



Physician Workforce: Projections, 2022-2037

November 2024

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 2022 and go through 2037. 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 are 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 187,130 full-time equivalent (FTE)² physicians** in 2037. In fact, 31 out of the 35 physician specialties reported in this brief are projected to have shortages in 2037, with a combined shortage of 200,900 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, 2027, 2032, and 2037

	2027	2032	2037
Supply	936,530	936,590	949,360
Demand	1,060,710	1,103,620	1,136,490
Surplus / (Shortage)	(124,180)	(167,030)	(187,130)
Percent Adequacy	88%	85%	84%

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 2037 divided by projected demand in 2037. FTE estimates may differ from estimates of the headcounts of the health workforce.

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.

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

- The adequacy of all physicians in the U.S. in 2037 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 40% in nonmetro areas (a shortage of nearly 60%), compared to 90% in metro areas (a shortage of 10%) in 2037.⁴
- Supply adequacy varies greatly across specialties, ranging from 64% (a shortage of 36%) for vascular surgeons to 116% (a surplus of 16%) for emergency medicine physicians.
- The specialties with the lowest supply adequacy in 2037 are vascular surgery (64%), thoracic surgery (66%), other specialists (68%), ophthalmology (68%), family medicine (73%), and plastic surgery (74%).
- The specialties with the largest supply adequacy in 2037 are emergency medicine (116%), critical care and pulmonology medicine (110%), endocrinology (102%), and neonatology (100%).
- Care should be used when interpreting these estimates given recent trends in the drivers of supply and demand for various physician specialties. For example, no shortage or surplus of neonatologists is projected in 2037, 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 also [download the data](#) from the dashboard in spreadsheet form.

Physician specialty	Adequacy 2037
Allergy & Immunology	75%
Anesthesiology	86%
Cardiology	81%
Colorectal Surgery	94%
Critical Care & Pulmonology Medicine	110%
Dermatology	94%
Emergency Medicine	116%
Endocrinology	102%
Family Medicine	73%
Gastroenterology	94%
General Internal Medicine	76%
General Surgery	99%
Geriatrics	78%
Hematology & Oncology	93%
Hospital Medicine	76%
Infectious Diseases	85%
Neonatology	100%
Nephrology	79%
Neurological Surgery	87%
Neurology	91%
Obstetrics & Gynecology	82%
Ophthalmology	68%
Orthopedic Surgery	85%
Otolaryngology	86%
Pathology	80%
Pediatrics	81%
Physical Medicine & Rehabilitation	93%
Plastic Surgery	74%
Radiation Oncology	85%
Radiology	82%
Rheumatology	90%
Thoracic Surgery	66%
Urology	82%
Vascular Surgery	64%
Other Specialist	68%
All Physicians	84%

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