

Physician Supply and Demand A 15-Year Outlook: Key Findings

In April 2019, the economic modeling and forecasting firm IHS Markit released the 2019 update of *The Complexities of Physician Supply and Demand: Projections from 2017 to 2032*, the report of a study commissioned by the AAMC. Projections for individual specialties were aggregated for reporting into four broad categories: primary care, medical specialties, surgical specialties, and other specialties.¹ To reflect future uncertainties in health policy and patterns in care use and delivery, the study presents ranges for the projected shortages of physicians rather than specific shortage numbers.



Demand for physicians continues to grow faster than supply. Although physician supply is projected to increase modestly between 2017 and 2032, demand will grow more steeply.

- By 2032, demand for physicians will exceed supply by a range of 46,900 to 121,900 full-time-equivalent physicians. The lower estimate would represent more aggressive assumptions about the impact on care delivery patterns from the rapid growth in nonphysician clinicians and widespread delayed retirement by currently practicing physicians.
- Total projected shortages in 2032 vary by specialty grouping and include²:
 - A shortfall of between 21,100 and 55,200 primary care physicians.
 - A shortfall of between 24,800 and 65,800 nonprimary care physicians, including 14,300 to 23,400 surgical specialists.
- Population growth and aging continue to be the primary drivers of increasing physician demand. By 2032, the U.S. population under age 18 is projected to grow by only 3.5%, while the population age 65 and over is projected to grow by 48%.³ Because seniors have much higher per capita consumption of health care, the demand for physicians — especially specialty physicians — is projected to increase.

The total projected physician shortage persists under most likely scenarios: a moderate increase in the use of advanced practice nurses (APRNs) and physician assistants (PAs), greater use of alternate settings such as retail clinics, delayed physician retirement, and rapid changes in payment and delivery (e.g., accountable care organizations, or ACOs).

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This year, the report contains a new potential scenario that examines the impact of emerging trends in health care delivery, including a focus on care coordination, reductions in unnecessary hospitalizations and ER visits, and managed care. This separate projection also includes improvements in population health, such as reductions in excess body weight, smoking cessation, and meeting behavioral health needs.⁴

Because this was the first time this scenario has been run, it was not included in the shortfall ranges or compared with future supply. The scenario showed, though, that delivery reforms did not lessen physician demand; in fact, it led to a less-than-1% increase.

Included for a fourth year, the AAMC's Health Care Utilization Equity analysis found that the U.S. would need an additional 95,900 doctors immediately if health care utilization patterns were equalized across race, insurance coverage, and geographic location. This estimate was not included in the ranges of projections.

Addressing the shortage will require a multipronged approach, including innovation in delivery; greater use of technology; improved, efficient use of all health professionals on the care team; and an increase in federal support for residency training. The magnitude of the projected shortfalls is significant enough that no single solution will be sufficient to resolve physician shortages.

Because physician training can take up to a decade, a physician shortage in 2032 is a problem that needs to be addressed now.

The study is an update to last year's report. It incorporates the most current and best available evidence on health care delivery and responds to questions received after the release of the previous report. The AAMC has committed to updating the study annually to make use of new data and new analyses and take an active role in fostering the conversation around modeling physician workforce projections.

For more information:
aamc.org/workforceprojections

NOTES

1. Primary care consists of family medicine, general internal medicine, general pediatrics, and geriatric medicine. Medical specialties consist of allergy and immunology, cardiology, critical care, dermatology, endocrinology, gastroenterology, hematology and oncology, infectious diseases, neonatal and perinatal medicine, nephrology, pulmonology, and rheumatology. Surgical specialties include general surgery, colorectal surgery, neurological surgery, obstetrics and gynecology, ophthalmology, orthopedic surgery, otolaryngology, plastic surgery, thoracic surgery, urology, and vascular surgery. The other specialties category consists of anesthesiology, emergency medicine, neurology, pathology, physical medicine and rehabilitation, psychiatry, radiology, and all other specialties.
2. The range in the projected shortfall for total physicians is smaller than the sum of the ranges in the projected shortfalls for the specialty categories. The demand scenarios modeled project future demand for physician services, but scenarios can differ in terms of whether future demand will be provided by primary care or nonprimary care physicians. Likewise, the shortfall range for total nonprimary care is smaller than the sum of the shortfall ranges for the specialty categories.
3. U.S. Census Bureau. 2017 national population projections datasets. www.census.gov/data/datasets/2017/demo/popproj/2017-popproj.html. Updated 2018.
4. These improvements were selected based on their inclusion as goals of the Healthy People 2020 program. Refer to: Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. Healthy People 2020. www.healthypeople.gov/2020/topics-objectives.