

Association of Medical School Pediatric Department Chairs (AMSPDC)  
Workforce Summit Meeting Summary  
Long Beach, CA  
February 27, 2020  
10:00am – 4:00pm

Sherin U. Devaskar, MD, President of the Association of Medical School Pediatric Department Chairs (AMSPDC), welcomed all participants, 36 individuals spanning 16 different organizations, to the AMSPDC Workforce Summit, and noted that this year marks the 60<sup>th</sup> year since AMSPDC was founded. AMSPDC Board Member and Education Committee Chair Robert J. Vinci, MD, and Executive Director Laura Degnon, CAE, introduced the meeting objectives: (1) Increase the number of high-quality students who enter training in our categorical Pediatrics, Medicine-Pediatrics and Combined Pediatric Subspecialty training programs, and (2) Improve recruitment of pediatric residents into pediatric fellowship programs, with an emphasis on those fellowship programs that are not filling their training positions.

Robert J. Vinci, MD, provided an overview of the overall NRMP Match data and then shared an in-depth review of pediatric workforce data consolidated from various sources. The National Resident Matching Program (NRMP) data demonstrates a continued increase in the overall number of applicants who register for the Match. During the five-year period from 2015 – 2019, the number of graduates of US allopathic medical schools has increased by 5% while over the same time period the number of osteopathic applicants has doubled. There has been a slight decrease in the total number of International Medical Graduates (IMG's). The 2019 NRMP data indicates the highest match rate ever recorded for both osteopathic seniors and IMG's. Data was shared on the number of available positions across disciplines over the last 5 years, during which time Pediatrics saw a 7% growth in the number of positions listed in the Match. In comparison to Pediatrics, most other disciplines increased their number of positions offered in the Match by double digits with Internal Medicine showing a 20% increase and Family Medicine a 29% increase. To emphasize the impact of the overall growth in other disciplines, in 2019 Pediatrics constituted only 8.8% of all positions that were offered in the Match compared to three years ago when we were 9.8% of available positions.

Per the Association of American Medical Colleges (AAMC), the percentage of allopathic medical students entering Pediatrics from 2008 – 2018 shows a marked decrease from 9.5% to just over 8.0%, with a significant decline between 2016 and 2018. Over the last five years, the NRMP data shows a 9% decrease in US seniors matching into Pediatrics, among the most significant decreases across disciplines. Given the decrease in the number of US seniors pursuing pediatrics, we now need to depend on other important components of the work force. The number of pediatric positions that have been filled by others students, (osteopathic graduates as well as US and Foreign-Born IMG's) is at an all-time high. The NRMP data reveals that while matched US MD seniors has decreased by 174 over five years, the number of osteopathic seniors who have matched into pediatrics has increased by 200 and the number of IMG's (both foreign and US born) has increased by about 100 over this same time period.

In the 2019 Match, pediatric residency programs saw the highest number of unmatched programs and unfilled positions in 10 years. While it is true that over the past five years pediatrics has seen an overall increase in the number of positions that have been filled in the NRMP Match, most other disciplines have dramatically increased their number of matched positions in the same time period. Pediatric programs now move further down our match lists in order to fill our residency quota by 1.3 positions/residency slot in 2019 compared to 2015. Subspecialty match data over the last 5 years was shared, highlighting the subspecialties that have low match rates/position. Some subspecialties have

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expanded positions offered despite low match rates. In 2019, the Match rate for all Pediatric subspecialties was 82% compared to a rate of 86% in 2015.

This data is to be interpreted with the understanding that while the trends are reliable, there are discrepancies in the actual data collected by the various entities. In a comparison between data provided by the NRMP and the American Board of Pediatrics (ABP), there is a nearly 200 position gap between the number of first-year categorical pediatric residents tracked by the ABP when compared to the total number of categorical positions that were listed as being filled in the NRMP Match data for Pediatrics.

Gary L. Freed, MD, noted the same challenge, citing numerous data discrepancies across various sources, including the American Medical Association (AMA) Masterfile, ABP, American Academy of Pediatrics (AAP), subspecialty societies, and state licensure files. It is important to understand that there could be underlying biases and limitations to any workforce study that can skew reader interpretation of the data. While previous data presented show a declined interest in pediatrics, in data collected by the Child Health Evaluation and Research Unit (CHEAR), there has been a steady increase in the number of pediatric fellows since 1998, which dispels the myth that “no one is going into fellowship.” Trends in number of Year 1 Fellows in some subspecialties have remained relatively flat for a 15-year period from 2001 to 2016, the last time the study was conducted. The number of new subspecialty diplomates across the five largest subspecialties (neonatology, cardiology, critical care, hematology-oncology, and emergency) have been trending upwards in the same period, while those in the four smallest subspecialties (developmental-behavioral pediatrics, rheumatology, adolescent medicine, and child abuse) have been showing little change in the number of diplomates.

There are a number of factors to be considered when measuring perceived “shortage” and “effective utilization”: devaluation of clinical time, referral utilization, periodicity of return visits as there are no specific guidelines set, discharges from specialty care, and growth in private practice. Many have suggested that nurse practitioners (NPs), pediatric nurse practitioners (PNPs), and physician assistants (PAs) could help alleviate the perceived workforce needs. While there has been an increase of NP graduates, the overall growth trend does not apply to pediatric NPs, neonatal NPs, pediatric acute NPs, or school NPs, all of which have remained flat. Family NPs, which have shown an increase in the same period, are unlikely to have an impact on the perceived workforce needs, as few work in pediatric practices and most provide little care to children. As of 2009, there were over 68,000 practicing PAs in the United States, with less than 3% specializing in pediatrics. A heat map was shared highlighting the states that had fewer than 50 pediatric PAs in the state. Though there are training programs available, they are unlikely to offer significant relief to the perceived workforce shortage and also because of a decrease in training programs for NP’s and PA’s.

Laurel K. Leslie, MD, shared updates on the efforts ABP is undergoing to study pediatric workforce needs. Per the Research Advisory Committee recommendations in 2016, the current workforce data published by ABP is available on the ABP website in an interactive dashboard format. The data, which covers demographic and geographic distribution and training, is consolidated from three sources: certification database, training database, and census survey platform, which aggregates data surveyed

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at seven touchpoints in a pediatrician's training and career. Though the data is accessible, there are limitations, as the databases only capture information on certified pediatricians, with no tracking mechanisms in place for any other child care providers, and in some cases can only include data up to five years old due to changes in recertification and the impact of Maintenance of Certification. The ABP is partnering with the Cecil G. Sheps Center for Health Services Research, at the University of North Carolina-Chapel Hill (UNC-CH) to conduct an analysis of the pediatric subspecialty workforce. The ABP analyses plan for the next three years includes more resident and fellow surveys that collect information on race, ethnicity, education, debt, factors influencing pediatric specialty and subspecialty choice, post-clinical plans, and perceptions about job availability. The addition of these types of questions will help inform and address some of the workforce challenges and needs. The ABP is in phase one of the Workforce Modeling project, which aims to analyze supply and demand to estimate degree to which number and distribution of pediatric subspecialists meets the needs of the pediatric population nationally and regionally. Phase one project goals include development of rigorous and flexible supply model to forecast headcount and clinical full-time equivalent (FTE) for 14 pediatric subspecialties from 2018 – 2040 and development of "what if" scenarios to simulate effect of changes in various factors. The Workforce Virtual Network, co-led by the ABP and the Council of Pediatric Subspecialties (CoPS), convenes nine pediatric organizations quarterly to discuss priority topics including activity sharing, subspecialty pipeline, and feedback on projects such as the modeling project.

After the current state of affairs were presented for the pediatric workforce, the participants were asked to engage in group discussions on three topics: (1) interpretation of the data presented, (2) methods to attract more residents to the pediatric specialty, and (3) promotion of career pathways into undersubscribed subspecialties. Five main themes emerged from the group discussions:

1. Workforce data: We need to further our understanding of the recent trends in pediatric workforce by analyzing and updating data on physician scientists, advanced practice providers, workforce diversity and the distribution and work profiles of our pediatric specialists. There is a need for a centralized and reliable resource for workforce data.
2. Need and access: We should partner with the appropriate organizations to understand the workforce needs throughout the country in order to answer questions related to access, regionalization of care and appropriate distribution of our work force.
3. Attracting residents: To attract more residents to pediatrics, we must increase our marketing, advocacy, recruitment, and outreach efforts. There is a need to develop strategies to market the field of pediatrics to high-quality students utilizing approaches that respond to factors important in their decision-making process. Medical schools should promote pediatrics through the use of pediatric interests groups, tracking pediatric specific metrics and creative approaches to highlighting the importance of our discipline. We should work towards improving the pediatric pipeline by creating strategies such as early exposure to pediatric specific STEM programs, enhanced work with organizations such as the Student National Medical Association (SNMA) and partnering with the Council on Medical Student Education in Pediatrics (COMSEP) to achieve greater recruitment of students into Pediatrics.

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4. Economic strategy: Pediatrics has a reputation of not being as financially viable or an attractive discipline compared to other disciplines. We must work towards changing this reputation through minimizing the impact of debt burden with targeted loan repayment programs, scholarships, and other financial incentives. To make this field more financially viable, we must work with payers to equalize reimbursement between adult and pediatric care providers, prioritizing equal payments between Medicare and Medicaid. Regardless of the impact to recruitment efforts, we must develop strategies that lead to changes in our compensation model leading to equalizing pediatric salaries with benchmarks established for adult providers.
5. Changing the educational paradigm: We need to explore opportunities to reinvent our UME and GME learning environments to better position pediatrics as an attractive discipline for trainees, including adopting best practices from allopathic and osteopathic medical schools that have had high pediatric matching rates, creating "fast track" programs that allow for more focused specialty and training pathways, and re-examining existing residency program components (length of training, flexibility of in-and-outpatient training, clinical rotation in subspecialties) to create a more well-rounded training experience that better prepares trainees for the patients of today and the future. To promote the field of pediatrics, we must work towards increasing and implementing early exposure of the pediatrics discipline at various critical touch points, including high school and college, medical school pre-clinical and clinical curricula, early residency training and identification of other crucial touch points. To promote undersubscribed subspecialties, we must explore methods of increasing subspecialty exposure, especially undersubscribed subspecialties early in training, develop models for sharing subspecialty experiences across training programs and increasing resident and subspecialty fellow interactions. Collectively, pediatric chairs need to develop innovative approaches to enhancing engagement between faculty and trainees by celebrating unique aspects of careers in pediatrics, including basic and translational science, clinical care, medical education and administration. We need to engage our regulatory agencies (ACGME and LCME) in order to drive change in our educational requirements.

Concluding the discussions, Dr. Devaskar thanked all participants for engaging in a powerful session that tackled complex topics. Ms. Degnon shared next steps, including a forthcoming survey to meeting attendees that will help guide the priority themes and next step action items and a forthcoming publication in the AMSPDC Pages summarizing the workforce summit. Dr. Vinci stated we will develop and distribute a workforce survey in order to prioritize the topics discussed in this summit. After identifying workforce priorities, we will form work groups consisting of representatives from our organizations and charge them identifying next steps and approaches to the themes identified in this summit. We anticipate that AMSPDC will host a follow-up workforce summit within the next year. At that time, we will discuss the reports and recommendations from our soon to be formed work and continue to share innovative ideas to improve the pediatric workforce.

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**List of Attendees:**

**AMERICAN ASSOCIATION OF MEDICAL COLLEGES (AAMC)**

Michael Dill, MD (Table 1)

**ACADEMIC PEDIATRIC ASSOCIATION (APA)**

Paul Chung, MD (Table 2)

Teri Turner, MD, MPH, M.Ed. (Table 3)

**AMERICAN ACADEMY OF PEDIATRICS (AAP)**

Mark Del Monte, JD (Table 4)

Anne R. Edwards, MD, FAAP (Table 5)

**AMERICAN ASSOCIATION OF COLLEGES OF OSTEOPATHIC MEDICINE (AACOM)**

W Paul Bowman, MD (Table 5)

Kenneth Johnson, DO (Table 4)

**AMERICAN BOARD OF PEDIATRICS (ABP)**

Laurel K. Leslie, MD, MPH (Table 3)

David Nichols, MD, MBA (Table 2)

Adam Turner, MPH, PMP (Table 1)

Suzanne Woods, MD (Table 5)

**AMERICAN PEDIATRIC SOCIETY (APS)**

Clifford W. Bogue, MD (Table 4)

Robin Steinhorn, MD (Table 3)

**ASSOCIATION OF ADMINISTRATORS IN ACADEMIC PEDIATRICS (AAAP)**

Sandie Bolina, MS (Table 2)

Liz McCarty, MS (Table 1)

**ASSOCIATION OF MEDICAL SCHOOL PEDIATRIC DEPARTMENT CHAIRS (AMSPDC)**

Michael Artman, MD (Table 1)

John Barnard, MD (Table 2)

Tiffany Chen (Scribe)

Wade Clapp, MD (Table 3)

Laura Degnon, CAE (Floater)

Sherin U. Devaskar, MD (Table 4)

Joe St. Geme, MD (Table 5)

Ann Reed, MD (Table 1)

Robert J. Vinci, MD (Floater)

**ASSOCIATION OF PEDIATRIC PROGRAM DIRECTORS (APPD)**

Becky Blankenburg, MD, MPH (Table 2)

Javier Gonzalez del Rey, MD (Table 3)

**CHILDREN'S HOSPITAL ASSOCIATION (CHA)**

Amanda Major, BS (Table 4)

**COUNCIL OF PEDIATRIC SUBSPECIALTIES (CoPS)**

Debra Boyer, MD, MHPE (Table 5)

Jill Fussell, MD (Table 1)

Angela Myers, MD, MPH (Table 2)

**COUNCIL ON MEDICAL STUDENT EDUCATION IN PEDIATRICS (COMSEP)**

Joseph Gigante, MD (Table 3)

Rachel Thompson, MD (Table 4)

**NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE (NASEM)**

Karen Helsing, MPH (Table 5)

**NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT, US NATIONAL INSTITUTES OF HEALTH (NICHD/NIH)**

Rohan Hazra, MD (Table 2)

**SOCIETY FOR PEDIATRIC RESEARCH (SPR)**

Stephanie D. Davis, MD (Table 1)

**UNIVERSITY OF MICHIGAN (U-M)**

Gary L. Freed, MD, MPH (Table 3)