Screening for Autism Spectrum Disorder in Young Children

David Grossman, M.D., MPH

Vice-Chair, US Preventive Services Task Force

U.S. Preventive Services TASK FORCE

Task Force Overview

- The U.S. Preventive Services Task Force’s recommendations are based on a rigorous review of existing peer-reviewed evidence and are intended to help primary care clinicians and patients decide together whether a preventive service is right for a patient's needs.

Task Force Overview (continued)

The U.S. Preventive Services Task Force …

- Makes recommendations based on rigorous review of existing peer-reviewed evidence
    - Does not conduct the research studies, but reviews and assesses the research
    - Evaluates benefits and harms of each service based on factors such as age and sex
- Is an independent panel of experts in prevention and evidence-based medicine
- Methodology is transparent and available on website. Same methods used for all preventive services for children and adults.

Task Force Recommendation Grades

Grade	Definition
A	The USPSTF recommends the Service. There is high certainly that the net benefit is substantial.
B	The USPSTF recommends the Service. There is high certainty that the net benefit is moderate, or there is moderate certainty that the net benefit is moderate to substantial.
C	The USPSTF recommends selectively offering or providing this Service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.
D	The USPSTF recommends against the Service. There is moderate or high certainty that the Service has no net benefit or that the harms outweigh the benefits.
1 Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the Service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Draft Recommendation Process

- To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including the **draft recommendation statement**. All comments are reviewed and considered in developing the final recommendation statement.

Screening for Autism Spectrum Disorder

- In August, the Task Force issued, for the first time, a draft recommendation statement on screening for autism in young children.
- The Task Force cares deeply about helping children with autism and their families get the care and support they need.

Autism Spectrum Disorder in Children Under Age Three Years: Screening

Draft Recommendation August 2015

- 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 children for whom no concerns of ASD have been raised by their parents or clinical provider.

This is an

I

statement.

This draft recommendation was posted for public comment at www.uspreventiveservicestaskforce.org/tfcomment from Aug. 3-Aug. 31, 2015.

Autism Spectrum Disorder in Children Under Age Three Years: Screening

Draft Recommendation August 2015 Clarifications

- An I Statement is NOT a recommendation against screening
  - An I Statement is <u>a call for additional research to close specific gaps identified</u>
    - High-quality evidence with internal and external validity for the benefits of treatment is inadequate for children under age 3 and screen-detected populations
  - Gaps identified from 'I' statements are high-priority areas and are outlined in an annual Report to Congress
  - USPSTF finds that potential harms of screening and behavioral treatments are likely low

Autism Spectrum Disorder in Children Age Three Years: Screening

Draft Recommendation August 2015 Clarifications

- Clinicians are advised to use clinical judgment in areas of uncertainty around screening
- I Statement on autism screening from the USPSTF will not influence insurance coverage
    - The ACA mandates coverage for autism screening based on the Bright Futures recommendation
- Task Force recommendations, including I Statements, do not apply to case-finding, or the type of targeted testing used to follow up on concerns raised by parents, caregivers or a child's healthcare provider

Autism Spectrum Disorder in Children Under Age Three Years: Screening

- Trial designs are available that would help close the research gaps:
  - Randomized screening trials with invitation to screen in early childhood
    - Vs. no screening
    - Vs. late screening
    - Vs. late vs. no screening
  - OR: Randomized trials focused on treatment of 1-3 year old children identified through screening

Summary

- USPSTF believes that important research progress has been made in the areas of :
  - Treatment trials of clinically identified, older children
  - Identification of accurate and valid screening tools
- The ideal scientific trajectory is:

Clinical identification → Treatment trials → Screening tests development → Screening trials → Screening programs

Summary

- The Task Force believes that children and their families deserve to know what works when it comes to screening for autism
  - We owe it to our children to execute high-quality studies that can help us fill in the research gaps
- The Task Force applauds the work the IACC partners have done thus far to help identify potential causes of, tools for diagnosis of, and potential treatments for autism
  - The next step is to focus research efforts on new trials

Thank you for your interest

www.USPreventiveServicesTaskForce.org

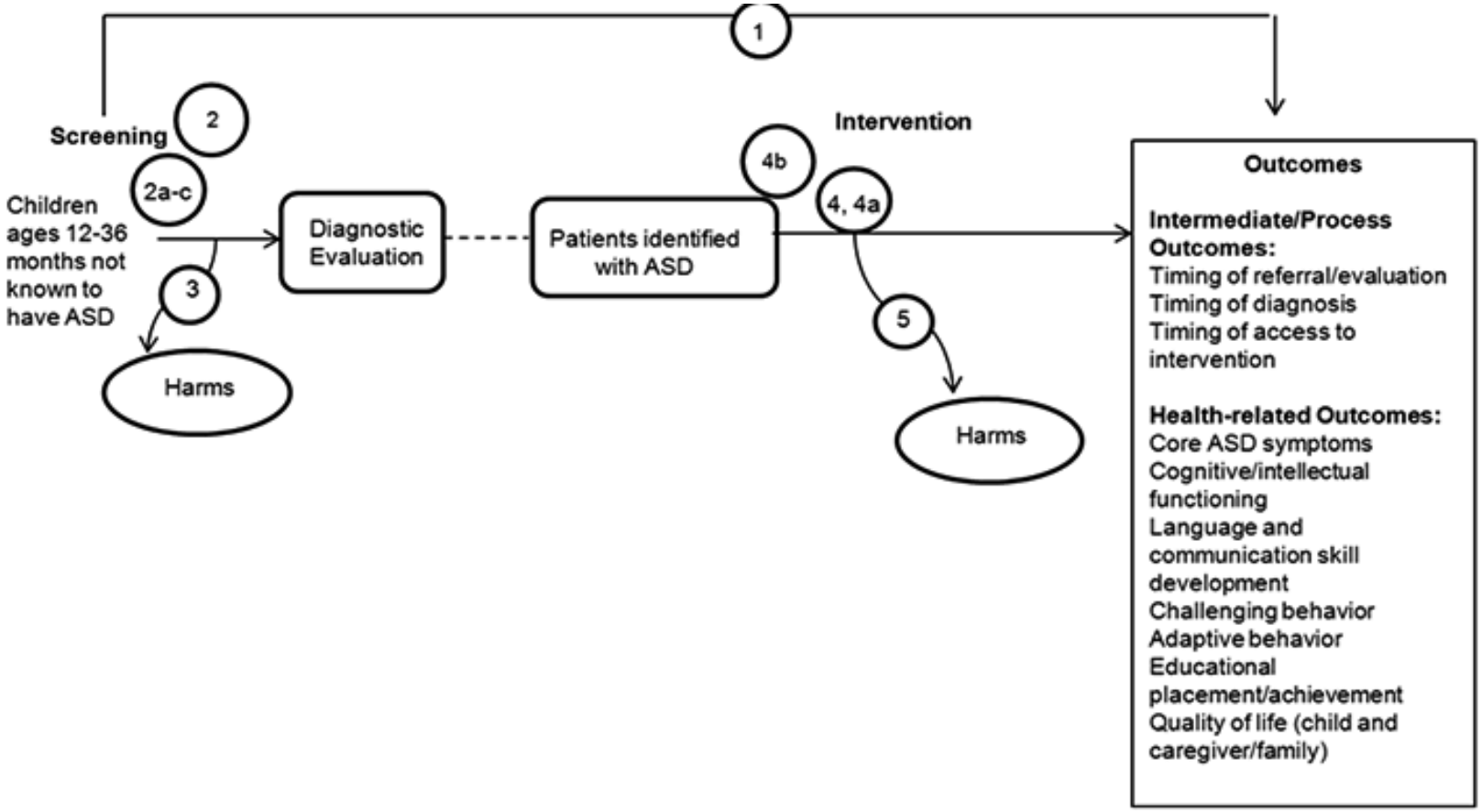
Autism Spectrum Disorder in Children Under Age Three Years: Screening

Draft Recommendation August 2015 Supporting Evidence

- What USPSTF does NOT do:
  - Use expert opinion to make recommendations when faced with inadequate evidence
  - Extrapolate evidence
  - Make insurance coverage recommendations

Autism Spectrum Disorder in Children Under Age Three Years: Screening

Draft Recommendation August 2015 Clarifications



Autism Spectrum Disorder in Children Under Age Three Years: Screening

Criteria Used for Judging Adequacy of an Evidence Base:

1. Do the studies have the appropriate research design to answer the key question(s)?

2. To what extent are the existing studies of sufficient quality (i.e., what is the internal validity)?

3. To what extent are the results of the studies generalizable to the general U.S. primary care population of interest to the intervention and situation (i.e., what is the applicability)?

4. How many and how large are the studies that address the key question(s)? Are the results precise?

5. How consistent are the results of the studies?

6. Biologic Plausibilty

WHO Criteria for Screening Program Feasibility

- Does this disease represent a significant health problem (morbidity, mortality, prevalence, quality of life, etc)?
- Is there an effective treatment for it?
- Does earlier intervention lead to a better outcome?
    - Is the natural history of the disease known, and is there a recognizable latent stage or early symptomatic stage during which screening could be applied?
    - Will treatment at this early stage decrease mortality and morbidity? For what fraction of cases?
- Is there a screening test that is valid, suitable and acceptable?
- Is there a defined population that can benefit from the screening program? Who are they?
- Is the optimal interval between screening tests known?