

PEDIATRIC SUBSPECIALTY SUPPLY MODEL INFORMATION SHEET

The American Board of Pediatrics (ABP) and the University of North Carolina at Chapel Hill's Cecil G. Sheps Center for Health Services Research are partnering to develop a workforce model to estimate the future *supply* of pediatric subspecialty physicians providing clinical care in the United States from 2018–2040.

What are the goals of the project?

The goals of this three-year project (2020–2023) are to:

- Provide regional and national estimates of the clinical headcount and full-time equivalents (FTEs) of physicians in each subspecialty; and
- Develop scenarios to estimate how potential changes (e.g., changes in retirement and attrition from the workforce, clinical hours worked, numbers of physicians in subspecialty training, length of training, other factors) may affect the future supply of pediatric subspecialties physicians.

What pediatric subspecialties will be included in the model?

Fourteen (14) pediatric subspecialties will be included. Certification for each of these subspecialties is administered by the ABP, permitting access to in-depth data about these subspecialties. The 14 subspecialties include:

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| • Adolescent Medicine | • Gastroenterology |
| • Cardiology | • Hematology-Oncology |
| • Child Abuse Pediatrics | • Infectious Diseases |
| • Critical Care Medicine | • Neonatal-Perinatal Medicine |
| • Developmental-Behavioral Pediatrics | • Nephrology |
| • Emergency Medicine | • Pulmonology |
| • Endocrinology | • Rheumatology |

What information will be used to generate the supply model?

- We will investigate the headcount and clinical FTE for each subspecialty, by age, gender, medical school type (U.S. medical graduates/international medical graduates), location of the existing workforce, and the training pipeline.
- The model will account for differences in clinical hours worked based on age, gender, and subspecialty.
- The model will examine physician diffusion, tracking the location of first practice setting after completing subspecialty training, and changes in practice location of the actively practicing workforce.
- We will report on attrition from the workforce (e.g., retirements, subspecialists leaving clinical care).

Using this information, we will build a baseline model that estimates the future supply of the pediatric subspecialty workforce through 2040.

What types of questions will the model not be able to be answer in the next three years?

It is important to keep in mind the types of questions that supply models can and cannot answer. Because this first iteration of the model is only looking at supply, we won't be able to comment on the match of supply to demand, except at a very high level (e.g., estimates of supply relative to the number of children under 18 years at the national and regional level). We hope to develop the demand model beginning in 2023.

Additional questions the model will not answer are:

- What is the pipeline for nonclinical subspecialists in education, research, and administration?
 - The project will focus on the supply of **clinical** FTE pediatric subspecialties.
- What is a “good match” (number of trainee slots filled) for an individual subspecialty?
 - The project will not directly comment on the “ideal” number of subspecialty-to-trainee slots filled, although data on match rates and differences in geographic ratios may suggest supply concerns for specific subspecialties and geographies.
- What is the supply of pediatric mental health professionals?
 - While there is an increasing need for mental health subspecialists, the project will not provide estimates on the supply of mental health professionals beyond estimates of the supply of developmental-behavioral pediatricians.
- How are nonpediatrician (e.g., Family Medicine) and nonphysician (e.g., nurse practitioners, physician assistants) providers included in the workforce estimates?
 - The supply estimates will be limited to pediatric subspecialty physicians.
- Why is Hospital Medicine not included in the model?
 - Hospital Medicine will be an important subspecialty to track in the future; however, given the novelty of certification in pediatric hospital medicine, there is insufficient information (data) available to provide reliable estimates at this time.