Screening for Autism Spectrum Disorder in Young Children: Recommendation Statement

As published by the U.S. Preventive Services Task Force.

This summary is one in a series excerpted from the Recommendation Statements released by the USPSTF. These statements address preventive health services for use in primary care clinical settings, including screening tests, counseling, and preventive medications.

The complete version of this statement, including supporting scientific evidence, evidence tables, grading system, members of the USPSTF at the time this recommendation was finalized, and references, is available on the USPSTF website at http://www.uspreventiveservicestaskforce.org/.

This series is coordinated by Sumi Sexton, MD, Associate Deputy Editor.


Summary of Recommendation and Evidence
The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for autism spectrum disorder (ASD) in young children for whom no concerns of ASD have been raised by their parents or a clinician (Table 1). I statement.

See the Clinical Considerations for suggestions for practice regarding the I statement.

Rationale

IMPORTANCE
ASD is a developmental disorder characterized by persistent and significant impairments in social interaction and communication and restrictive and repetitive behaviors and activities, when these symptoms cannot be accounted for by another condition. In 2010, the prevalence of ASD in the United States was estimated at 14.7 cases per 1,000 children, or 1 in 68 children, with substantial variability in estimates by region, sex, and race/ethnicity.1

DETECTION
The USPSTF found adequate evidence that currently available screening tests can detect ASD among children aged 18 to 30 months.

BENEFITS OF EARLY DETECTION AND INTERVENTION OR TREATMENT
The USPSTF found inadequate direct evidence on the benefits of screening for ASD in toddlers and preschool-age children for whom no concerns of ASD have been raised by family, clinician, or teacher concerns, the USPSTF found inadequate evidence on the efficacy of treatment of cases of ASD detected through screening or among very young children. Treatment studies were generally very small, few were randomized trials, most included children who were older than would be identified through screening, and all were in clinically referred rather than screen-detected patients.

HARMS OF EARLY DETECTION AND INTERVENTION OR TREATMENT
The USPSTF found that the harms of screening for ASD and subsequent interventions are likely to be small based on evidence about the prevalence, accuracy of screening, and likelihood of minimal harms from behavioral interventions.

USPSTF ASSESSMENT
The USPSTF concludes that there is insufficient evidence to assess the balance of benefits and harms of screening for ASD in children aged 18 to 30 months for whom no concerns of ASD have been raised. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Clinical Considerations

PATIENT POPULATION UNDER CONSIDERATION
This recommendation applies to children who have not been diagnosed with ASD or developmental delay and for whom no concerns of ASD have been raised by family members, other caregivers, or health care professionals.

SCREENING TESTS
A number of tests are available for screening for ASD in children younger than 30 months. The most commonly studied tool is the Modified Checklist for Autism in
Toddlers (M-CHAT) and its subsequent revisions (Modified Checklist for Autism in Toddlers With Follow-Up [M-CHAT-F] and Modified Checklist for Autism in Toddlers–Revised, With Follow-Up [M-CHAT-R/F]). The M-CHAT-R/F is a parent-rated scale, and a positive finding leads to a follow-up interview. If the follow-up interview is positive, a full diagnostic workup for ASD is indicated. The screening process assesses communication skills, joint attention, repetitive movement, and pretend play.

TREATMENTS AND INTERVENTIONS

Treatments for ASD include behavioral, medical, educational, speech/language, and occupational therapy and complementary and alternative medicine approaches. Treatments for young children are primarily behavioral interventions, particularly early intensive behavioral and developmental interventions.

Balance of benefits and harms

The USPSTF concludes that there is insufficient evidence to assess the balance of benefits and harms of screening for ASD in young children for whom no concerns of ASD have been raised.

Other relevant USPSTF recommendations

The USPSTF has made a recommendation on screening for speech and language delays and disorders among children 5 years or younger. This recommendation is available on the USPSTF website (http://www.uspreventiveservicestaskforce.org).
children by race/ethnicity, socioeconomic status, and language of origin, creating concern that certain groups of children with ASD may be systematically underdiagnosed. It is important to note that an “I” statement is not a recommendation for or against screening. In the absence of evidence about the balance of benefits and harms, clinicians should use their clinical judgment to decide if screening in children without overt signs and symptoms is appropriate for the population in their care.

**Potential Harms.** Although there is limited evidence about the harms of screening for ASD in children, reported potential harms include misdiagnosis and the anxiety associated with further testing after a positive screening result, particularly if confirmatory testing is delayed because of resource limitations. Behavioral treatments are not generally thought to be associated with significant harms but can place a large time and financial burden on the family. Other treatments for ASD are less well studied and were not included in this review.

**Current Practice.** A 2004 survey of pediatricians in Maryland and Delaware found that 8% screened specifically for ASD. Few data are available regarding the current prevalence of screening for ASD by clinicians in the United States. More recent surveys have found higher rates, although they remain less than 60%. 5-8

**USEFUL RESOURCES**


The Health Resources and Services Administration’s website provides links to training resources for professionals (available at http://mchb.hrsa.gov/programs/autism/trainingforprofessionals.html).

The M-CHAT screening tool is available online for free at https://m-chat.org/. Other professional and advocacy organizations have also developed toolkits and resources.

The USPSTF has made a recommendation on screening for speech and language delays and disorders among children 5 years or younger (available at http://www.uspreventiveservicestaskforce.org).

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The USPSTF recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

**REFERENCES**


