

Health Workforce Projections: General Pediatricians

(April 2017)

This fact sheet presents the national supply of and demand for general pediatricians for 2013 through 2025 using HRSA's Health Workforce Simulation Model (HWSM).¹ While the nuances of modeling supply and demand differ for individual health professions, the basic framework remains the same. HWSM assumes that demand equals supply in the base year.² For supply modeling, the major components (beyond common labor-market factors like unemployment) include characteristics of the existing workforce in a given occupation; new entrants to the workforce (e.g., newly trained workers); and workforce participation decisions (e.g., retirement and hours worked patterns). For demand modeling, the major components include population demographics; health care use patterns (including the influence of increased insurance coverage); and demand for health care services (translated into requirements for full-time equivalents (FTEs)).

Important limitations for these workforce projections include: an underlying model assumption that health care delivery in the future (projected until 2025) will not change substantially from the way care was delivered in the base year (2013) and that there will be stability in the current rates of workforce participation, and health care utilization. Changes in any of these factors may significantly impact both the supply and demand projections presented in this fact sheet. These projections also do not account for the geographical distribution of providers which may impact access to care in certain communities.

BACKGROUND

General pediatricians are physicians who assess, diagnose, and treat children with a wide variety of injuries and illnesses, and who provide a range of health care services.^{3,4} They conduct routine check-ups to assess a child's growth and development; administer vaccinations to protect against diseases such as polio, measles and mumps; and treat acute and chronic illnesses. Pediatricians must have general medical

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¹ This model uses a micro-simulation approach where supply is projected based on the simulation of career choices of individual health workers. Demand for health care services is simulated for a representative sample of the current and future U.S. population based on each person's demographic and socioeconomic characteristics, health-related behavior, and health risk factors that affect their health care utilization patterns. For more information on data and methods, please see [Technical Documentation for Health Resources Service Administration's Health Workforce Simulation Model](#)

² Ono T, Lafortune G, Schoenstein M. "Health workforce planning in OECD countries: a review of 26 projection models from 18 countries." *OECD Health Working Papers, No. 62*. France: OECD Publishing; 2013: 8-11.

³ University of Maryland Medical School. 2016. "What is a Pediatrician?" Accessed 12/23/2016 from: [University of Maryland Medical Center-What is a Pediatrician?](#)

⁴ Committee on Pediatric Workforce. Definition of a Pediatrician. *Pediatrics*. April 2015;135(4):780-781.

knowledge as well as an understanding of how treatments may affect a child’s different developmental. Pediatricians typically complete a three-year pediatric residency upon graduation from medical school. They are then eligible to become board certified following successful completion of a comprehensive exam. HRSA recently released a report estimating the supply and demand for primary care providers, that included general pediatricians, but only those practicing in primary care settings.⁵ This factsheet includes general pediatricians practicing in all settings, primary care as well as inpatient settings.

FINDINGS

Between 2013 and 2025, the national pediatrician supply is estimated to grow by 9 percent, while the demand is estimated to grow by 6 percent (Exhibit 1). Thus, the projected growth in supply exceeds the projected growth in demand for pediatricians, which suggests that the United States will have a sufficient supply of pediatricians to meet the projected growth in demand for services in 2025.

Exhibit 1. Estimated Supply and Demand for General Pediatricians^a in the United States, 2013 – 2025

	Pediatricians (FTEs)
Supply	
Estimated supply, 2013	48,890
Estimated supply growth, 2013-2025:	4,420 (9%)
<i>New entrants</i>	19,700
<i>Attrition^b</i>	-15,040
<i>Change in average work hours^c</i>	-230
Projected supply, 2025	53,320
Demand	
Estimated demand, 2013 ^d	48,890
Estimated demand growth, 2013-2025:	2,770 (6%)
<i>Changing demographics impact</i>	2,770
<i>Insurance coverage impact^e</i>	---
Projected demand, 2025	51,660
Projected supply (minus) demand, 2025	1,660

Notes: Numbers may not sum to totals due to rounding. All estimates are rounded to the nearest 10.

^a Includes hospitalists

^b Includes retirements and mortality.

^c This represents the change in provider FTEs resulting from a change in the demographic composition of the future workforce and the associated effect on average number of hours worked.

^d The model assumes that national supply and demand are in approximate equilibrium in 2013.

^e The model estimates increased insurance coverage associated with Medicaid expansion and Affordable Care Act marketplaces.

⁵ [“National and Regional Projections of Supply and Demand for Primary Care Practitioners: 2013-2025.”](#) The National Center for Health Workforce Analysis. Available for download.

HWSM's projections indicate that all of the demand growth is associated with an increase in the size of the population of children. While it is estimated that the supply of pediatricians will be adequate to meet demand, the model does not capture changes in care delivery patterns. These national projections also do not reflect regional maldistributions in pediatrician supply that may be present both at baseline and in 2025.