

# Formal Speech-Language Screening Not Shown to Help Children

Robert G. Voigt, MD<sup>a</sup>, Pasquale J. Accardo, MD<sup>b</sup>

Confirming its first report from 2006, in this issue of *Pediatrics*, the US Preventive Services Task Force (USPSTF) continues to find no evidence to suggest that speech-language screening improves speech and language outcomes.<sup>1,2</sup> This persistent lack of evidence accumulated across nearly a decade reveals that unlike simple laboratory screening for lead toxicity or dyslipidemia, child development represents a drastically more complex phenomenon that may present insurmountable obstacles to the process of simple screening.

Child development and screening have conflicting definitions. Child development is defined as the basic science of pediatrics<sup>3</sup>; it fundamentally distinguishes pediatrics from all other areas of medicine, and developmental disorders are among the most prevalent chronic medical conditions in daily pediatric practice.<sup>4</sup> Screening, in contrast, is defined as a process to be carried out by parents (rather than trained professionals), briefly and rapidly, for the purpose of separating children into those probably not in need of further evaluation from those who would probably benefit from more in-depth assessment.<sup>5</sup> Different screening tests that have been standardized to identify children at developmental risk have been found not to identify the same children,<sup>6</sup> and developmental screening tests have been reported not to function as well in actual practice settings as in validation studies.<sup>7</sup> Consistent with the USPSTF reports, it is incongruous to fathom that child development (the basic science of pediatrics) should rely on a process (developmental screening)

that possesses all the limitations inherent in instruments that rely on untrained, biased observers to make difficult judgments on complex behaviors.<sup>8</sup>

Pediatricians are not unskilled screeners who have brief contact with a child (or a parent's screening questionnaire form) but professionals who have ongoing relationships with children and their families. Child psychologists, educators, and speech-language pathologists each view child development from a slightly different perspective; pediatricians have their own perspective, which does not contradict these others but supplements them and has its own unique validity. Pediatricians are the professionals who have longitudinal contact with children and families, and they have available the child's entire medical, family, and developmental histories and can interpret developmental data within the broader context of the whole child. Just as a laboratory test is never interpreted in a vacuum, so no screening test result can be interpreted by itself. Developmental screening tests are certainly better than nothing; however, they serve merely to identify a chief complaint, not to supplant pediatric clinical judgment.

One in 6 children in the United States has a developmental disability, and the prevalence of autism spectrum disorder, attention-deficit/hyperactivity disorder, and other developmental delays has been increasing over time.<sup>9</sup> When a child fails a developmental screen, the American Academy of Pediatrics'

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<sup>a</sup>Department of Pediatrics, Baylor College of Medicine, Houston, Texas; and <sup>b</sup>Department of Pediatrics, Virginia Commonwealth University, Richmond, Virginia

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Address correspondence to Robert G. Voigt, MD, FAAP, Meyer Center for Developmental Pediatrics, Texas Children's Hospital, 8080 North Stadium Dr, Houston, TX 77054. E-mail: [rgvoigt@bcm.edu](mailto:rgvoigt@bcm.edu)

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Algorithm for Developmental Surveillance and Screening recommends subspecialty referral for a diagnostic developmental evaluation to make a developmental diagnosis.<sup>10</sup> However, of the 108 879 pediatricians currently certified by the American Board of Pediatrics, only 720 are board certified in developmental-behavioral pediatrics, and only 255 are board certified in neurodevelopmental disabilities.<sup>11</sup> Thus, referral for subspecialty diagnostic evaluation is a futile proposition for the vast majority of children who fail screening. Clinical judgment in developmental evaluation and diagnosis needs to be considered as basic to general pediatric practice as evaluating and diagnosing asthma and other common chronic medical conditions encountered daily in pediatric practice.

Instead of a focus on screening, the basic science of pediatrics requires a process that exploits the clinical judgment acquired through the rigorous pediatric residency training experience. Pediatric residents develop competence and confidence in their clinical judgment across organ systems, and they cannot graduate from residency training unless their program directors' verify that they have demonstrated sufficient competence to enter practice without direct supervision.<sup>12</sup> Given child development's status as the basic science of pediatrics, the high prevalence of developmental disorders in general pediatric practice, and the scarcity of subspecialists to whom to refer; the ability to evaluate development clinically and make developmental diagnoses, rather than simple screening, needs to become a line item of competence for which every graduating pediatric resident is certified.

Unfortunately, the Accreditation Council of Graduate Medical Education Program Requirements for Graduate Medical Education in Pediatrics currently mandate only a 4-week subspecialty experience in developmental-behavioral pediatrics.<sup>12</sup> This represents a distressing mismatch between the amount of training received and future demands in daily pediatric practice. A substantial expansion of required subspecialty exposure to developmental evaluation and diagnosis during pediatric residency training should lead to increased confidence in using clinical judgment to address developmental concerns just like any other commonly presenting concern in daily pediatric practice. Such enhanced pediatrician competence in evaluation and diagnosis of the basic science of pediatrics might ultimately provide evidence for improved outcomes, which has so far been lacking in the USPSTF studies of screening.

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