

Behavioral Health Webinar Series for Primary Care

Screening for Autism Spectrum Disorder in Primary Care

Presented by:

Kevin Stephenson, PhD and Jessica Scherr, PhD

DATE: Wednesday, June 12, 2019

TIME: Noon to 1:00 p.m.

Join by Phone: 1-415-655-0001

Conference ID: 649 738 395

Join by WebEx: <https://bit.ly/2l8aZTY>

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A link to the survey will be shared just prior to the presentation

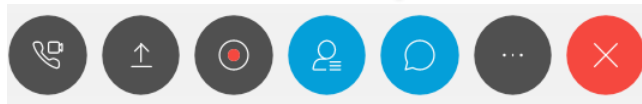
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<https://www.nationwidechildrens.org/specialties/behavioral-health/for-providers/webinar-series>



Reminders

- We have **muted** all participants.
- If you would like to unmute yourself for questions, please see below:
- **Chat with us during the webinar.** To **type a question or comment** for the speaker or a facilitator, type directly into the WebEx chat box.



- This webinar is being recorded.

Screening for Autism Spectrum Disorder in Primary Care



Kevin Stephenson, PhD and Jessica Scherr, PhD

Objectives

- Learn how to administer the recommended screening tools for autism spectrum disorder as recommended by the American Academy of Pediatrics.
- Able to accurately identify and recognize the first signs of autism spectrum disorder to improve developmental screening frequency and accuracy.
- Able to identify the next clinical steps and referral process(es) upon positive autism spectrum screening results.



What is Autism Spectrum Disorder?

Social Communication

Social Interactions

Nonverbal Communication

Atypical Language Patterns

Restricted & Repetitive Behaviors

Restricted Interests

Repetitive Behaviors/Routines

Behavioral Rigidity

Sensory Sensitivities



Autism Spectrum Disorder (ASD)

- 1:59 children (4:1 M/F)
- Median age of first diagnosis: 4:4
- Diagnosis as young as 18 mo
 - Stable diagnosis as young as 14 mo (Pierce et al., 2019)



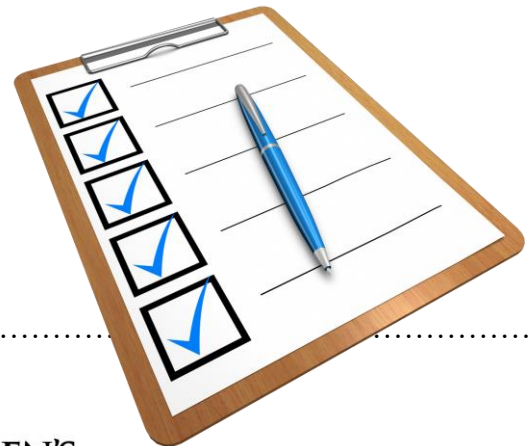
Red Flags



- 12 months: no babbling
- 12 months: no pointing
- 16 months: no words
- 24 months: no 2-word combos
- Loss of language or social skills at any age

AAP Routine Screening Guidelines

- Routine ASD-specific screening for all children
 - 18 months
 - 24 months
- Additional screening whenever there are concerns



Screening Tools

- Autism-Specific
 - M-CHAT-R/F
 - General Development
 - ASQ-3; ASQ:SE-2
 - PEDS
 - Level 1 vs. Level 2 Screening
 - Level 1: “universal” screening
 - Level 2: at-risk screening
-

M-CHAT-R/F

- Autism specific screening tool
- Parent questionnaire
 - Plus follow-up interview
- Appropriate for ages 16-30 months
- 20 items
- <https://mchatscreen.com/>

M-CHAT-R/F

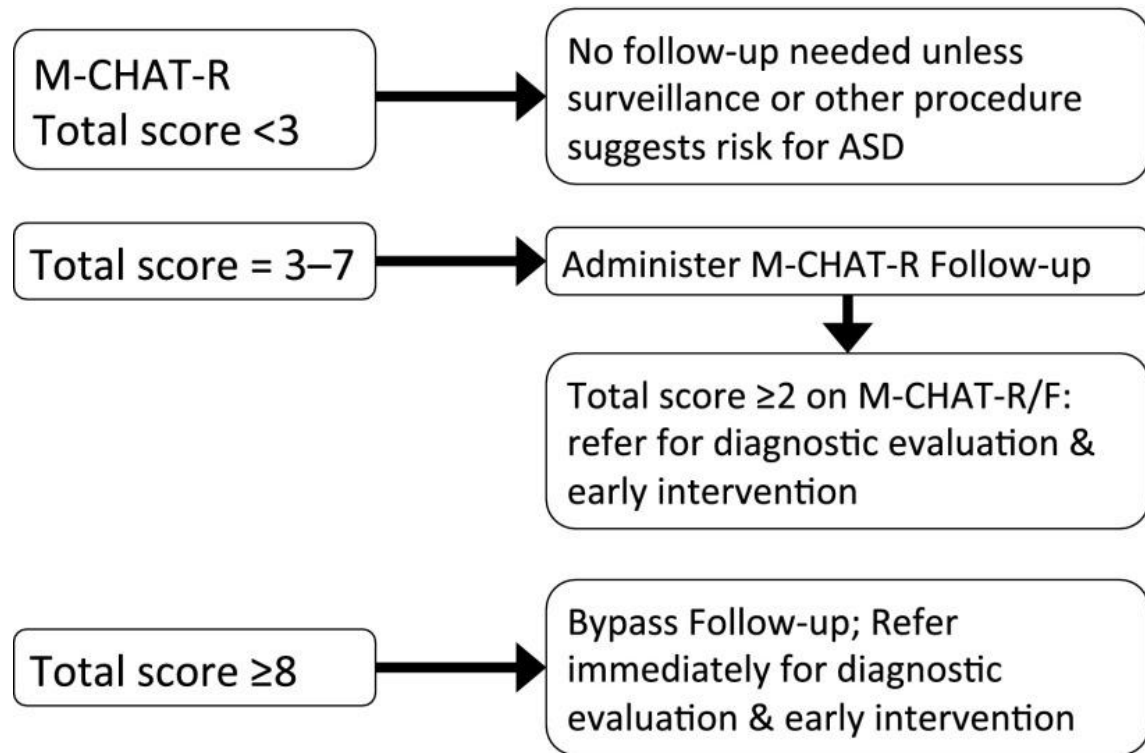
M-CHAT-R™ (Modified Checklist for Autism in Toddlers Revised)

Please answer these questions about your child. Keep in mind how your child usually 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 **yes** or **no** for every question. Thank you very much.

1. 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
2. Have you ever wondered if your child might be deaf?	Yes	No
3. 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
4. Does your child like climbing on things? (FOR EXAMPLE , furniture, playground equipment, or stairs)	Yes	No
5. 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
6. 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
7. 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
8. Is your child interested in other children? (FOR EXAMPLE , does your child watch other children, smile at them, or go to them?)	Yes	No

M-CHAT-R/F

- Scoring – overlay and spreadsheet scoring available

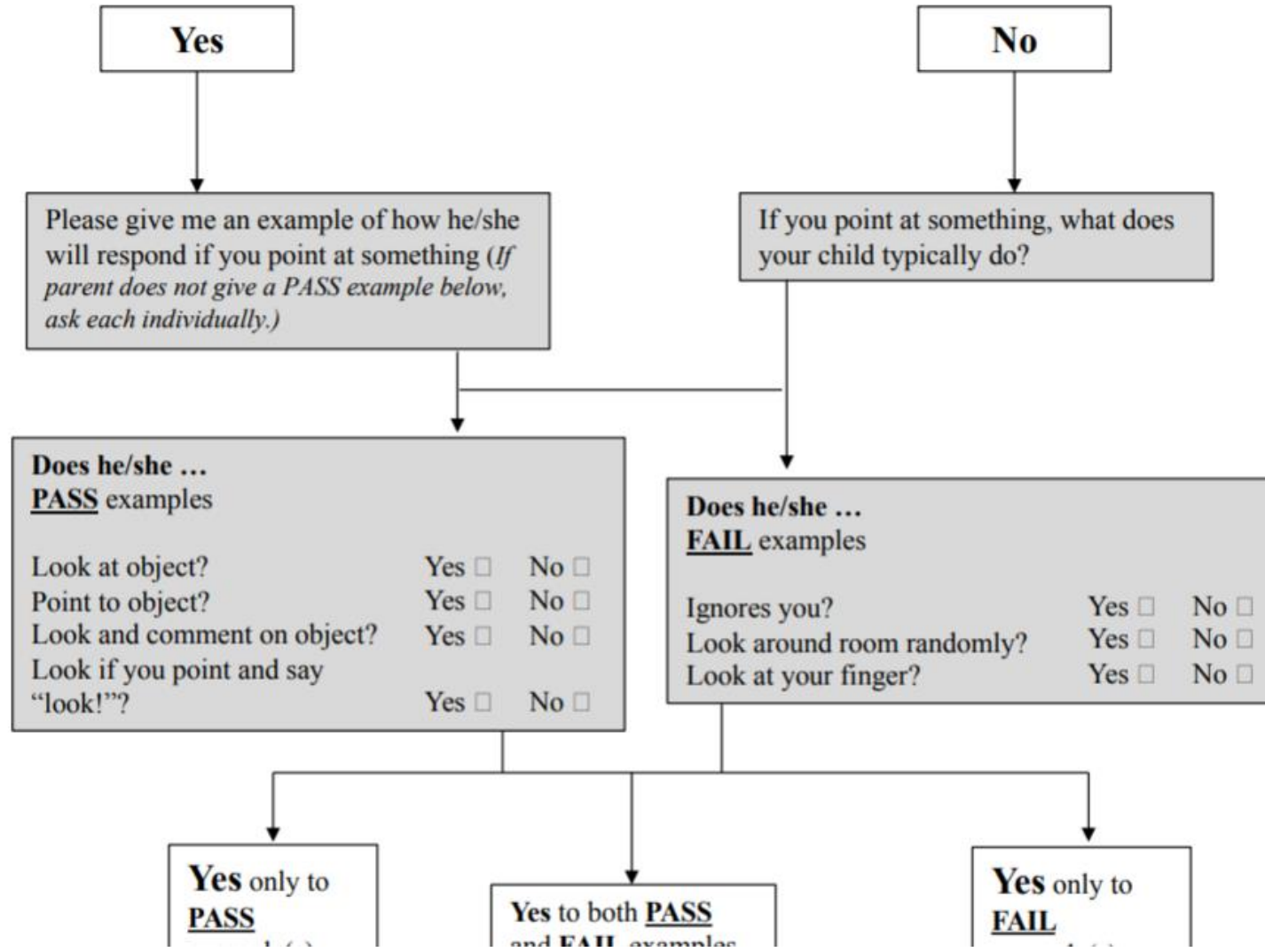


M-CHAT-R Follow-up

- Interview for “failed” questionnaire items
- Interview questions follow flowchart
- Parent responds “maybe” or “sometime”?
 - Ask whether it is most often “yes” or “no”
- ≥ 2 f/u items failed → positive screen

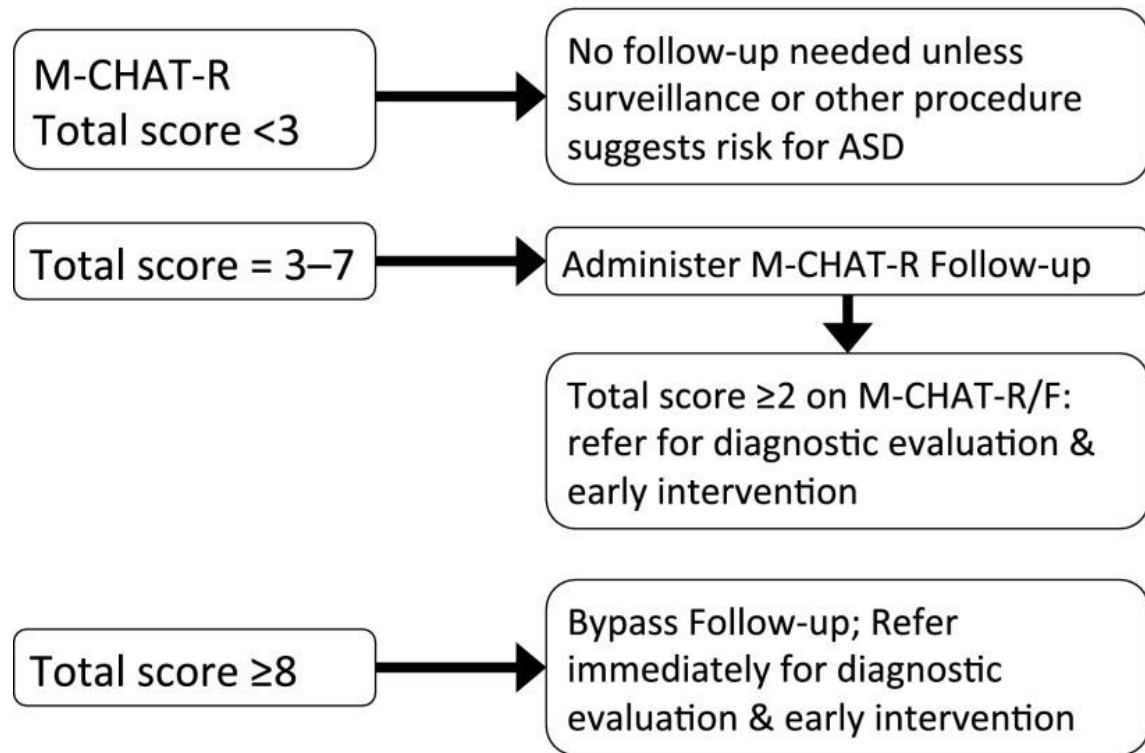
M-CHAT-R Follow-up

1. If you point at something across the room, does _____ look at it?



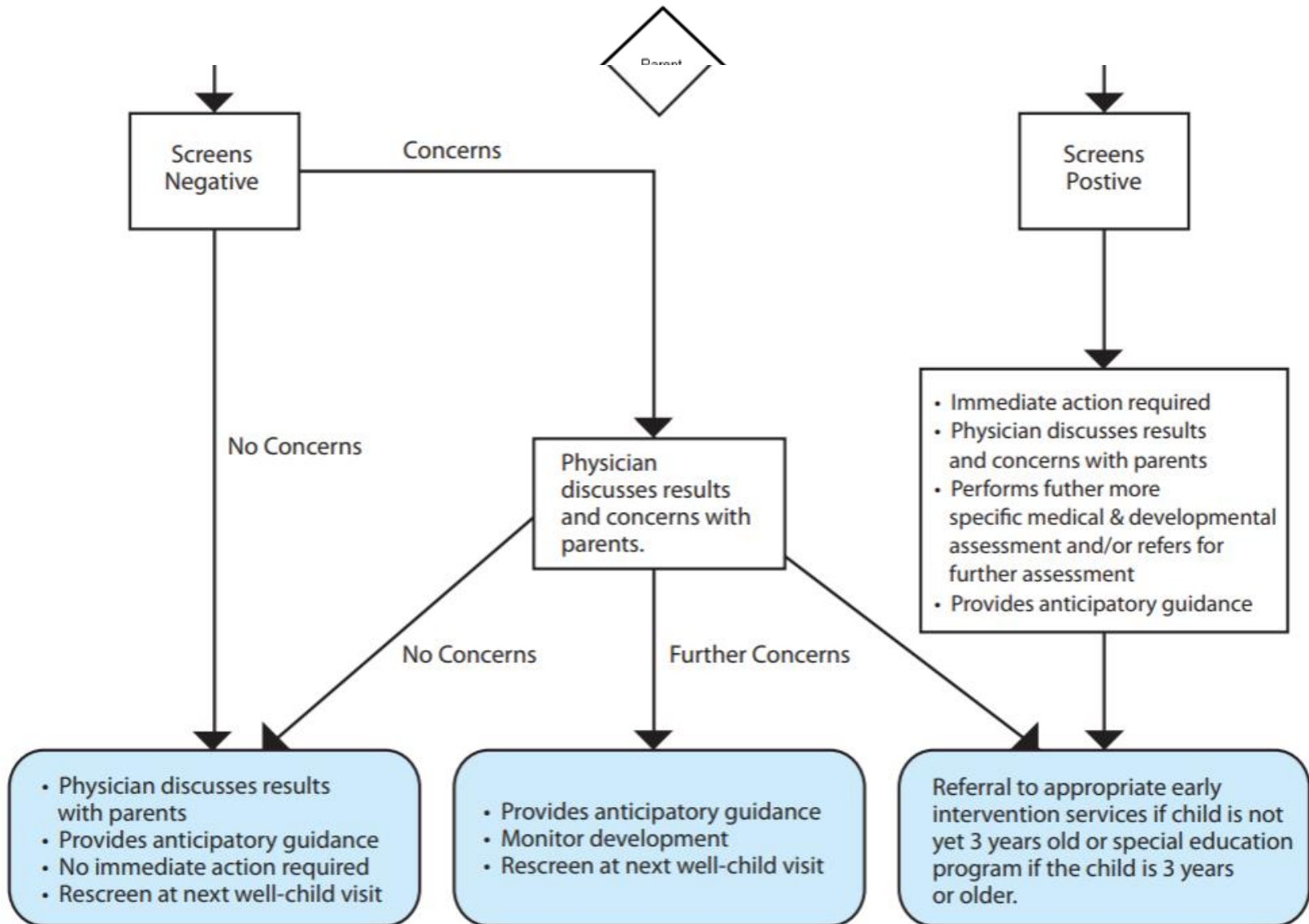
M-CHAT-R/F

- Scoring – overlay and spreadsheet scoring available



CDC Recommendations

Pediatric Developmental Screening Flowchart



Developmental Screening - Billing

- Developmental/Autism screening **can** be billed
- 96110 – Developmental Screening
 - Per instrument
 - Must be a standardized instrument (e.g., M-CHAT-R, Ages and Stages)

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What is Autism Spectrum Disorder?

Observation:
Lack of Response to Name
Evan, 19 Mos

Observation:
Echolalia
Lucas, 30 Months

GeneticaLens

Observation:
Inappropriate Play
Evan, 17 Mos

Typical Development

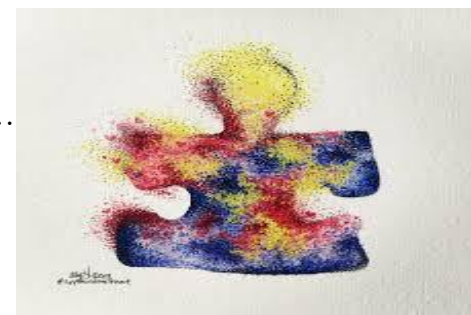


Observation:
Response to Name
Kyle, 12 Months

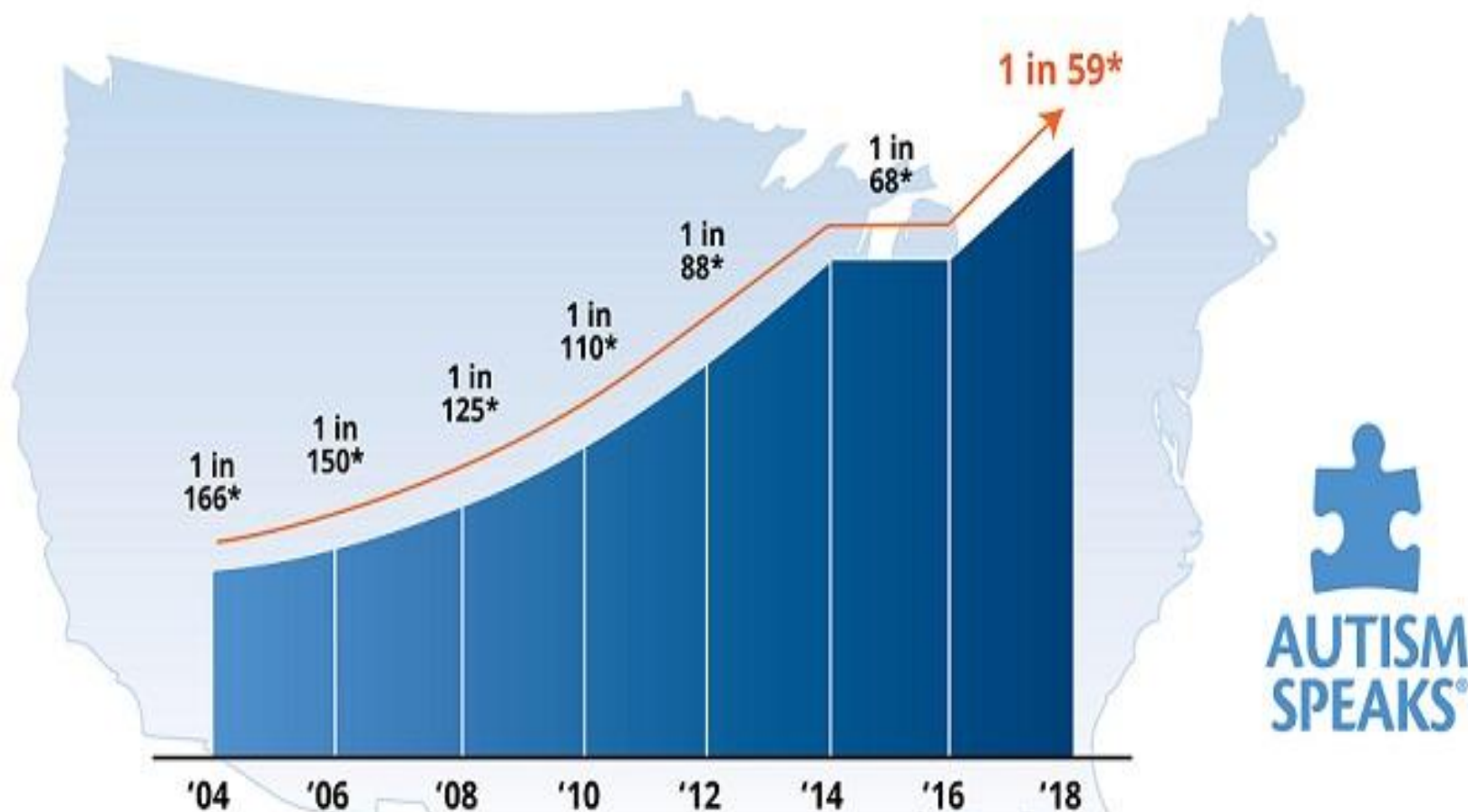
GeneticaLens®

What is Autism Spectrum Disorder?

- 1 in 59 children are diagnosed with ASD
- ASD is 4 times more common in males
 - 1 in 37 males
- Children that have siblings with ASD are at increased risk for ASD
 - 19% will receive a diagnosis (Ozonoff et al., 2011)
 - Broader autism phenotype (Losh et al., 2009)



Estimated Autism Prevalence 2018



* Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2018 figures are from 2014)



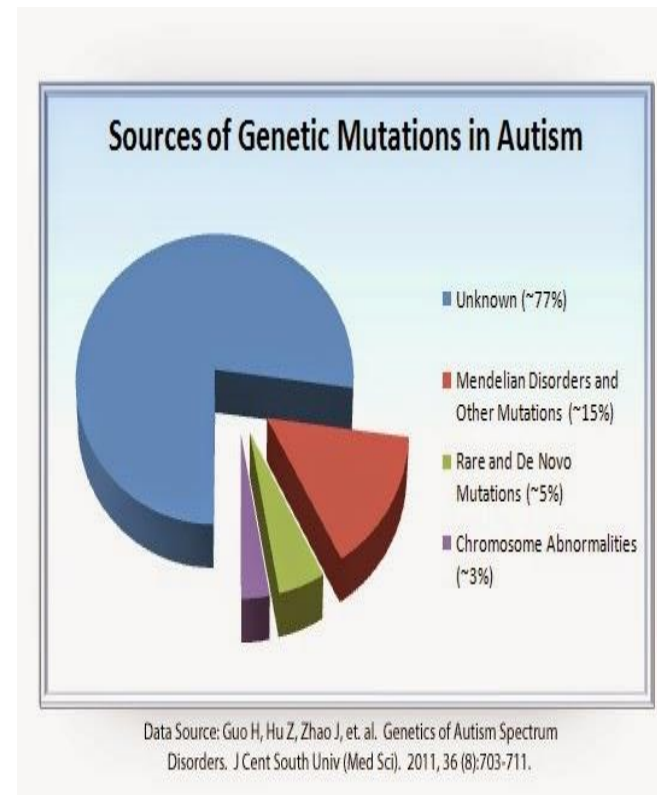
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When your child needs a hospital, everything matters.™

Co-Occurring Conditions

- **Anxiety Disorders** (van Steensel, Bogels, & Perrin, 2011; White et al., 2009)
 - Wide variability 11-84% of individuals with ASD
 - 40% of males meet diagnostic criteria for one anxiety disorder
- **Attention Deficit Hyperactivity Disorder** (Leitner, 2014)
 - 30-50% of school aged children with ASD
- **Intellectual Disability** (Mash & Barkley, 2003)
 - 40-69% have some degree of Intellectual Disability
 - Females more likely to be in severe range of intellectual disability

What's the Cause: Genetics?

- Significant genetic variability
 - More than 100 genes associated with ASD
 - Only 10-30% of genotyped SNPs and “de novo” mutations contribute to ASD
 - Genetic risk factors are also present in individuals without ASD
- Multiple pathways of genetic risk
- Genetic factors are not solely responsible



What's the Cause: Environment?

- Environmental factors explain large portion of variance in genetic liability of ASD
- Increased attention to environmental influences during the prenatal and neonatal period
 - Symptoms of ASD emerge early in development
 - Most parents report symptoms or concerns prior to the first year of life
- Pregnancy related exposures (Webb & Mourad, 2018):
 - Prenatal medication (e.g., neuroleptics, anti-depressants)
 - Maternal disease
 - Nutrition
 - Environmental toxins
 - Maternal substance abuse

Causes of ASD- Environmental Influences?

- Other risk factors for ASD (Hisle-Gorman et al., 2018)
 - Neonatal seizures
 - Maternal mental illness
 - Labor complications
 - Low birth weight
 - Infant infection
 - Birth asphyxia
 - Newborn illness and other medical complications
 - Vaccines are not related to the development of ASD (Hviid et al., 2019)
-

Gene-Environment Interaction

- Multiple genetic and environment pathways contribute to the development of ASD
- Interaction between genetic and environmental factors during critical period of brain development



Early Detection and Intervention are Important

- ASD can be diagnosed by 18 months
 - ASD is not usually diagnosed until 4-5 years
 - Important to recognize early symptoms of ASD
 - Early intervention leads to better outcomes
 - Caregivers and providers can make a difference!
 - Use every day activities to teach and intervene
-

ASD Diagnostic Process:

- Referral
 - Primary Care Provider
 - Speech Therapist/Occupational Therapy
 - Parent
- Diagnostic Intake
 - Interview –developmental history and symptom presentation
- ASD Evaluation
 - Interdisciplinary Assessment
 - Medical Provider
 - Psychologist
 - Speech Therapist
 - Genetic Counselor

ASD Diagnostic Process:

- Diagnostic Interview
- Direct Assessment of ASD Symptoms
 - Autism Diagnostic Observation Sample (ADOS-2)
 - Childhood Autism Rating Scale (CARS-2)
- Developmental/Cognitive Testing
 - Mullen, Bayley-3
 - Stanford Binet, WISC-V, Leiter-3, etc
- Parent Report of ASD symptoms and behavior
 - ASRS, SRS, SCQ, CBCL, Conners-3, BASC, etc
- Teacher Report of Symptoms

ASD Treatment and Intervention

- Applied Behavior Analysis (ABA)
 - Individualized Treatment
 - Decreasing maladaptive behaviors
 - Improving social-communication skills
 - Teaching adaptive skills
 - Parent Training/Behavioral Consultation
 - Social Skills Groups
 - Speech/Occupational/Physical Therapy
 - School-based Interventions: IEP
-

Intervention: How to develop social-communication skills

- Learning can happen in everyday activities
 - Daily activities and routines provide a rich source of learning opportunities
- Find and create learning moments in your daily activities
 - Sharing attention to an activity together
 - Add interesting components to help make necessary activities (ex. diaper change, hand washing) more interesting and fun
- Offer the child a role in activity with predictable steps
 - Tossing toys into tub for bath time
 - Picking favorite toy
 - Throwing away napkins to signal “all done”

Intervention: How to develop social-communication skills

- Use your position to your advantage
 - Position yourself in front of the child
 - Make it easier to watch and share enjoyment
 - Improve eye contact by positioning a reinforcing item at your nose before giving the item to the child
- Talk about what your child is looking at

Intervention: How to develop social-communication skills

- Encourage initiation and imitation
 - Pay attention to subtle signals (reaching, showing, noises)
 - Encourage initiation by inserting natural pauses to cue child to communicate
 - Leave off the endings of phrases; ex. “Hat is on. Hat is ... off!”
Shoe is on. Shoe is ... off!”
- Model gestures, words, and actions
- Read to your child
 - Encourage engagement and shared enjoyment in the story
 - Encourage child to point to objects in pictures. Use hand over hand and praise for engagement
- Expect more as your child grows
 - Teach skills at or just above child’s current level

Resources: Further Reading

- **An Early Start for Your Child With Autism: Using Everyday Activities to Help Kids Connect, Communicate, and Learn**
 - Rogers, S., et al. Guilford Press, 2012
 - **Evidence-Based Practices and Treatments for Children With Autism**
 - Reichow, B., et al. (Eds.), Springer, 2011
 - **The Activity Kit for Babies and Toddlers at Risk: How to Use Everyday Routines to Build Social and Communication Skills**
 - Fein, D., et al. Guilford Press, 2016
-

Autism Navigator-Florida State University, 2019

- <https://autismnavigator.com/>
- Autism Navigator is a unique collection of web-based tools and courses to bridge the gap between science and community practice.
 - Amy M. Wetherby, PhD, CCC-SLP
 - Juliann J. Woods, PhD, CCC-SLP
 - Lindee Morgan, PhD, CCC-SLP
 - Renee Daly Holland, MS, CCC-SLP
 - Nancy D. Rich Wiseman
 - Steve Barnes, BFA

Online Resources

- **Autism Navigator**
 - <https://autismnavigator.com/>
- **First Words Project**
 - **16 by 16- building social communication skills**
 - <https://firstwordsproject.com/about-16by16/>
- **Early Signs of Autism**
 - <https://www.kennedykrieger.org/patient-care/centers-and-programs/center-for-autism-and-related-disorders/outreach-and-training/early-signs-of-autism-video-tutorial>
 - <https://www.cdc.gov/ncbddd/actearly/autism/video/module1.html>

State of the Science



- Biomarkers?
 - Eye tracking
 - Others
- Genetics
 - >91 “high-ranking”
 - SPARK
- Early Identification/Diagnosis
 - Level 2 Screening: STAT, ADEC



Autism Speaks Toolkits

- <https://www.autismspeaks.org/tool-kit>
- Resources for both parents and providers
 - Sleep, pica, EEG, blood-draws, dental, feeding, constipation, visual supports, ABA, hair cutting, challenging behaviors, employment/education, and more

Taking the Work Out of Blood Work:
Helping Your Patient With Autism



A Provider's Guide





ECHO Autism



- Virtual learning network
 - Weekly or bi-weekly meeting – 60 minutes
 - Web-based meetings
 - Increase knowledge for:
 - Improved referrals
 - Screening, diagnosis, and treatments
 - Common medical and psychiatric concerns
 - Successful office visits
-





ECHO Autism



How will ECHO Autism help me?

Get expert autism specialist knowledge in a virtual learning network with Nationwide Children's Hospital providers, including a developmental pediatrician, child psychologist, social worker, parent advocate and educator.

Care for your patients in your own practice with the support of nationally recognized autism experts.

Regular, convenient access to NCH experts will help providers increase knowledge about

- Evidence-based practices for screening, diagnosis and treatment of autism
- Common medical and psychiatric concerns in children with autism
- Successful office visits for children with autism and other behavioral concerns
- Care for your patients in your own practice with the support of nationally recognized autism experts

What do I need to get started?

Internet access, a front-facing camera on smartphone, tablet, or computer/webcam and send an email to: projectECHO@nationwidechildrens.org





ECHO Autism



- Next round starting in August 2019
- projectECHO@nationwidechildrens.org



Questions?



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Jessica.Scherr@nationwidechildrens.org

Thank you for participating!

If you would like to receive CME credit for today's presentation, please complete the following survey **by**
Wednesday, June 19, 2019:

<https://www.surveymonkey.com/r/DNMGMQX>

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Series Name: Behavioral Health Webinar Series for Primary Care

Date: June 12, 2019 / Noon-1PM

Presentation Title: Screening for Autism Spectrum Disorder in Primary Care

Speakers Name(s): Kevin Stephenson, PhD and Jessica Scherr, PhD

Planning Committee: Jennifer White, MD; William Long, MD; Nancy Cunningham, PsyD; Alex Bishara; Megan Rhodes; Sherry Fletcher; Jessica Dudley

- No one in a position to control content has any relationships with commercial interests

Session Objectives:

At the conclusion of this activity,

1. Participants should be familiar with and know how to administer the recommended screening tools for autism spectrum disorder as recommended by the American Academy of Pediatrics.
2. Participants should be able to accurately identify and recognize the first signs of autism spectrum disorder to improve developmental screening frequency and accuracy.
3. Participants should be able to identify the next clinical steps and referral process(es) upon positive autism spectrum screening results.

Commercial Support: N/A

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SAVE THE DATE(S) for the 2019 BH Webinar sessions!

Thursday, September 12, 2019

Wednesday, October 16, 2019

Thursday, November 14, 2019

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