1,390,181		
Nurse Practitioner	\$388,696		

Provider Type	Annual Collections at a 50% Collection Rate		
Obstetrician/Gynecology	\$1,880,888		
Otolaryngology	\$2,095,277		
Pediatrics	\$661,552		
Psychiatry	\$1,348,730		
Pulmonology	\$1,561,617		
Radiology	\$1,015,750		
Rheumatology	\$1,705,140		
General Surgery	\$5,834,508		
Orthopedic Surgery	\$4,904,757		
Urology	\$2,943,381		

Trends And Observations

According to the Center for Medicare and Medicaid Service's Office of the Actuary, spending on healthcare in the U.S. reached \$4.3 trillion in 2021, a number representing 18.3% of the economy and equating to an average of \$12,914 per person. The following chart shows how the 2021 healthcare dollar was spent.





Physicians Drive Healthcare Economics

Although direct payments to physicians represents only 20% of total healthcare dollars spent in 2021, physicians generate a much greater percentage of overall healthcare spending through the tests they order, prescriptions they write, patients they admit to the hospital, and the consultations and procedures they perform. All these activities generate work for other types of healthcare professionals, such as nurses, lab technologists, imaging technologists, therapists, and case managers, to name only a few. Without activities generated by physicians, these professionals would have little to do in many cases, and their facilities would have few revenue-generating services to offer. Certain types of advanced practice professionals, such as nurse practitioners (NPs) and certified registered nurse anesthetists (CRNAs), also may directly and indirectly generate revenue (see discussion on advanced practice professionals further in this report).`

It has been estimated that physicians are the catalyst for 80% of healthcare spending, including spending on direct physician services and other services that they generate (*Crosson FJ. Change the microenvironment. Delivery system reform essential to control costs. Mod Healthc.* 2009;39(17):20–1.).

AMN Healthcare's 2023 Physicians Billing Report underscores one aspect of the economic role played by physicians by tracking the billing they submit to commercial payors for their professional services. These services may include consultations, tests, procedures, and other activities that have a cascading effect throughout the continuum of care.

For example, a patient consultation with a family physician may lead to a hospital admission for cardiac care that generates a variety of services performed by other physicians, nurses, technicians, therapists, and additional types of healthcare professionals. A procedure performed by a surgeon also may lead to services performed by other healthcare professionals, as well as the use of medical supplies, prescription drugs, hospital stays, and other revenue-generating products and services. The continuum of both patient care and revenue generation often begins or can be traced to billing submitted by physicians.

This report tracks only billing submitted directly by physicians, CRNAs and NPs for their own services and does not include billing for tests, prescriptions, procedures, and other services they may have generated that they did not directly provide. These additional services also should be considered when calculating the revenue-generating role played by physicians and advanced practitioners.

Average Billing to Commercial Payors

The 2023 Physicians Billing Report tracks billing submitted to commercial payors for 18 physician specialties as well as for two types of advanced practice professionals who may also bill payors directly or indirectly for their services, including nurse practitioners (NPs) and certified registered nurse anesthetists (CRNAs).



The average annual billing amount to commercial payors generated by all 20 types of providers tracked in the survey over the period from January 2021 through December 2021 was \$3.8 million. To this may be added gross amounts submitted to Medicare and other non-commercial payors, which often average about 33% of commercial billing, in AMN Healthcare's experience. Using the .33% formula (.33 x \$3.8 million), average annual billing to all payors generated by all providers tracked in this report would be approximately \$5 million.

In the majority of cases, gross billing submitted to payors for physician and advanced practitioner services will not equal the amount of net payments collected. In some cases, payors may deny claims made by physicians altogether. In other cases, they may revise the billing downward based on their coverage policies or based on coding errors that may have been made by physicians or their office personnel. Net collections may differ from provider to provider, as is referenced below.

Billing by Physician Type/Specialty Care

Billing submitted by physician type, as tracked in the report, reflects the manner in which physicians are typically paid. Current physician payment formulas generally reward physicians providing procedural-oriented services at a higher rate than physicians providing consultative services. Under current payment models, primary care physicians such as family medicine physicians, internal medicine physicians, and pediatricians, whose practices usually are largely consultative, are paid less than physicians who more frequently perform surgeries, diagnostic tests, and other procedures. Some specialists, such as psychiatrists, rheumatologists, pulmonologists, and others, also typically provide mostly consultative services and are usually paid less for these services than specialists performing surgeries and other procedures.

Physician payment systems today often are tied to Relative Value Units (RVUs), metrics that assign a dollar value for various services performed by physicians based on the amount of work, expertise, practice expense, and malpractice costs required to deliver them. Higher work, expertise, and expense metrics are usually assigned to complex procedures, and less value is assigned to non-procedural consultations.

In line with these payment models, the report indicates that general surgeons and orthopedic surgeons generate the highest average billing to commercial payors at \$11,669,016 and \$9,809,514, respectively. Though general surgeons and orthopedic surgeons provide patient consultation, they also order and/or conduct a range of complex and often expensive tests and procedures.

Orthopedic surgeons, for example, may perform hip replacement surgery, hand surgery, back surgery, and other types of surgery. As of 2019, the average cost of a hip replacement came in at nearly \$40,000, while the average cost of a knee replacement was \$35,000. (*Good Health Rx. August 29, 2022*).

Billing by Physician Type/Primary Care

Primary care physicians, by contrast, usually generate less average billing than specialists, with an average for family medicine, internal medicine and pediatrics to commercial payors of \$1,770,564. However, the activity of primary care physicians may lead to considerable "downstream revenue" through the hospital admissions, tests and treatment they order. The 2019 *Inpatient/Outpatient Revenue Survey* conducted by Merritt Hawkins (a division of AMN Healthcare now known as AMN Healthcare Physician Solutions) indicates that primary care physicians on average generate \$2,113,273 a year in net annual revenue for their affiliated hospitals, close to the \$2,446,429 in net annual revenue generated by specialist physicians, as tracked in the 2019 survey.

Advanced Practice Professionals Playing Larger Role in Revenue Generation

In emerging, team-based models of healthcare delivery, advanced practice professionals are expanding their scope of practice and their role as direct generators of revenue.

There are currently over 49,000 CRNAs in active practice in the U.S. who deliver 50 million anesthetics each year to patients nationwide, including 80% of anesthetics provided to rural patients (*American Association of Nurse Anesthetists 2022 Fact Sheet*). CRNAs can now practice autonomously in 19 states and fill positions in virtually all settings where anesthetics are delivered, including hospital surgical suites and delivery rooms, ambulatory surgical centers, physician and dental offices, podiatry offices, and others.

The report indicates that CRNAs generate an average of \$1,750,281 in billing to commercial payors. This is less than the average of \$3,324,020 in billing to commercial payors generated by anesthesiologists. However, it should be considered that CRNAs are compensated at a lower rate than anesthesiologists. According to AMN Healthcare/Merritt Hawkins' 2022 Review of Physician and Advanced Practice Recruiting Incentives, CRNAs are offered an average starting salary of \$211,000 compared to an average starting salary of \$400,000 for anesthesiologists. CRNAs and anesthesiologists often are employed today in the same settings and work in a complementary manner. For additional information about CRNA staffing models and recruiting trends, see the AMN Healthcare white paper CRNAs: Supply, Demand, and Recruiting Trends.

Similarly, NPs now may practice autonomously in 26 states and the District of Colombia. There are over 355,000 NPs licensed to practice in the U.S., with approximately 36,000 completing their academic programs each year, more than the number of physicians who complete training annually. Close to 90% are certified in primary care while over 70% deliver primary care (*American Association of Nurse Practitioners 2022 Fact Sheet*).

The report indicates that NPs generate an average of \$777,393 in billing to commercial payors, which is less than the average of \$1,770,564 in billing to commercial payors generated by primary care physicians. However, NPs also are compensated at a lower rate than primary care physicians. AMN Healthcare/Merritt Hawkins' 2022 *Review of Physician and Advanced Practitioner Recruiting Incentives* indicates that the average starting salary for NPs is \$153,000 compared to \$251,000 for family medicine physicians. As with CRNAs, NPs often are employed in the same settings where physicians practice and work with them in a complementary manner. For additional information about NP staffing models and recruiting trends, see the AMN Healthcare white paper *Nurse Practitioners and Physician Assistants: Supply, Scope of Practice, Compensation and Recruiting Considerations*.

Physician Productivity and Payment Models

A growing number of physicians in today's healthcare system are employed by hospitals, medical groups, community health centers, retail clinics, urgent care centers, insurance companies, and other entities. Often, their provider billing identification numbers are assigned to their employers, who submit physician claims to payors and collect subsequent payments. A shrinking number of physicians remain in private practice, submitting claims directly to payors and sustaining their practices through the payments they receive.

According to the *Survey of America's Physicians* conducted by AMN Healthcare/Merritt Hawkins for The Physicians Foundation, 31% of physicians are private practice owners, while the remaining 69% are employed by a hospital, medical group, other facility type, or are in some other status.

Employed physicians usually are paid a base salary and often receive a bonus based on their productivity. However, physician productivity is difficult to measure and may vary among physicians of the same specialty for a number of

31% of physicians are private practice owners

reasons, including the number of patients the physician sees, patient acuity, and patient payor mix. Productivity is often measured by the number of RVUs that physicians generate, the number of patients seen, net collections, and, on occasion, gross billing. Though not as precise a metric as net collections, gross billing does provide one way of measuring physician productivity and determining the amount of revenue physicians generate.

When determining physician and advanced practitioner salary levels, it can be useful to compare average salaries offered to physicians by specialty to the billing they generate (see chart below):

Physician Starting Salaries* vs. Billing to Commercial Payors by Select Specialties	Starting Salaries*	Average Billing Commercial Payors
Family Medicine	\$251,000	\$1,394,188
Internal Medicine	\$255,000	\$2,594,400
Pediatrics	\$232,000	\$1,323,104
Cardiology (non-invasive)	\$484,000	\$3,406,027
Orthopedic Surgery	\$565,000	\$9,809,514
Psychiatry	\$308,000	\$2,697,461
Gastroenterology	\$486,000	\$5,530,231
Nurse Practitioner	\$153,000	\$777,393
CRNA	\$211,000	\$1,750,281
Obstetrics/Gynecology	\$332,000	\$3,761,777
Pulmonology	\$412.000	\$3123,235
Radiology	\$455,000	\$2.031,501

*AMN Healthcare/Merritt Hawkins 2022 Review of Physician and Advanced Practitioner Recruiting Incentives

As these comparisons show, the billing physicians generate to commercial payors typically are many times higher than the salaries they are paid. As is referenced above, billing amounts generated by physicians, CRNAs and NPs tracked in this report would be even higher if claims to Medicare and other non-commercial payers were considered. Even when making the assumption that net collections represent 50% of what physicians bill, it is clear that physicians generate revenue that is well in excess of their usual remuneration.

Changing Physician Compensation Models

Today, healthcare organizations are moving toward models in which physician payments are more closely tied to patient satisfaction, low hospital readmission rates, patient outcomes, and other "quality-based" metrics and less tied to "volume-based" metrics such as RVUs, net collections, and gross billing.

Nevertheless, volume-based metrics remain the prevailing standard in physician compensation. AMN Healthcare/Merritt Hawkins' 2022 *Review of Physician and Advanced Practitioner Recruiting Incentives* indicates that of healthcare facilities offering physicians a production bonus, only 31% featured quality-based metrics as part of the production formula. By contrast, 58% featured RVUs. The Review further indicates that only 11% of total physician compensation is tied to quality metrics, suggesting that the quality-based physician compensation model remains aspirational.



Conclusion

Through the services they provide and other activities, physicians determine or strongly influence how the healthcare dollar is spent. Increasingly, this also can be said of advanced practice professionals such as NPs and CRNAs.

AMN Healthcare's *2023 Physician Billing Report* reflects one aspect of physician and advanced practitioner revenue generation by tracking the bills they submit to commercial payors. The report shows that physicians practicing in procedure-oriented specialties consistently generate higher billing amounts than those in consultative specialties. It further indicates that advanced practice NPs and CRNAs also are a source of significant billing amounts.

The report provides one measure of physician, NP, and CRNA productivity and demonstrates that physicians and advanced practitioners generate revenues considerably higher than the remuneration they receive.

For additional information about AMN Healthcare's thought leadership resources and services visit AMNHealthcare.com.



AMNHealthcare.com © AMN Healthcare 2023