

SOLVING THE PUZZLE:

ELIMINATING HEALTHCARE DISPARITIES IN THE DIAGNOSIS AND TREATMENT OF ASD

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SPEAKER DISCLOSURES

✓ I have no conflicts of interest to disclose.



OBJECTIVES

- 1. Gain awareness of disparities in ASD diagnosis and treatment.
- 2. Learn strategies to address these disparities within the context of early childhood screening.
- 3. Gain practical steps to support patients and families following a positive ASD screen.

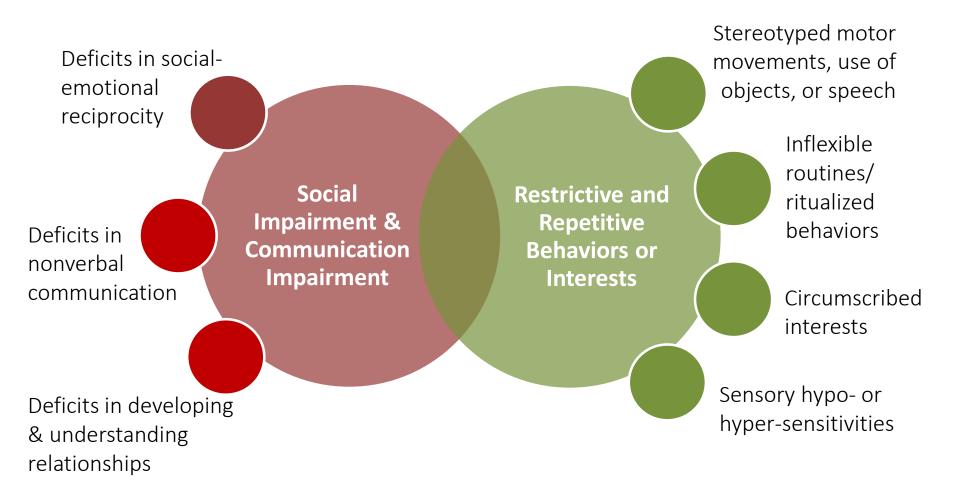


Overview

AUTISM SPECTRUM DISORDER



AUTISM SPECTRUM DISORDER





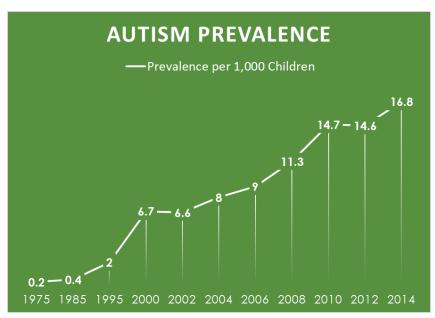
ASSOCIATED CONDITIONS

- Language impairments
- Motor deficits (e.g., odd gait, clumsiness, toewalking)
- Sleep disorders
- Gastrointestinal problems (e.g., chronic constipation or diarrhea)
- Seizure disorders

- Restrictive eating
- Behavioral problems (e.g., self-harm, tantrums, elopement)
- Psychiatric conditions (e.g., anxiety, depression)
- Cognitive impairments (e.g., intellectual disability, executive function deficits)



AUTISM PREVALENCE

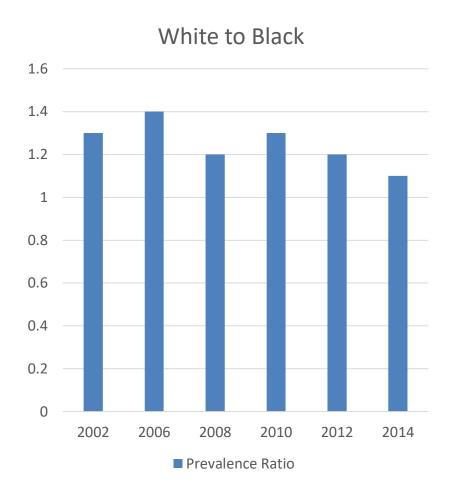


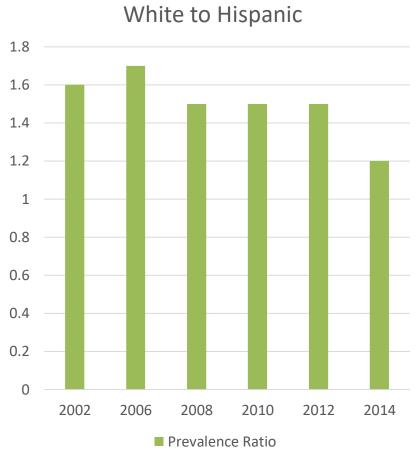
CDC's Autism and Development Disabilities Monitoring (ADDM)
Network 2000-2014 combined data from all sites

- Current prevalence rate = 1 in 54¹
- Prevalence by sex
 - Significantly higher rate of ASD among boys than girls (4:1)
- Prevalence by race/ethnicity
 - 7% higher in white than black children
 - 22% higher in white than
 Hispanic children
- Prevalence by SES
 - Higher identified ASD prevalence in neighborhoods with higher SES



RELATIVE INCREASES IN ASD

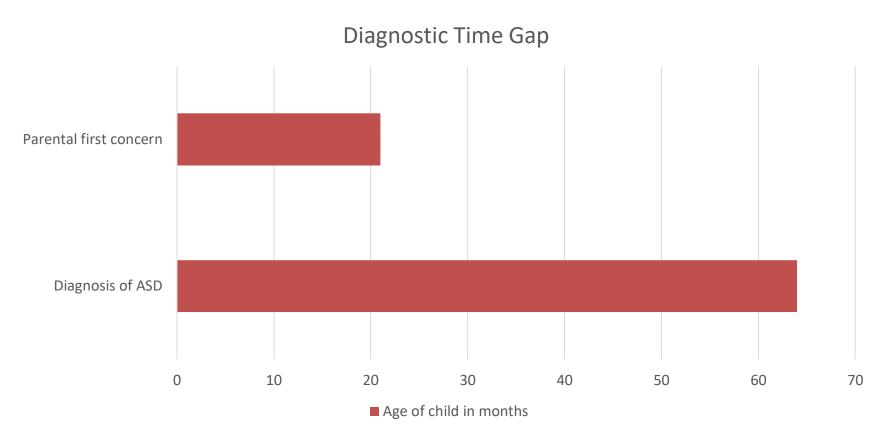




Community Report on ASD 2018



AGE AT DIAGNOSIS



Zablotsky et al. (2017); Zuckerman et al. (2020)



RACIAL/ETHNIC INCONGRUENCIES

- Racial disparities in the age of diagnosis
 - African American and multiracial children diagnosed later than white children
 - Hispanic ethnicity (English-speaking families) not found to be risk factor for age of diagnosis disparities
- Several studies found no difference in age of parents' first concern

Short & Schopler (1988); Ellingson et al. (2004); Mandell et al. (2002); Mandell et al. (2009); Rosenberg et al. (2011); Twyman et al. (2009)



Autism Spectrum Disorder

EARLY CHILDHOOD SCREENING



ASD SCREENING GUIDELINES

- US Prevention Services Task Force
 - Insufficient evidence to recommend for or against universal screening because of limited data on:
 - Outcomes of children who screen negative
 - From diverse samples
- American Academy of Pediatrics
 - Autism-specific Screening at 18 and 24 months of age.
 - Does not endorse specific screening tool.



MODIFIED CHECKLIST FOR AUTISM IN TODDLERS (M-CHAT-R/F)

M-CHAT-R™

Please answer these questions about your child. Keep in mind how your child <u>usually</u> behaves. If you have seen your child do the behavior a few times, but he or she does not usually do it, then please answer no. Please circle <u>yes or no</u> for every question. Thank you very much

child do the behavior a few times, but he or she does not usually do it, then please answer no. P for every question. Thank you very much.	lease circle	e yes <u>or</u> no
 If you point at something across the room, does your child look at it? (FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?) 	Yes	No
Have you ever wondered if your child might be deaf?	Yes	No
Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?)	Yes	No
 Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs) 	Yes	No
Does your child make <u>unusual</u> finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?)	Yes	No
Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach)	Yes	No
Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road)	Yes	No
 Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?) 	Yes	No
 Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck). 	Yes	No
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?)	Yes	No
11. When you smile at your child, does he or she smile back at you?	Yes	No
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noise such as a vacuum cleaner or loud music?)	Yes	No
13. Does your child walk?	Yes	No
14. Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her?	Yes	No
 Does your child try to copy what you do? (FOR EXAMPLE, wave bye-bye, clap, or make a funny noise when you do) 	Yes	No
16. If you turn your head to look at something, does your child look around to see what you are looking at?	Yes	No
17. Does your child try to get you to watch him or her? (FOR EXAMPLE, does your child look at you for praise, or say "look" or "watch me"?)	Yes	No
18. Does your child understand when you tell him or her to do something? (FOR EXAMPLE, if you don't point, can your child understand "put the book on the chair" or "bring me the blanket"?)	Yes	No
19. If something new happens, does your child look at your face to see how you feel about it? (FOR EXAMPLE, if he or she hears a strange or funny noise, or sees a new toy, will he or she look at your face?)	Yes	No
Does your child like movement activities? (FOR EXAMPLE, being swung or bounced on your knee)	Yes	No

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- 2 stage screener
 - Stage 1: Questionnaire
 - 0-2 = low risk
 - 3-7 = moderate risk
 - 8-20 = high risk
 - Stage 2: Interview
 - Administer follow-up when M-CHAT-R score = moderate risk
 - If follow-up score > or = 2, refer for evaluation
- Sensitivity = 39%
- PPV = 15%

Guthrie et al. (2019)



RACIAL/ETHNIC INCONGRUENCIES

- Specificity and PPV higher in:
 - White children than black, Asian, or multi-racial children
 - English-only exposure compared to non-English exposure

Cultural Translation

- Some questions may not translate culturally.
- May make inaccurate assumptions about caregiving systems.



SCREENING TOOL FOR AUTISM IN TODDLERS (STAT)



User's Manual ages 24 - 36 months

Psychometric properties:

- Ages 24-36 months
 - Sensitivity = .83
 - Specificity = .86
 - Concurrent validity with ADOS = .95
- Ages 14-24 months
 - Sensitivity = .93
 - Specificity = .73
 - PPV = .68
 - NPV = .97



SCREENING OF RACIAL/ETHNIC MINORITIES

 Psychometric properties for the STAT with racial/ethnic minorities or non-English speakers has not yet been studied.

Holds the potential to minimize cross-cultural misinterpretations

Eliminates reporter accuracy problems



TAKEAWAYS

- Universal screening:
 - Reduces age of diagnosis and, in turn, facilitates early intervention.
 - Holds potential to minimize influence of provider bias, if instruments are validated for racial/ethnic groups.

 It is important to understand the limits of screening tools.



Autism Spectrum Disorder

SHARED DECISION MAKING



SHARED DECISION MAKING (SDM)

- Decisions are collaboratively made by providers and patients, informed by evidence and weighted according to families' goals and values.
- Meta-analysis of over 100 RCTs found that SDM:
 - Improves patients' knowledge about treatment options
 - Provides patients with clarity about their healthrelated values
 - Increases patients' treatment adherence
 - Improves health outcomes



SDM AND HEALTH CARE DISPARITIES

- PCPs less likely to do the following with BIPOC than White patients:
 - Use open-ended questions
 - Elicit details
 - Allow opportunities for patients to ask questions
 - Provide information on conditions

Matthew (2015)



PARENT COMMUNICATION ENGAGEMENT AT WELL-VISITS

LILJENQUIST ET AL., IN PROGRESS

Objective

 To assess parent conversation engagement patterns during WCC visit for children 2-24 months old

Study Design

Audio recording of 87 WCC visits (n=44 English visits; n=43 Spanish visits) across 10 FQHCs were analyzed



DEVELOPMENT AND BEHAVIOR

Parent Information Giving	English Speaking	Spanish Speaking
Cognitive Skills	9	0
Expressive Language	41	12
Fine Motor Skills	18	1
Gross Motor Skills	42	14
Receptive Language	5	0
Social/Emotional Development	24	4
Parent Question Asking		
Cognitive Skills	6	0
Expressive Language	4	0
Fine Motor Skills	1	0
Gross Motor Skills	5	5
Receptive Language	1	0
Social/Emotional Development	2	0



SDM TOOL

Choice Cards:

 Meant to be presented to families during the appointment for the purpose for the purpose of guiding a discussion.

Caregiver Booklet:

 Meant to be sent home with families so they can review and rate treatment options based on their fit with family values and goals.



Autism Screening and Evaluation

A Decision Making Tool for Families and Their Primary Care Providers







AUTISM OVERVIEW

Autism Overview

What is Autism Spectrum Disorder (ASD)?

Autism spectrum disorder (ASD) is a disability that impacts development. The two main components of ASD are:

- Challenges with communication and social interaction
- 2. Repetitive or unusual behaviors



What does is mean if my child has a positive screen? screen for risk

A positive screen means that your child has some symptoms for ASD. Your provider should take a closer look to make sure everything is okay. A positive screen does not mean that your child has ASD.

How is ASD diagnosed?

A specialist will meet with a family and ask questions to learn about their child's behavior. The specialist will also observe the child through a series of activities or tasks.



Myths and Facts About ASD

What causes ASD?

Autism is largely a genetic condition. However, we have a lot to learn about other factors that may contribute to ASD.

Myth: Autism is caused by certain vaccines.

Fact: No studies have found any relationship between vaccinations and autism.

Myth: Autism is caused by cold or distant parents.

Fact: There is no relationship between parenting practices and ASD.

Can autism be cured?

Myth: Yes.

<u>Fact</u>: There is no known cure for ASD. However, there are several therapies that can be beneficial for children with autism. Evidence-based therapies for ASD include:

- · Applied Behavioral Analysis (ABA) therapy
- · Speech-language pathology
- Occupational therapy

ASD therapies are most beneficial when started early

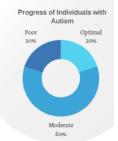
What does the future look like for a child diagnosed with ASD?

Myth: Children with autism can't learn or develop.

<u>Fact</u>: Of individuals diagnosed with ASD, about 20% will make optimal progress and 60% will make moderate

We cannot predict which group a child will be in. This can be difficult for caregivers. We encourage caregivers to accept that their children will develop at their own pace.

Therapies can help children learn skills for everyday life.





NEXT STEPS



WATCHFUL WAITING

Description

Watchful waiting means you do not actively start the evaluation process or enrolling your child in therapies. You and your doctor keep an eye on how your child is developing.

Benefits

- · This is a no-cost option.
- · You avoid unnecessary labeling of your child.
- · You can start active treatment at any time.

Downsides X

- You lose time. Children with autism tend to have better outcomes if they start interventions earlier.
- It is possible that your child's symptoms will worsen.

AUTISM DIAGNOSTIC EVALUATION



Description

An evaluation will help you determine whether your child's symptoms are best explained by ASD. If ASD is diagnosed, the examiner will recommend specific therapies, supports and/or resources.

Benefits

- A diagnosis provides clarity around your child's behavior and development.
- The more you understand your child's particular needs, the better you can help them.
- Certain services and resources are only accessible with an autism diagnosis.

Downsides X

- · There are long wait times to get an autism diagnosis.
- · Some insurance plans may not cover these evaluations.
- For some, there is concern about the stigma of an autism diagnosis. However, your info and diagnosis are kept between you and your provider.



DECISION MAKING

Compare Options

Reasons to Choose Reasons to Avoid This Option This Option Watchful · You lose time and symptoms Lowest cost Waiting Avoid labeling your child may worsen Autism Can access more services Long wait time Diagnostic Evaluation Can better understand · Insurance may not cover diagnosis · Concerns about potential stigma Early No diagnosis needed May not be available in your Offers support for preferred language Intervention Can be time consuming navigating your child's development · Can address immediate · Does not address the concerns root issue Can work with your primary care provider Combined Maximize benefits · Can be overwhelming Approach and minimize risks What are your family's short-term goals for your child? What are your family's long term goals for your child? What matters to you? (Rank each from 1-5) Managing Gaining a support Getting clarity symptoms and requirement system behaviors

1. How well do you long long long long long long long long	O O	I somewhat understand	0 0	I'm very confident in my knowledge
2. Which option(s) a	re you leaning	towards? (Ci	ircle all that ap	oply)
Watchful Waiting	Autism Diagnositc Evaluation	Early Intervention Services	Symptom Management	Combined Approach
3. Do you understar	nd each option	?		
Yes No	If no, please explain:			
4. Do you understar	nd the benefits	and downsic	des of each opt	tion?
Yes No	If no, please explain:			
5. Do you have enou	ıgh support an	d advice fron	n others?	
Yes No	If no, please explain:			
6. How sure are you	about your dec	cision?		
Not Sure at All		omewhat Sure	0 0	Extremely Sure
7. What would you	need to feel mo	ore sure?		



QUESTIONS?

