Pediatric dermatologists care for children with skin disorders both in the outpatient clinic setting and in hospitals across the country. The field is actively growing with numerous opportunities for research and a dynamic professional community. However, the demand for pediatric dermatology services has continued to outpace the available workforce.

**PEDIATRIC DERMATOLOGY IN CONTEXT**

In the long history of medical specialties, pediatric dermatology is a fairly recent development. In the late 20th century, studies showed that between 10 and 30 percent of pediatric primary care visits included a skin-related problem, which ranged from skin infections, atopic dermatitis, seborrheic dermatitis, contact dermatitis, acne, and more. At this time, pediatric training programs did not provide much depth into dermatology, and studies also showed that pediatricians struggled to diagnose dermatological issues with the accuracy of trained dermatologists.

To meet this growing need and ensure that young patients received the highest quality of care, the International Society of Pediatric Dermatology was officially established in 1973, soon followed by the Society for Pediatric Dermatology (SPD) in 1975. In 1982 came the launch of the journal *Pediatric Dermatology*, and in 1986 an American Academy of Pediatrics (AAP)—sponsored Section on Dermatology was officially created. In 2000, pediatric dermatology was officially recognized as a subspecialty of the American Board of Dermatology (ABD), and the first accreditation examinations were held in 2004.

At first, progress building the subspecialty was slow. By the end of the 1980s, though the demand for pediatric dermatologists was evident, hospitals had only a small pool of available positions and an even smaller budget to fill them. Still, by the early 2000s, the number of practicing pediatric dermatologists had almost tripled. According to the ABD, 380 people have become certified in pediatric dermatology as of 2019.

Though promising, this rate of growth is still insufficient to meet the needs of young patients across the country.

**THE CURRENT STATE OF THE SUBSPECIALTY**

Pediatric dermatology is facing a deep-rooted personnel shortage—a fact that has been well documented across numerous recent studies.

A national survey conducted in 2004 found that three-quarters of hospitals understood the need for pediatric dermatologists but admitted there was a shortage of them. The survey further showed that during the period of study, the number of open faculty positions greatly exceeded the number of fellows in training.

In 2009, the National Association of Children’s Hospitals and Related Institutions reported that the average waiting period for a pediatric dermatologist was the highest of any pediatric specialty, at more than 13 weeks. A pediatric workforce study conducted in 2016 showed that the average wait time for patients is six weeks, though 25 percent of the surveyed wait times exceeded 10 weeks. This is progress, but it is not nearly enough—even six weeks is too long for children to wait for needed medical consultation.

As recently as this year, new data continues to illustrate the shortage of pediatric dermatologists. At the July 2020 SPD annual meeting, research was presented indicating that in the US, the maldistribution of pediatric dermatologists is over three times greater than that of pediatric generalists. The study further showed that nine states do not have a single pediatric dermatologist: Delaware, Idaho, Maine, Mississippi, Montana, Nevada, North Dakota, South Dakota and Wyoming.

Pediatric dermatology is an engaging and rewarding subspecialty that delivers on many of the key values postgrads search for. An exciting field with significant room for growth and research, pediatric dermatology has also developed a tight-knit group of health care professionals with a constant...
stream of circulating information. All of this is built on the rewarding foundation of helping children and establishing relationships with patients over many years.

So, what is contributing to this ongoing shortage? The SPD identifies three central factors:

1. **Timing.** Trainees in dermatology have limited exposure or insight into the variety of subspecialties on offer throughout their education. Because these subspecialties are not presented promptly or in detail, by the time a pediatric resident discovers their interest in pediatric dermatology, it can be particularly challenging to apply for a highly competitive dermatology residency position.

Data underscores this challenge: in a survey of general pediatricians, pediatric dermatology was ranked as the third least accessible subspecialty, behind only child psychiatry and developmental pediatrics.

2. **Compensation.** Salary alone rarely determines a student’s choice of specialty. However, it does play a role in the decision making process, particularly for those facing student loan debt. Compared to colleagues in other dermatology specialties, pediatric dermatologists on average receive lower compensation, even though becoming a pediatric dermatologist requires an additional year of training. Nonetheless, pediatric dermatologists are paid comparably or higher than many pediatric subspecialties, with recent informal survey data suggesting salaries range from $225K to $650K.

3. **Mentorship.** Pediatric dermatologists enjoy a tight-knit and dynamic professional community. However, the simple fact that there are not enough professionals in the field leads to a shortage of mentors to help teach, encourage, and inspire potential newcomers.

Mentors are a vital link in the training of new pediatric dermatologists. This results in strong ties formed between mentors and trainees and makes new recruits more likely to stay in the area where they were trained, further deepening their mentor relationship and creating hubs for pediatric dermatology, typically in large cities. The uneven geographic distribution of pediatric dermatologists noted at the SPD annual meeting is a direct result of this scarcity and clustering of mentorship.

**EMERGING RESEARCH TRENDS**

Children are not just small-scale adults, and they require specific study in order to develop the most effective and accurate diagnoses and treatments. Despite the shortage in numbers, thanks to the brilliant and dedicated community of practicing pediatric dermatologists, there is significant ongoing research in the field.

Currently, the Pediatric Dermatology Research Alliance (PeDRA) has numerous research studies and grants, spanning birthmarks, genetic skin disorders, inflammatory skin diseases, neonatal skin, and skin tumors and reactions to cancer therapies. Pediatric dermatologists also continue to pursue research on rare diseases such as epidermolysis bullosa and ichthyoses. Studies have covered topics such as dermatitis and the microbiome, new therapeutic agents for atopic dermatitis, beta-blocker use in infants, and many more.

Further, pediatric dermatologists are working to expand clinical trials for novel therapeutics to include the pediatric population, which has historically been neglected. PeDRA is collaborating with the NIH to expand basic science research in pediatric dermatology, and SPD has successfully included pediatric populations in studies spanning a number of diseases, including atopic dermatitis, psoriasis, and alopecia areata. Industry is also increasingly pursuing studies in pediatric patients in tandem or shortly after studies in adults.

**TOWARD THE FUTURE OF PEDIATRIC DERMATOLOGY**

Pediatric dermatology is a vital subspecialty, with unique opportunities for research, professional development, and connection with patients and families. The breadth and depth of clinical information discovered over the past four decades is a clear sign of the strength and importance of the field. Still, the scarcity of pediatric dermatologists means patients do not have access to much-needed clinical care and has created space for misconceptions around pediatric skincare to grow.

Concrete steps can be taken to close this gap and help ensure that the field continues to thrive. More fellows in pediatric dermatology must be recruited by increasing exposure to the field in the early stages of training. Considering novel training pathways, as well as additional educational opportunities, will be essential to increase accessibility. Then, once trainees have made the selection to pursue pediatric dermatology, career development and geographically dispersed mentorship programs are key to robust and balanced growth.

The SPD works to further develop the field through dedicating money, support, and development tools to pediatric dermatologists across the US. Advancing clinical research and developing educational opportunities is at the core of this work, and reflects a collective responsibility of all currently practicing pediatric dermatologists to help leave the subspecialty stronger than we found it.

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