



Physician Workforce: Projections, 2020-2035

November 2022

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 2020 and go through 2035. 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 81,180 full-time equivalent (FTE)² physicians** in 2035. In fact, 26 out of the 36 physician specialties reported in this brief are projected to have shortages in 2035, with a combined shortage of 111,220 FTE physicians, 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, and these professions are projected to have excess supplies by 2035.⁴

Projected supply of and demand for physicians, 2025, 2030, and 2035

Projection Estimates	2025	2030	2035
Supply	909,720	940,690	982,640
Demand	966,970	1,019,770	1,063,820
Surplus / (Shortage)	(57,259)	(79,080)	(81,180)
Percent Adequacy	94%	92%	92%

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 2035 divided by projected demand in 2035. 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](#).

⁴ See the [Workforce Projections Dashboard](#) and the projections factsheets for Primary Care and the Nursing 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.

- The adequacy of all physicians in the U.S. in 2035 is smaller 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 48% in nonmetro areas (a shortage of nearly 52%), compared to 99% in metro areas (a shortage of just 1%) in 2035.⁵
- Supply adequacy varies greatly across specialties, ranging from 69% (a shortage of 31%) for thoracic surgeons to 174% (a surplus of 74%) for pulmonology physicians.
- The specialties with the lowest supply adequacy in 2035 are thoracic surgery (69%), ophthalmology (70%), other specialists (71%), plastic surgery (75%), and nephrology (79%).
- The specialties with the largest supply adequacy in 2035 are pulmonology (174%), emergency medicine (126%), endocrinology (112%), neonatology (110%), and neurology (108%).
- 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, however given the declining birth rate in the United States over the past decade, this adequacy may change in the future.

Physician specialty	Adequacy 2035
Allergy & Immunology	90%
Anesthesiology	93%
Cardiology	83%
Colorectal Surgery	100%
Critical Care Medicine	88%
Dermatology	99%
Emergency Medicine	126%
Endocrinology	112%
Family Medicine	90%
Gastroenterology	100%
General Internal Medicine	83%
General Surgery	104%
Geriatrics	88%
Hematology & Oncology	99%
Hospital Medicine	90%
Infectious Diseases	93%
Neonatology	110%
Nephrology	79%
Neurological Surgery	89%
Neurology	108%
Obstetrics & Gynecology	89%
Ophthalmology	70%
Orthopedic Surgery	91%
Otolaryngology	92%
Pathology	85%
Pediatrics	98%
Physical Medicine & Rehabilitation	107%
Plastic Surgery	75%
Pulmonology	174%
Radiation Oncology	92%
Radiology	89%
Rheumatology	107%
Thoracic Surgery	69%
Urology	83%
Vascular Surgery	84%
Other Specialist	71%
All Physicians	92%

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.

⁵ 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](#).