U.S. Preventive Services Task Force

Screening for Speech and Language Delay and Disorders in Children Aged 5 Years or Younger: 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 Medical Editor.

A collection of USPSTF recommendation statements published in *AFP* is available at http://www.aafp.org/afp/uspstf.

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 speech and language delay and disorders in children aged 5 years or younger *(Table 1)*. **I statement.**

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

Rationale

IMPORTANCE

Speech and language delays and disorders can pose significant problems for children and their families. Children with speech and language delays develop speech or language in the correct sequence but at a slower rate than expected, whereas children with speech and language disorders develop speech or language that is qualitatively different from typical development. Differentiating between delays and disorders can be complicated. First, screening instruments have difficulty distinguishing between the two. Second, although the majority of school-aged children with language disorders present with language delays as toddlers, some children outgrow their language delay.[1]

Information about the prevalence of speech and language delays and disorders in young children in the United States is limited. In 2007, about 2.6% of children ages 3 to 5 years received services for speech and language disabilities under the Individuals with Disabilities Education Act (IDEA).[2] In 1 population-based study in 8-year-olds in Utah, the prevalence of children with communication disorders (speech or language) on the basis of special education or *International Classification of Diseases, Ninth Revision*, classifications was 63.4 cases per 1,000 children.[3] The prevalence of isolated communication disorders (i.e., children without a concomitant diagnosis of autism spectrum disorder or intellectual disability) was 59.1 cases per 1,000 children.

Information on the natural history of speech and language delays and disorders, including how outcomes may change as a result of screening or treatment, is also limited.

DETECTION

The USPSTF found inadequate evidence on the accuracy of screening instruments for speech and language delay for use in primary care settings. Several factors limited the applicability of the evidence to routine screening in primary care settings.

The USPSTF also found inadequate evidence on the accuracy of surveillance (active monitoring) by primary care clinicians to identify children for further evaluation for speech and language delays and disorders.

BENEFITS OF EARLY DETECTION AND INTERVENTION

The USPSTF found inadequate evidence on the benefits of screening and early intervention for speech and language delay and disorders in primary care settings.

The USPSTF found inadequate evidence on the effectiveness of screening in primary care settings for speech and language delay and disorders on improving speech, language, or other outcomes. Although the USPSTF found evidence that interventions improve some measures of speech and language for some children, there is inadequate evidence on the effectiveness

of interventions in children detected by screening in a primary care setting.

The USPSTF found inadequate evidence on the effectiveness of interventions for speech and language delay and disorders on outcomes not specific to speech (e.g., academic achievement, behavioral competence, socioemotional development, and quality of life).

HARMS OF EARLY DETECTION AND INTERVENTION

The USPSTF found inadequate evidence on the harms of screening in primary care settings and interventions for speech and language delay and disorders in children aged 5 years or younger.

USPSTF ASSESSMENT

The USPSTF concludes that the evidence is insufficient, and that the balance of benefits and harms of screening and interventions for speech and language delay and disorders in young children in primary care settings cannot be determined.

Clinical Considerations

PATIENT POPULATION UNDER CONSIDERATION

This recommendation applies only to asymptomatic children whose parents or clinicians do not have specific concerns about their speech, language, hearing, or development. It does not apply to children whose parents or clinicians raise those concerns; these children should undergo evaluation and, if needed, treatment.

This recommendation discusses the identification and treatment of "primary" speech and language delays and disorders (i.e., in children who have not been previously

Table 1. Screening for Speech and Language Delay and Disorders in Children Aged 5 Years or Younger: Clinical Summary of the USPSTF Recommendation

Population	Asymptomatic children aged ≤ 5 years whose parents or clinicians do not have specific concerns about their speech, language, hearing, or development
Recommendation	No recommendation Grade: I statement (insufficient evidence)
Risk assessment	Risk factors that have been reported to be associated with speech and language delay and disorders include male sex, family history of speech and language impairment, low parental education level, and perinatal risk factors (e.g., prematurity, low birth weight, and birth difficulties).
Screening tests	The USPSTF found inadequate evidence on specific screening tests for use in primary care settings. Widely used screening tests in the United States include the Ages and Stages Questionnaire, the Language Development Survey, and the MacArthur-Bates Communicative Development Inventory.
Treatment and interventions	Interventions for childhood speech and language disorders vary widely and can include speech-language therapy sessions and assistive technology (if indicated). Interventions are commonly individualized to each child's specific pattern of symptoms, needs, interests, personality, and learning style.
Balance of benefits and harms	The current evidence is insufficient to assess the balance of benefits and harms of screening and interventions for speech and language delay and disorders in young children in primary care settings.
Other relevant USPSTF recommendations	The USPSTF recommends screening for hearing loss in all newborn infants, and is developing a recommendation on screening for autism spectrum disorder in young children (available at http://www.uspreventiveservicestaskforce.org).

NOTE: *For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement, and supporting documents, go to http://www.uspreventiveservicestaskforce.org/.*

USPSTF = U.S. Preventive Services Task Force.

identified with another disorder or disability that may cause speech or language impairment).

SUGGESTIONS FOR PRACTICE REGARDING THE I STATEMENT

Potential Preventable Burden. Information about the prevalence of speech and language delays and disorders in young children in the United States is limited. In 2007, about 2.6% of children ages 3 to 5 years received services for speech and language disabilities under IDEA.[2]

Childhood speech and language disorders include a broad set of disorders with heterogeneous outcomes. Information about the natural history of these disorders is limited, because most affected children receive at least some type of intervention. However, there is some evidence that young children with speech and language delay may be at increased risk of language-based learning disabilities.[4]

Potential Harms. The potential harms of screening and interventions for speech and language disorders in young children in primary care include the time, effort, and anxiety associated with further testing after a positive screen, as well as the potential detriments associated with diagnostic labeling. However, the USPSTF found no studies on these harms.

Current Practice. Surveillance or screening for speech and language disorders is commonly recommended as part of routine developmental surveillance and screening in primary care settings (i.e., during well-child visits).[5] In practice, however, such screening is not universal. The previous evidence review[6] found that 55% of parents reported that their toddler did not receive any type of developmental assessment at their well-child visit, and 30% of parents reported that their child's health care provider had not discussed with them how their child communicates.[7] In a 2009 study, approximately half of responding pediatricians reported that they "always or almost always" use a standardized screening tool to detect developmental problems in young children; about 40% of respondents reported using the Ages and Stages Questionnaire (ASQ).[8] The USPSTF distinguishes between screening in primary care settings and diagnostic testing, which may occur in other settings.

ASSESSMENT OF RISK

Based on a review of 31 cohort studies, several risk factors have been reported to be associated with speech and language delay and disorders, including male sex, family history of speech and language impairment, low parental education level, and perinatal risk factors (e.g., prematurity, low birth weight, and birth difficulties).[9]

SCREENING TESTS

The USPSTF found inadequate evidence on specific screening tests for use in primary care. Widely used screening tests in the United States include the ASQ, the Language Development Survey (LDS), and the MacArthur-Bates Communicative Development Inventory (CDI).

INTERVENTIONS

Interventions for childhood speech and language disorders vary widely and can include speech-language therapy sessions and assistive technology (if indicated). Interventions are commonly individualized to each child's specific pattern of symptoms, needs, interests, personality, and learning style. Treatment plans also incorporate the priorities of the child, parents, and/or teachers. Speech-language therapy may take place in various settings, such as speech and language specialty clinics, the school or classroom, and the home. Therapy may be administered on an individual basis and/or in groups, and may be child-centered and/or include peer and family components. Therapists may be speech-language pathologists, educators, or parents. The duration and intensity of the intervention depend on the severity of the speech or language disorder and the child's progress in meeting therapy goals.

OTHER APPROACHES TO PREVENTION

The USPSTF recommends screening for hearing loss in all newborn infants (B recommendation). The USPSTF is developing a recommendation on screening for autism spectrum disorder in young children. These recommendations are available on the USPSTF Web site (http://www.uspreventiveservicestaskforce.org).

USEFUL RESOURCES

All states have designated programs that offer evaluation and intervention services to children ages 0 to 5 years. IDEA is a law that ensures early intervention, special education, and related services for children with disabilities in the United States. Infants and toddlers (birth to age 2 years) with disabilities and their families may receive early intervention services under IDEA part C, whereas children and adolescents (ages 3 to 21 years) may receive special education and related services under IDEA part B.[10]

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The "Other Considerations," "Discussion," "Update of Previous USPSTF Recommendation," and "Recommendations of Others" sections of this recommendation statement are available at http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/speech-and-language-delay-and-disorders-in-children-age-5-and-younger-screening.

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