McPheeters et al provided a systematic review of the evidence that was used by the US Preventive Services Task Force (USPSTF) to make its recent recommendations on universal autism screening. The USPSTF concluded that there is currently insufficient evidence to assess the benefits of universal screening for autism spectrum disorder (ASD) in young children. In particular, the USPSTF noted that no study has directly compared the long-term outcomes of screened vs non-screened children and, further, studies of the efficacy of early ASD treatment have not been based on samples identified through screening. Thus, the USPSTF concludes that the long-term benefits and harms of screening in the general population cannot yet be determined.

The report was met with considerable controversy. The president of the American Academy of Pediatrics (AAP) promptly issued a statement noting that the USPSTF recommendations “run counter to AAP guidelines” and that the “AAP remains committed to its recommendation for the timely screening and identification of children who benefit from early intervention and treatment.”

Autism advocacy organizations and US Reps Chris Smith and Mike Doyle, co-chairs of the Congressional Autism Caucus, urged the USPSTF to reconsider their recommendations on universal autism screening. What then is the basis of this controversy?

The AAP and other professional and advocacy organizations that support universal autism screening have based their current practice guidelines on several research findings, which are described in the review by McPheeters et al. First, autism is a prevalent condition, affecting 1 in 68 children in the United States, and associated with significant short- and long-term burdens. The lifetime cost of supporting an individual with ASD is estimated to be $1.4 million. That cost is $2.4 million for those who also have an intellectual disability.

Second, current autism screening tools, while not perfect, adequately detect ASD in children between approximately 18 and 36 months in age. The most commonly used tool is a parent questionnaire that requires little training by the health care professionals and takes less than 5 minutes to complete. If a child’s score falls in a questionable range, then an additional 5 to 10 minutes of follow-up questions are needed. Large studies conducted in community primary care settings have found that, of those children who fail the screen, about 50% will be diagnosed with ASD, and 98% will have an actionable developmental concern. Although the data on false negatives are scant, the available evidence suggests that the current screening tool does not miss a substantial number of children. All children who fail the screen can be referred for infant-toddler assessment and intervention services through Part C of the Individuals with Disabilities and Education Act, a program supported by a federal grant established in 1986 by Congress.

Third, studies have shown that screening leads to earlier referral and diagnosis. Most children identified through screening have not been previously identified by either the pediatrician or a parent. Children who are screened, on average, are diagnosed earlier and thus receive services at an earlier age. This finding is especially significant for African American and Hispanic children, who tend to be diagnosed and access services at a later age than do white children. The majority of states have passed legislation that mandates insurance benefits for early intervention for children with diagnosed ASD. Finally, studies evaluating the efficacy of early intervention show significant improvements in cognitive and language outcomes, and a younger age of enrollment in treatment has been shown to result in better outcomes.

In short, research has shown that universal screening leads to earlier diagnosis and earlier access to intervention and, further, that earlier intervention leads to better outcomes; however, no study has yet been conducted that examines whether screening, per se, leads to better outcomes. Such a study would require a large representative group of children from the general population to be randomly assigned to receive or not receive autism screening and then be followed up longitudinally to assess the impact of screening on the long-term outcomes of these children and their families, as well as the overall societal cost. Studies on the efficacy of early intervention in samples of children younger than 3 years who were identified through screening are also needed.

Interventions appropriate for children with ASD younger than 3 years have been developed and evaluated. A systematic review of 24 studies related to intervention for children with ASD younger than 3 years was recently published. Compared with interventions for preschool-aged children, interventions for children younger than 3 years more often intensively involve parents and use naturalistic developmental behavioral approaches. Such interventions usually are delivered by parents in the context of everyday routines and the parents’ interactions with their children, and all are designed to promote learning, engagement, and communication and reduce behavioral challenges. The review identified 6 randomized clinical trials that assessed the efficacy of intervention in children with ASD younger than 3 years, with treatments ranging...
while continuing to advance our knowledge about the full impact of autism screening.

REFERENCES


