

Understanding Gaps in Developmental Screening and Referral

Mei Elansary, MD, MPhil, Michael Silverstein, MD, MPH

In this issue of *Pediatrics*, Lipkin et al¹ describe trends in pediatrician-reported developmental screening and referral practices between 2002 and 2016. The authors compare data across serial American Academy of Pediatrics (AAP) Periodic Surveys conducted in 2002, 2009, and 2016. They demonstrate that pediatricians' self-reported use of formal developmental screening tools increased from 21% in 2002 to 63% in 2016 and that referral of patients identified as at risk for developmental delay to early intervention (EI) services increased concomitantly from 41% to 59%. Their data, however, also suggest that in 2016, more pediatricians considered lack of available treatment options to be a barrier to screening than did so in 2002 (21% vs 9%).

Although developmental screening, surveillance, and referral to services has long been an important aspect of pediatric primary care, the AAP issued its first policy statement calling for universal developmental screening in 2001.² The unique sampling frames queried with each Periodic Survey included in the current study preclude a true longitudinal analysis of individual-level practice changes; however, the current study represents an important barometer of screening and referral practices over the nearly 20 years since the AAP's initial policy statement. Notably, these years have been characterized by an epidemic of autism spectrum disorder diagnoses³ and increasing recognition of the effect of late preterm birth and adverse childhood experiences (both highly prevalent exposures) on children's

developmental trajectories.^{4,5} This period has also seen conflicting recommendations between the AAP and the US Preventive Services Task Force over screening for speech and language delay and autism spectrum disorder.⁶⁻⁹

Against this backdrop, and depending on one's disposition toward the evidence that supports developmental screening, the results of the Lipkin et al¹ study are likely to be seen as encouraging. At the same time, however, a full one-third of pediatricians still report not using formal screening instruments to detect children with developmental delays, and a greater proportion report not referring those with a positive screen result to EI. Commonly cited explanations for these enduring gaps include lack of time¹⁰ in modern pediatric practice settings and suboptimal reimbursement.¹¹

Although time and financial barriers are real, it is also likely that some of the residual gaps in guideline-concordant practice reflect variability among pediatricians in their perception of the clinical relevance of certain developmental problems that require formal instruments to identify and in the availability and effectiveness of services targeted to children with these less severe developmental issues. In other words, although the value of referring children with severe delays that are evident without a formal screen may be clear, there is a far broader population with developmental risk for whom the most appropriate course of action may not be seen as so straightforward. Although evidence has



Department of Pediatrics, School of Medicine, Boston University and Boston Medical Center, Boston, Massachusetts

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Address correspondence to Mei Elansary, MD, MPhil, Division of General Pediatrics, School of Medicine, Boston University, 801 Albany St, Boston, MA 02118. E-mail: mei.elansary@bmc.org

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highlighted the first years of life as a critical window¹² for improved long-term outcomes,^{13–15} existing systems of care do not always support children facing highly prevalent developmental risks such as late preterm birth¹⁶ and social deprivation,^{17,18} and in many places, EI lacks the capacity to offer them services. In this complicated web of changing epidemiology, time and reimbursement constraints, and service availability, many pediatricians default to what they know best: clinical judgment.

In a seminal article, Pantell et al¹⁹ demonstrated a similar phenomenon in the management of febrile infants. Across nearly 600 pediatric practitioners and >3000 febrile infants, the authors demonstrated that practitioners followed guidelines in only 42% of episodes; more importantly, however, they demonstrated that relying on guidelines would only have resulted in more hospitalizations without improving clinical care. In this framework, the improving but still suboptimal developmental screening and referral rates revealed in the current study should not be interpreted as a failure of the remaining one-third of pediatricians to practice guideline-concordant care. Rather, they are best viewed as a logical outcome of pediatricians' participation in an intricate, longitudinal process of case identification to which there is no universally accepted best practice. In each well-child visit, pediatricians engage in complex decision-making specific to individual families and local resources. Those who screen formally must integrate screening results with information accrued over time through clinical judgment and developmental surveillance and engage in shared decision-making with families. Thus, although screening guidelines have a role in promoting quality of care generally, they may have more applicability in some practice settings than in others.

Over the past 20 years, the issue of developmental screening has generated substantial interest, research, and debate. Practices have no doubt changed, and despite the discordance between the AAP and the US Preventive Services Task Force, the trend toward formalized screening and algorithm-based referral likely reflects a change for the better. However, the pediatrics community may have something to learn from the significant minority of pediatricians who do not practice formalized screening. As important as developing strategies to achieve more widespread developmental screening, therefore, is developing a greater understanding of the root causes of practice variation and determining the range of viable clinical practices that lead to better developmental outcomes.

ABBREVIATIONS

AAP: American Academy of Pediatrics
EI: early intervention

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