



Physician Workforce: Projections, 2021-2036

October 2023

This brief contains highlights of workforce projections for physician specialties in the United States.

These projections were generated using HRSA’s Health Workforce Simulation Model (HWSM) and start with the year 2021 and go through 2036. The primary function of the HWSM is to assess the adequacy of the nation’s projected workforce supply to meet the demand.¹

Full data on the workforce projections will be available in the [Workforce Projections Dashboard](#).

Key Results and Takeaways

- Nationally, across all physician specialties in the United States, there is a **projected shortage of 139,940 full-time equivalent (FTE)² physicians** in 2036. In fact, 30 out of the 35 physician specialties reported in this brief are projected to have shortages in 2036, with a combined shortage of 160,450 FTE physicians for those specialties reporting shortages, assuming current patterns of attrition, graduation, and labor force participation persist over the forecast period.³
- It is important to note that shortages in some specialties may, in part, be mitigated by increased use of nurse practitioners and physician assistants to perform certain services. Scope-of-practice for NPs and PAs has increased in recent years.

Projected supply of and demand for physicians, 2026, 2031, and 2036

	2026	2031	2036
Supply	919,370	938,510	969,740
Demand	1,027,220	1,073,150	1,109,680
Surplus / (Shortage)	(107,850)	(134,640)	(139,940)
Percent Adequacy	90%	87%	87%

Notes: Demand and supply estimates and projections are in full-time equivalents (FTEs), defined as working 40 hours a week. Adequacy is calculated by taking projected supply in 2036 divided by projected demand in 2036. FTE estimates may differ from estimates of the headcounts of the health workforce.

¹ For a detailed explanation of the data, methods, and assumptions of the model, including the definitions of supply and demand, refer the [HWSM technical documentation](#).

² An FTE is defined as working 40 hours per week.

³ NCHWA also reports projections under alternative scenarios of supply, such as varying graduation rates and retirement ages, and of demand including improved access to care. The projected estimates under each scenario are available at [Workforce Projections Dashboard](#).

About the National Center for Health Workforce Analysis

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

For more information, visit the [Health Workforce Analysis](#) webpage.

- The adequacy of all physicians in the U.S. in 2036 is lower in nonmetro areas than metro areas. This means nonmetro areas will experience greater shortages of various types of physicians than metro areas. The percent adequacy of supply across all physician specialties is projected to be 44% in nonmetro areas (a shortage of nearly 56%), compared to 94% in metro areas (a shortage of 6%) in 2036.⁴
- Supply adequacy varies greatly across specialties, ranging from 64% (a shortage of 36%) for vascular surgeons to 123% (a surplus of 23%) for emergency medicine physicians.
- The specialties with the lowest supply adequacy in 2036 are vascular surgery (64%), thoracic surgery (70%), ophthalmology (71%), other specialists (71%), plastic surgery (74%), and general internal medicine (76%).
- The specialties with the largest supply adequacy in 2036 are emergency medicine (123%), critical care and pulmonology (112%), neonatology (110%), and endocrinology (110%).
- Care should be used when interpreting these estimates given recent trends in the drivers of supply and demand for various physician specialties. For example, a 10% surplus of neonatologists is projected in 2036, however given the declining birth rate in the United States over the past decade, this adequacy may change in the future.

These projections were generated using some data from the period of the COVID-19 pandemic. The pandemic impacted the population seeking care, the workforce providing care, and the data available for both. These projections should be interpreted with caution as the behavior of those seeking care and the size and composition of the workforce providing care during the pandemic may not be fully reflected in these projections. See the [HWSM technical documentation](#) for details on the methodology and datasets used to generate these projections.

For full data on the workforce projections, see the [Workforce Projections Dashboard](#). You can access a [webinar](#) about the Workforce Projections Dashboard that shows how to use it. You can also [download the data](#) from the dashboard in spreadsheet form.

Physician specialty	Adequacy 2036
Allergy & Immunology	87%
Anesthesiology	90%
Cardiology	83%
Colorectal Surgery	100%
Critical Care & Pulmonology Medicine	112%
Dermatology	100%
Emergency Medicine	123%
Endocrinology	110%
Family Medicine	78%
Gastroenterology	98%
General Internal Medicine	76%
General Surgery	95%
Geriatrics	81%
Hematology & Oncology	97%
Hospital Medicine	77%
Infectious Diseases	88%
Neonatology	110%
Nephrology	78%
Neurological Surgery	90%
Neurology	94%
Obstetrics & Gynecology	87%
Ophthalmology	71%
Orthopedic Surgery	89%
Otolaryngology	90%
Pathology	85%
Pediatrics	95%
Physical Medicine & Rehabilitation	97%
Plastic Surgery	74%
Radiation Oncology	90%
Radiology	87%
Rheumatology	90%
Thoracic Surgery	70%
Urology	83%
Vascular Surgery	64%
Other Specialist	71%
All Physicians	87%

⁴ See the [Workforce Projections Dashboard](#) for more data on metro/non-metro projections, including detail by physician specialty. The metro and non-metro classification is based on the [NCHS urban-rural classification scheme](#).