Physician Supply and Demand Through 2030: Key Findings

In April 2018, the economic modeling and forecasting firm IHS Inc. released the 2018 update of *The Complexities of Physician Supply and Demand: Projections from 2016 to 2030*, 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 2016 and 2030, demand will grow more steeply.

- By 2030, demand for physicians will exceed supply by a range of 42,600 and 121,300. The lower estimate would represent more aggressive changes in care delivery patterns subsequent to the rapid growth in nonphysician clinicians and widespread delayed retirement by currently practicing physicians.
- Total shortages in 2030 vary by specialty grouping and include:
  - A shortfall of between 14,800 and 49,300 primary care physicians
  - A shortfall of between 33,800 and 72,700 nonprimary care physicians, including 20,700 to 30,500 surgical specialists
- Population growth and aging continue to be the primary drivers of increasing physician demand. By 2030, the U.S. population under age 18 is projected to grow by only 3%, while the population age 65 and over is projected to grow by 50%. 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).
The report also examines scenarios in which underserved populations had care utilization patterns similar to populations with fewer access barriers. Under these scenarios, demand for physicians could rise substantially.

- If those living in nonmetropolitan areas and those without insurance had the same use patterns as those in metropolitan areas who have insurance, an additional 31,600 doctors would have been needed in 2016, almost half in the South.
- If everyone used care at levels equal to insured, metropolitan, non-Hispanic white populations, an additional 95,100 physicians would have been needed in 2016, more than three-quarters of them in metropolitan areas.

These estimates are 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 on its own to resolve physician shortages.

Because physician training can take up to a decade, a physician shortage in 2030 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 physician workforce projections modeling.

For more information: aamc.org/2018projections

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 range for total nonprimary care is smaller than the sum of the ranges for the specialty categories.