

# Autism or Something Else? Knowing the Difference

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- I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity.
- I will not discuss off label medication or treatments.

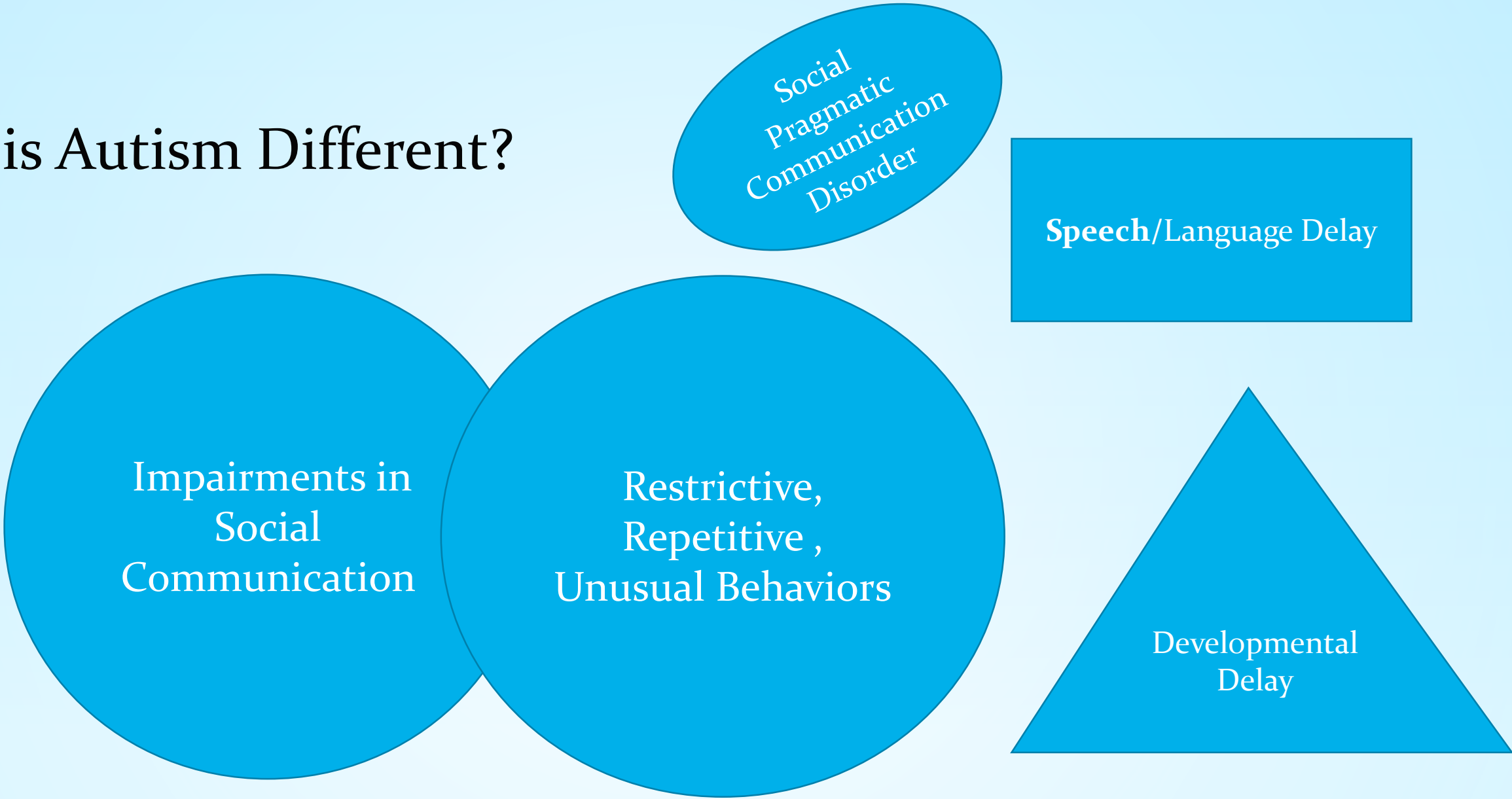
# Learning Objectives

- Understand the Diagnostic Criteria for Autism Spectrum Disorder (ASD)
- Identify the signs and symptoms associated with ASD
- Review the differential diagnosis of ASD
- Understand what non-verbal social communication entails
- Identify appropriate screening tools for ASD

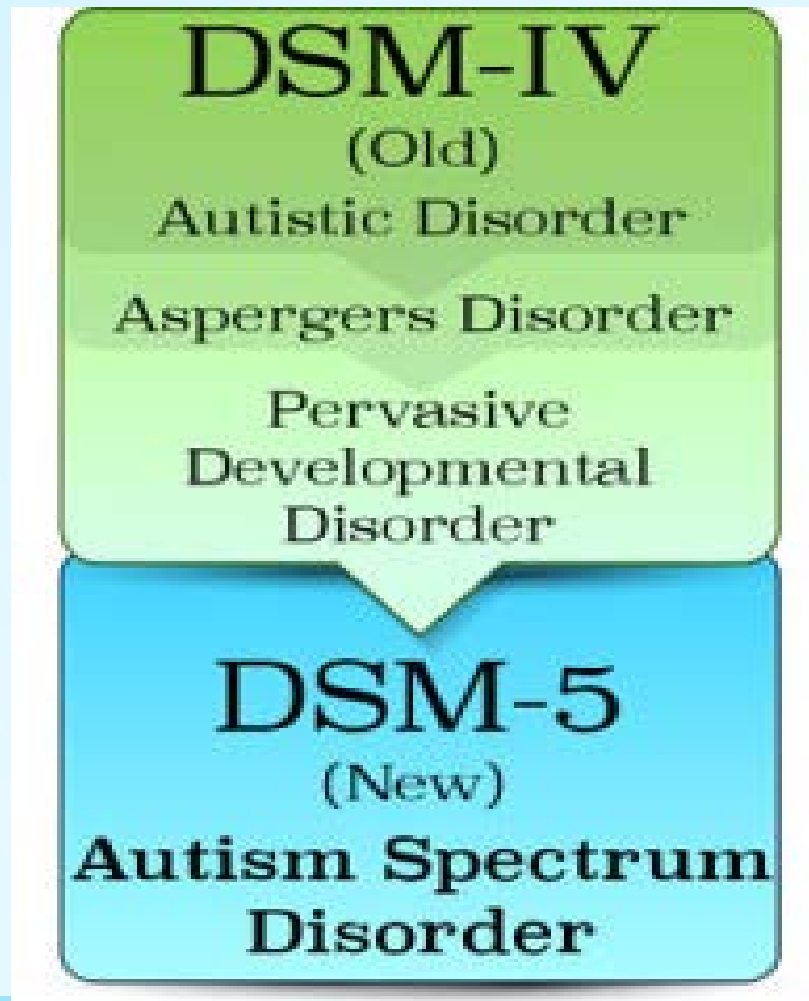
# What do you think? Autism or not

- You walk into the exam room. Caleb who is 2 runs behind his mother
- You say, “Hi, Caleb, I’m Dr. Judice”
- He doesn’t answer.
- Mother says that he is behind in his speech and she is concerned about autism
- He’s attached to her and his brother, but won’t play with anyone else
- He has about 30 single words but isn’t putting 2 words together
- He loves dinosaurs and trains and that’s all he wants to play with at home.
- And he does have some toe walking

# How is Autism Different?



# Diagnostic and Statistic Manual-5



Attempted to erase the confusion



# DSM-5 Criteria

- Persistent Deficits in Social Interaction and Communication:
  - Social and Emotional Reciprocity
    - Unable to have back and forth conversations
  - Usage of Nonverbal Communication
    - Poor eye contact, use of gesture and facial expressions
  - Social Interactions
    - Absence of friends
    - No imaginative play
    - Inappropriate play





# DSV-5 Criteria

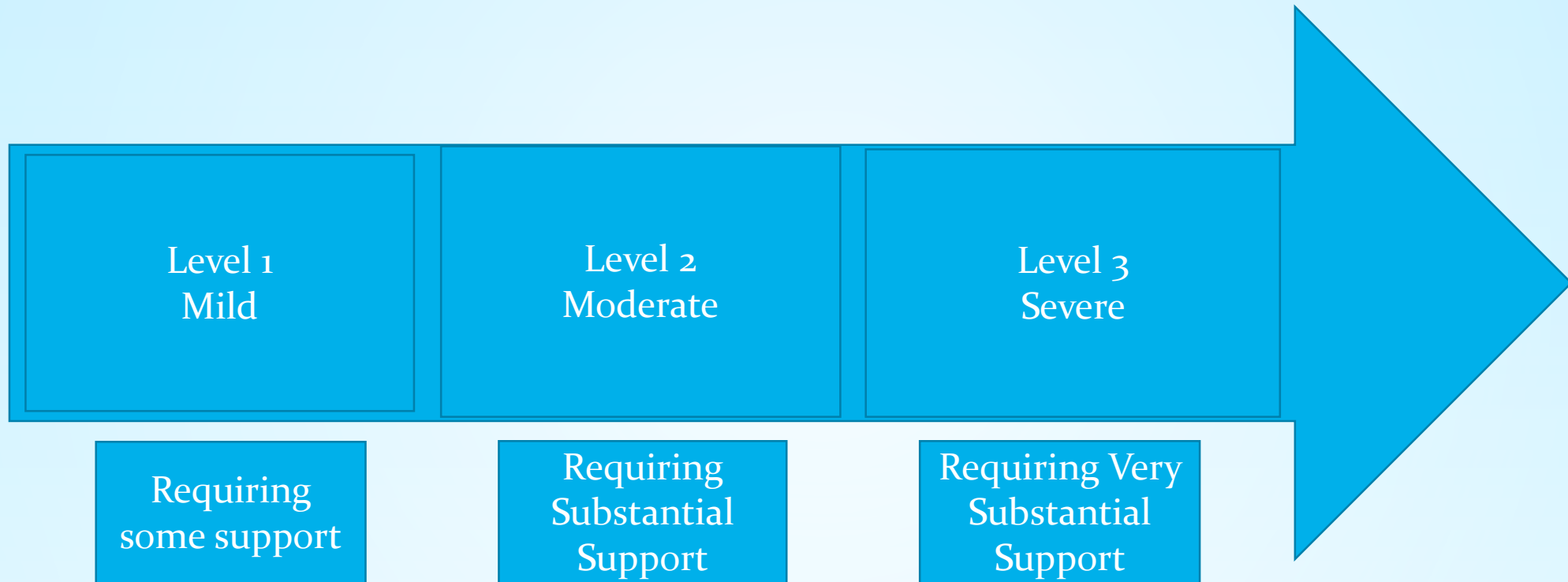
- **Restricted, repetitive patterns of behavior, interests or activities:**
  - Stereotyped or repetitive motor movements, use of objects or speech
  - Insistence on sameness, ritualized routines, patterns of verbal or non-verbal behaviors
  - Highly restricted, fixated interests, abnormal in focus or intensity
  - Sensory hyper- or hypo reactivity or unusual interest in sensory activity



- Symptoms must be:
  - Present in early development
  - Cause significant impairment in social, occupational and day to day functioning.
- Not accounted for by Intellectual disability or global developmental delay (but can co-exist with either condition)

Other needed pieces to make the diagnosis

# ASD: Defined by Severity of the Spectrum



# Typical Social Emotional Development

Age in Months	Social-Emotional Milestones
6	<ul style="list-style-type: none"><li>• Jointly attends to actions and objects of interests to caregivers</li></ul>
8	<ul style="list-style-type: none"><li>• Engages in gaze monitoring (when care-giver looks away, child follows with own eyes)</li></ul>
9	<ul style="list-style-type: none"><li>• Looks preferentially when name is called</li><li>• Follows a point</li><li>• Enjoys interactive games (Peek-A-Boo)</li></ul>
12	<ul style="list-style-type: none"><li>• Protoimperative pointing (pointing to get desired objects)</li><li>• Lets adults know help is needed</li></ul>
14	<ul style="list-style-type: none"><li>• Proto-declarative pointing (pointing at object to express interest)</li></ul>

# Typical Social Emotional Development

Age in Months	Social-Emotional Milestones
15	<ul style="list-style-type: none"><li>• Shows empathy (someone cries, child looks sad)</li><li>• Hugs adult in reciprocation</li></ul>
18	<ul style="list-style-type: none"><li>• Engages in pretend play (feeds baby doll, talks on phone)</li></ul>
24	<ul style="list-style-type: none"><li>• Engages in parallel play</li><li>• Begins to have thoughts about feelings (“Mommie are you sad?”)</li></ul>
30	<ul style="list-style-type: none"><li>• Shows imaginative play</li><li>• Shows symbolic play (makes an object into something new or different)</li></ul>
36	<ul style="list-style-type: none"><li>• Imaginative play, more elaborate</li><li>• Uses stories to describe what someone else is thinking (“Mommie thought I was sleeping”)</li></ul>

## Red Flag Symptoms for Possible ASD



- No babbling, pointing or other gesture by 12 months
- No single words by 16 months
- No 2 word spontaneous language (not echolalia) phrases by 24 months
- Loss of language skills at any age

# What Can You Do?

- Screen all children's development at every well child visit using a standardized tool at 9, 18, 24 or 30 months using a standardized tool
  - Ages and Stages (4-60 months)
  - Denver Developmental Profile
  - PEDS (Parents' Evaluation of Developmental Status)
- Screen children at 18, 24, and/or 30 months using MCHAT-R (Modified Checklist for Autism in Toddlers-Revised)

# MCHAT-R

- 12-30 months
- Sensitivity: 94% Specificity: 83%
- 20, yes or no questions completed by the parent
- Takes 5-10 minutes to complete
- Simple scoring
- Download form and scoring

<http://mchatscreen.com/mchat-rf/scoring/>



## Always

- If there is a parental concern about language
  - Have a formal Audiologic Evaluation
  - Screen for ASD using the MCHAT-R or the CAST (Childhood Autism Spectrum Test).

# ASD vs Intellectual Disability (ID)

- ASD
  - Lack of social interaction
  - Lack of gestures to support communication
  - Repetitive stereotyped movements that impede function
- ID
  - Social interaction, not at age level
  - Uses gestures to support communication
  - May have repetitive or stereotyped movements in severe to profound ID

# Social Pragmatic Communication Disorder

Persistent difficulties in the social use of verbal and nonverbal communication as manifested by all of the following:

- Deficits in using communication for social purposes
- Impairment of the ability to change communication to match context or the needs of the listener, Difficulties following rules for conversation and storytelling
- Difficulty understanding what is not explicitly state.
- Functional limitations in effective communication, social participation, social relationships, academic achievement, or occupational performance, individually or in combination.
- Onset of symptoms is in the early developmental period.
- Symptoms are not better accounted for by another mental disorder and are not due to a general medical or neurological condition

# Medical Co-Morbidities

- Sleep Disturbance 52-73%
- Gastro-esophageal reflux, constipation 8-59%
- Food Selectivity 30-90%
- Seizure Disorder 5-49%
- Tics 8-10%
- Language Deficits 50-63%
- Motor Delay 9-19%
- Hypotonia 50%

# Psychiatric Co-Morbidities in ASD

- I%<sup>0</sup>D 40-80%
- Sensory issues
  - Tactile 80-90%
  - Auditory 5-47%
- Attention problems, impulsivity or hyperactivity 59%
- Anxiety 43-84%
- Depression 2-30%
- Self-Injurious Behaviors 34%
- Disruptive, Irritable or Aggressive behaviors 8-32%
- Obsessive Compulsive Behaviors 37%
- Oppositional Defiant Disorder 7%

Levy et. Al., Lancet, (247), 2009

# Regression

- Up to 30% of those with ASD will have regression (may be gradual or sudden)
  - Stopped talking
  - Stopped using gestural communication
  - Loss of social skills
- Regression could be something else in addition to ASD
  - Motor skill regression
    - Mitochondrial, metabolic or genetic disorder
    - Seizure Disorder Landau-Kleffner Syndrome



# Practice Change

- Do formal Developmental Screening on all children at well child checks and any other time a parent expresses concern
- Screen for ASD at 18, 24 and 30 months
- Always have a formal hearing evaluation completed on any child with speech language delay



# References and Helpful Websites

- MCHAT Website with Revised Follow-up Questions:
  - [http://mchatscreen.com/wp-content/uploads/2015/09/M-CHAT-R\\_F.pdf](http://mchatscreen.com/wp-content/uploads/2015/09/M-CHAT-R_F.pdf)
- CDC Autism Case Training Modules
  - <https://www.cdc.gov/ncbddd/actearly/autism/case-modules/identifying.html>
- CDC Learn the Sign/Act Early
  - <https://www.cdc.gov/ncbddd/actearly/milestones/milestones-in-action.html>
- Autism Speaks
  - <https://www.autismspeaks.org/family-services/tool-kits>
  - First 100 Day Toolkit
  - Toilet Training Toolkit
  - Constipation Toolkit