



DEPARTMENT REPORT

The Expert Generalist: An Approach to Enhance Access to Pediatric Subspecialty care

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Unlike Internal Medicine, where there is a significant shortage of primary care doctors compared to subspecialists, pediatrics has the opposite problem. Internal medicine has 36 subspecialists for every 100,000 adults, whereas there are approximately 13 pediatric subspecialists for every 100,000 children, contributing to significant pediatric subspecialist shortage.⁹ This report details how we have addressed this issue through a program that trains and mentors primary care pediatricians in subspecialty care to serve as expert generalists and augment subspecialty care delivery.

A recent survey of primary care pediatricians revealed significant dissatisfaction with the availability of subspecialists. These shortages are also more likely to be reported in the rural areas compared to urban areas.¹ The American Academy of Pediatrics issued a policy statement in 2015 concluding that there is a shortage of pediatric medical and surgical subspecialists in the US.² This issue is especially concerning, as the increasing number of children with complex medical problems need subspecialist support which may typically be beyond the scope of practice for the primary care pediatrician.³

A Children's Hospital Association survey in 2017 found shortages of providers in several pediatric subspecialties. These fields include developmental pediatrics, child psychiatry, genetics, and pain management, among others.⁴ There are also several states in the United States that do not have access to many critical pediatric subspecialties. For example, there are no pediatric endocrinologists in Alaska, Idaho, Montana, or Wyoming, nor are there any gastroenterologists in Montana, Vermont, or Wyoming. In addition, many families often have to travel long distances for pediatric subspecialty care. Nationally, children travel on average 60 miles to reach pediatric rheumatologists, 44 miles to reach developmental pediatricians, and 32 miles to reach pediatric gastroenterologists.⁵

Data from American Board of Pediatrics also show that fewer trainees are entering certain disciplines including development/behavior pediatrics, child psychiatry, pulmonology, endocrinology, gastroenterology and child protection, which will further contribute to subspecialty provider shortage.

The Department of Pediatrics at University of Florida (UF) provides subspecialist services in each of the major pediatric subspecialties. Nonetheless, in some subspecialties, our workforce was inadequate to meet local and regional needs. To address this need, in 2016, we developed an Expert Generalist Program to compliment the pediatric subspecialists. Through analyses of electronic records data, we monitored wait times to next third new patient appointment based on the consultation requests by the primary care pediatricians, and identified specialties that would benefit with the additional workforce. These areas and related diagnoses included Neurology for evaluation and management of headaches; Developmental/Behavioral Pediatrics, and Psychiatry for Attention Deficit Hyperactivity Disorder, learning difficulties, autism, anxiety and depression; Gastroenterology for abdominal pain and constipation; and Endocrinology for hyperlipidemia, insulin resistance and obesity.

Training of the expert generalists included working in tandem with respective subspecialists and didactic training. The expert generalists were embedded in the subspecialty clinics where they worked in close conjunction, literally co-located, with the specialists. The expert generalists were mentored by the specialists, attended multiple Continuing Medical Education lectures on the conditions they were managing, and attended the weekly divisional educational meetings. The pediatric specialists and the expert generalists developed protocols for the patient answering service to direct patients with certain conditions to the expert generalists in place of the subspecialists. This system served to triage patients, as the expert generalists were assigned patients according to a specific list of chief complains.

The UF Expert Generalist program, in its five years since its inception, has been successful. After implementation of the Expert Generalist program, the third available new patient appointment for a developmental pediatrician reduced from over four to six months to within a week. Similar significant improvements were seen in headache clinic, metabolic/obesity clinic and gastroenterology clinic. The ability to get patients with above conditions into clinic all reduced, since the expert generalist were able to triage patients who would truly benefit from a subspecialty visit.

The referring pediatricians and patients demonstrated high levels of satisfaction with the ability to be seen in a timely manner. This higher level of satisfaction, in addition to the enhanced access, was reflected in the significant increase in the referrals to all clinics. The highest increase was in development/behavior pediatrics, which more than doubled from 2016 to 2021. Amongst the different pediatric subspecialties served by the program, the largest proportion of patients seen by the expert generalists was in child development behavior clinic.

The subspecialists and expert generalist were also satisfied with the program, which continues to grow. The subspecialists were now able to utilize their time to care for patients with high levels of complexity as well as initiate new programs as part of their academic mission. The expert generalists had high job satisfaction, as they were able to care for patients and conditions that they had an interest in, while still being able to practice general pediatrics.

Patients referred from outside the primary care practice were billed as consultations while patients referred from within the practice were either billed as consults or return patients based on the request from the referring providers.

In summary, the Pediatric subspecialty shortage is a pressing concern and innovative solutions such as the expert generalist program can improve access without sacrificing quality. As we have shown this program benefits the patients, referring physicians, the subspecialists, as well as the expert generalists themselves.

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