



Autism Developing a Deeper Understanding

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Learning Objectives

1. Recall the DSM-5 diagnostic criteria as it relates to the Autism Spectrum
2. Assess how characteristics of autism present in early childhood and manifest across the lifespan.
3. List common medical and psychiatric co-occurring conditions in Autism

What is Autism?

- Neurodevelopmental Disorder
 - Affect brain function
 - Occur early in life
- Characteristics manifest in core areas
 - Social Communication
 - Restrictive and Repetitive Behaviors

A Brief History of Autism

*1 in 25,000 children
identified as Autistic

A rare condition,
considered still
viewed through
the lens of
schizophrenia

1940-
1960s

1980s

“Autism Disorder”
introduced to DSM
and separated
from schizophrenia
(narrow criteria),
marks beginning of modern
“autism research”

Asperger syndrome
included in DSM & ICD
(Autistic people without
intellectual disabilities now more
easily recognized)

1990s

2013

Autism spectrum
conditions as
umbrella concept
introduced to DSM-5
(criteria broadened).
Autism and ADHD can now
both be diagnosed.

Changes with DSM-5

- Single diagnostic category (Autistic Disorder, Asperger's, PDD NOS → ASD)
- 3 symptom domains to 2



- Addition of severity criteria (Levels 1 through 3) to capture heterogeneity of disorder

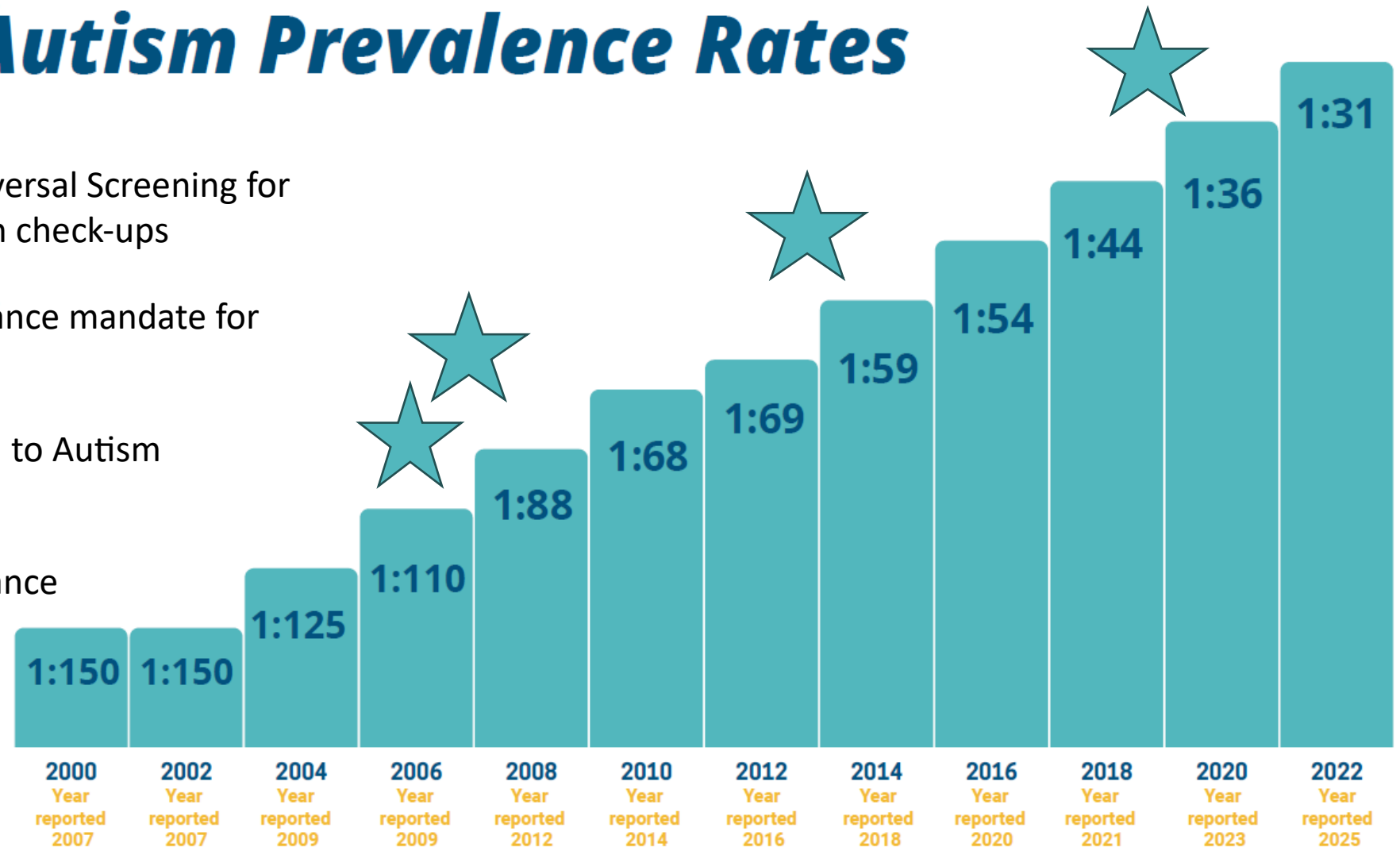
Through the Years: *Autism Prevalence Rates*

2006 – AAP Recommends Universal Screening for Autism at all 18 and 24- month check-ups

2007 – First State passes insurance mandate for ABA coverage

2013 – DSM-5 expands Autism to Autism Spectrum Disorder

2019 – 50th State passes insurance mandate for ABA coverage



The Autism Spectrum

- A spectrum of characteristics
- Characteristics vary
 - In intensity & complexity
 - In number
 - Across time
 - Between individuals

**** Neuroaffirming Language**

Autism Spectrum

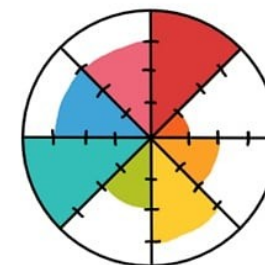
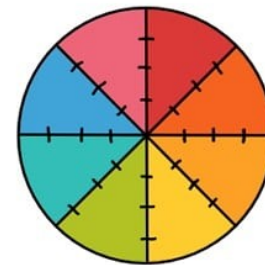
The Autism Spectrum is NOT linear



less autistic

very autistic

The Autism Spectrum looks more like:



- Social differences
- Interests
- repetitions
- sensory sensitivities
- emotional regulation
- perception
- executive functioning
- other

Terms like "high functioning", "low functioning" and "Asperger" are harmful and outdated.

Autism_sketches



Ambitious
about Autism

Young people explain autism



DSM-5 Criteria

- Deficits in ***social communication and social interaction*** (3 of 3)
- ***Restricted, repetitive*** and ***stereotyped*** patterns of behavior, interests or activities (2 of 4)
- Symptoms present in early childhood
- Symptoms cause clinically significant impairment in functioning
- Symptoms can't be better explained by intellectual disability (ID)

Social Communication

A1: Deficits in social-emotional reciprocity:

- Abnormal social approach
- Failure of normal back and forth conversation
- Reduced sharing of interests, emotions, or affect
- Failure to initiate or respond to social interactions



Toddlers



Social Communication

A2: Deficits in nonverbal communicative behaviors used for social interaction:

- Poorly integrated verbal & nonverbal communication
- Abnormal eye contact and body language
- Deficits in understanding & using nonverbal communication
- Lack of facial expression or gestures



Infant Social Communication



<http://www.youtube.com/watch?v=J8bKblC1yPc>

Social Communication

A3: Deficits in developing, maintaining, and understanding relationships ranging from:

- Difficulties adjusting behavior to suit different social contexts
- Difficulties sharing imaginative play or making friends
- Absence of interest in peers



What do you see?



Restricted/Repetitive Behavior

B1: Stereotyped or repetitive motor movements, use of objects, or speech, such as:

- Simple motor stereotypies
- Lining up toys or flipping objects
- Echolalia
- Idiosyncratic phrases



Restricted/Repetitive Behavior

B2: Insistence on sameness, inflexible routines, or ritualized behavior:

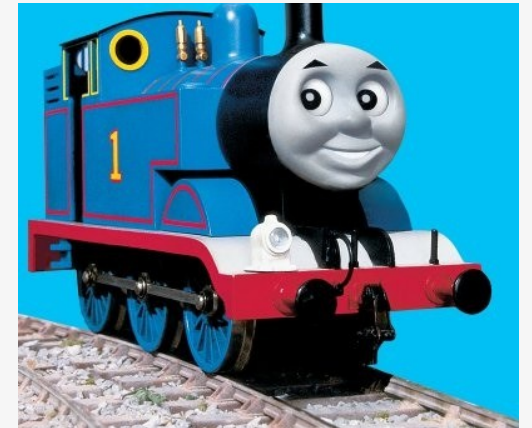
- Need to take same route or eat same food every day
- Extreme distress at small changes
- Difficulties with transitions
- Rigid thinking patterns
- Greeting rituals



Restricted/Repetitive Behavior

B3: Highly restricted, fixated interests that are abnormal in intensity or focus:

- Strong attachment to/preoccupation with unusual objects
- Excessively circumscribed or perseverative interests



Restricted/Repetitive Behavior

B4: Hyper- or hypo-reactivity to sensory input or unusual sensory interests:

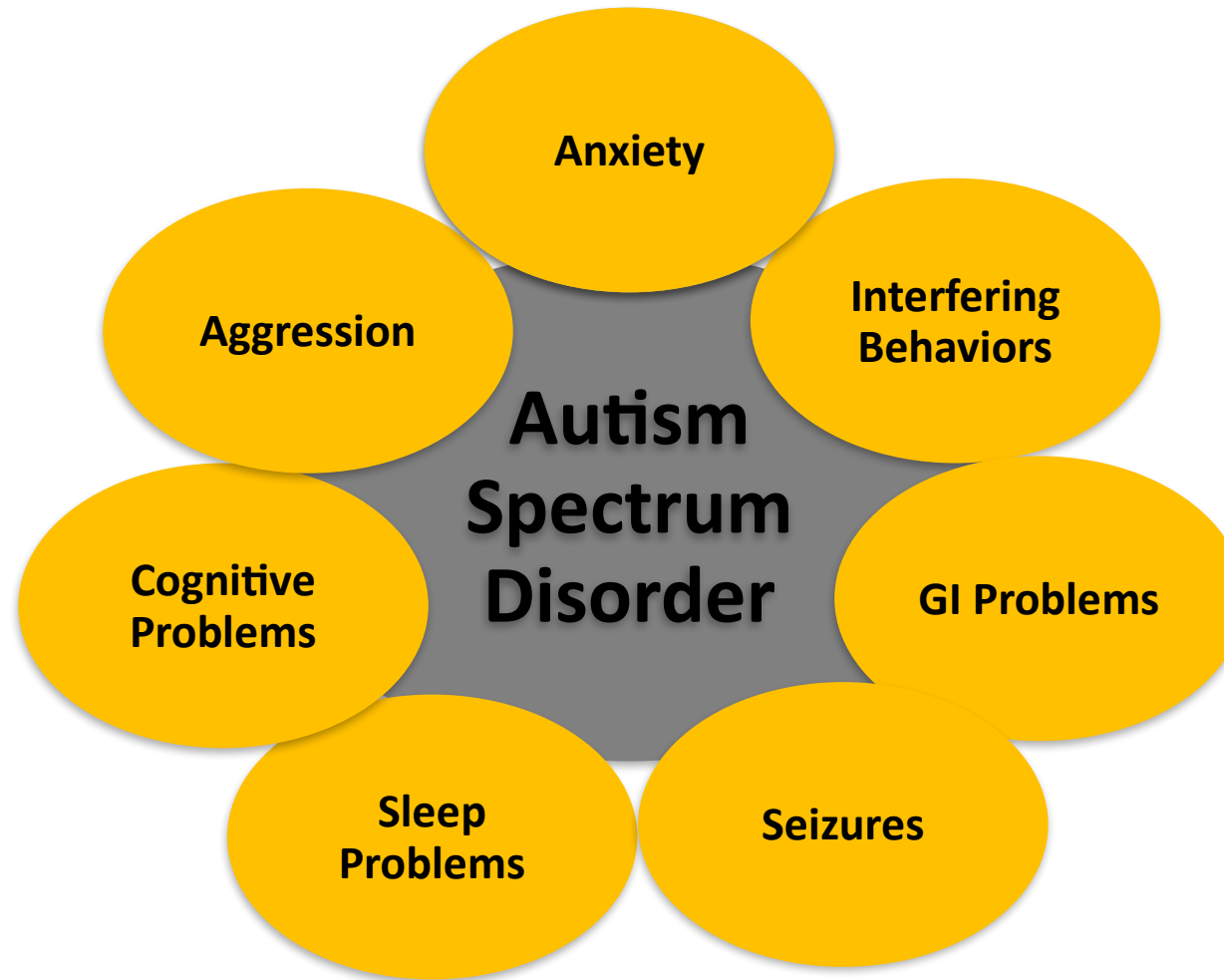
- Indifference to pain/temperature
- Adverse response to specific sounds or textures
- Excessive smelling/touching objects
- Visual fascination with lights or movement



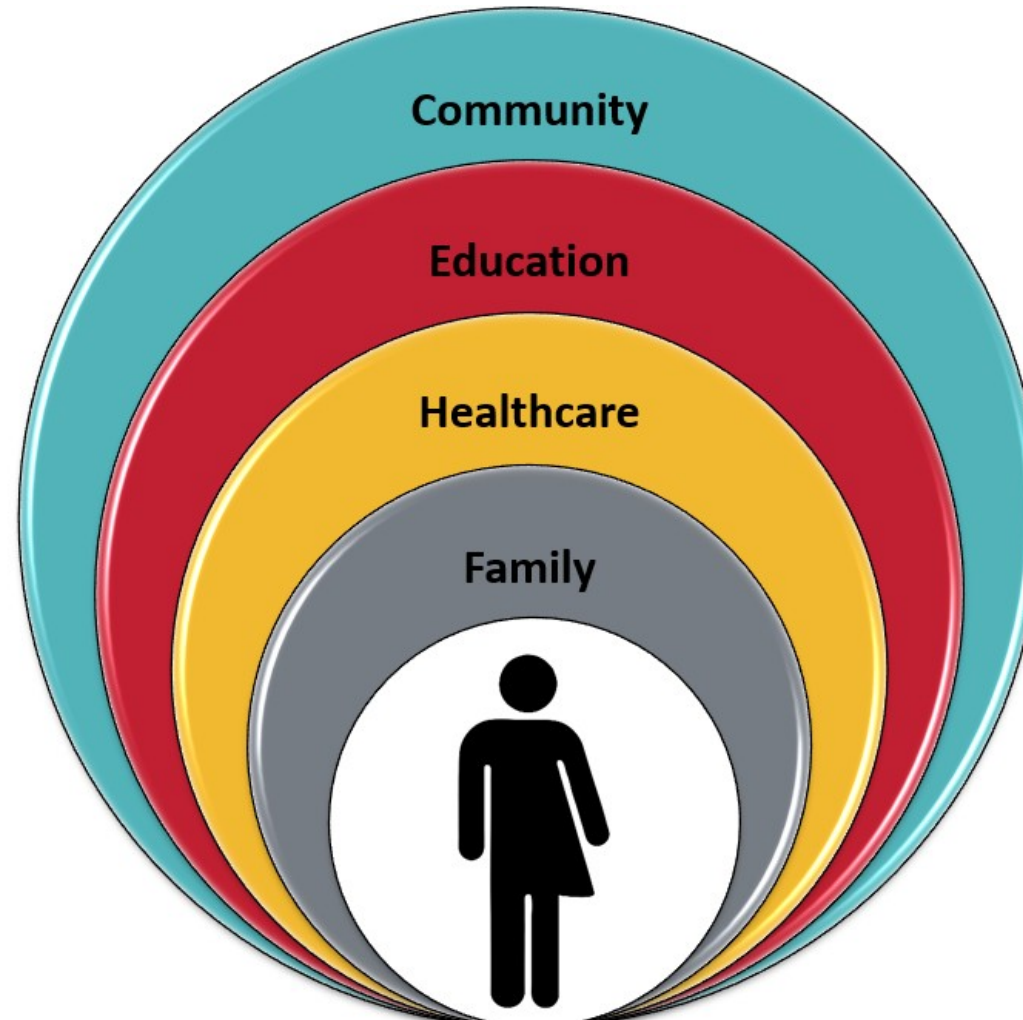


<https://youtu.be/2LhI23QPoi8>

More than Autism

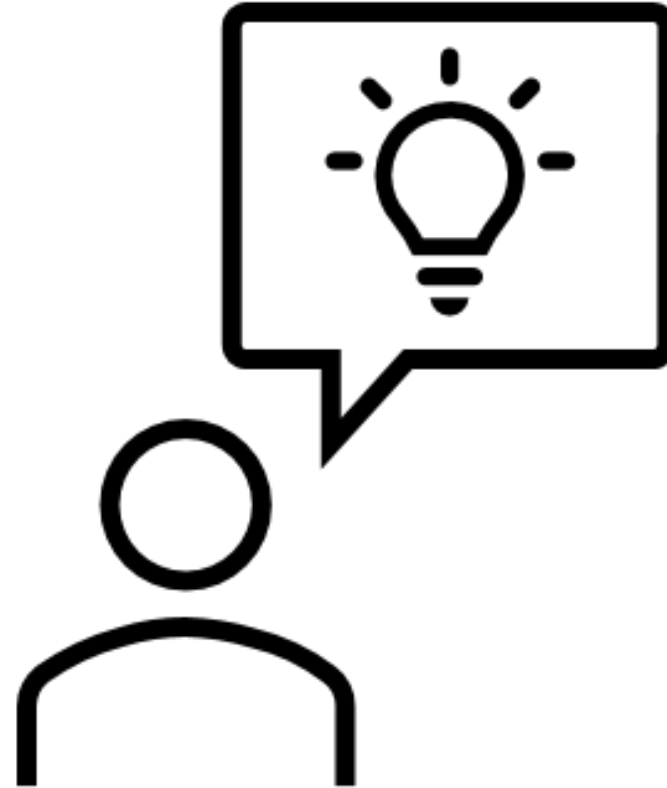


Whole Care for the Whole Family



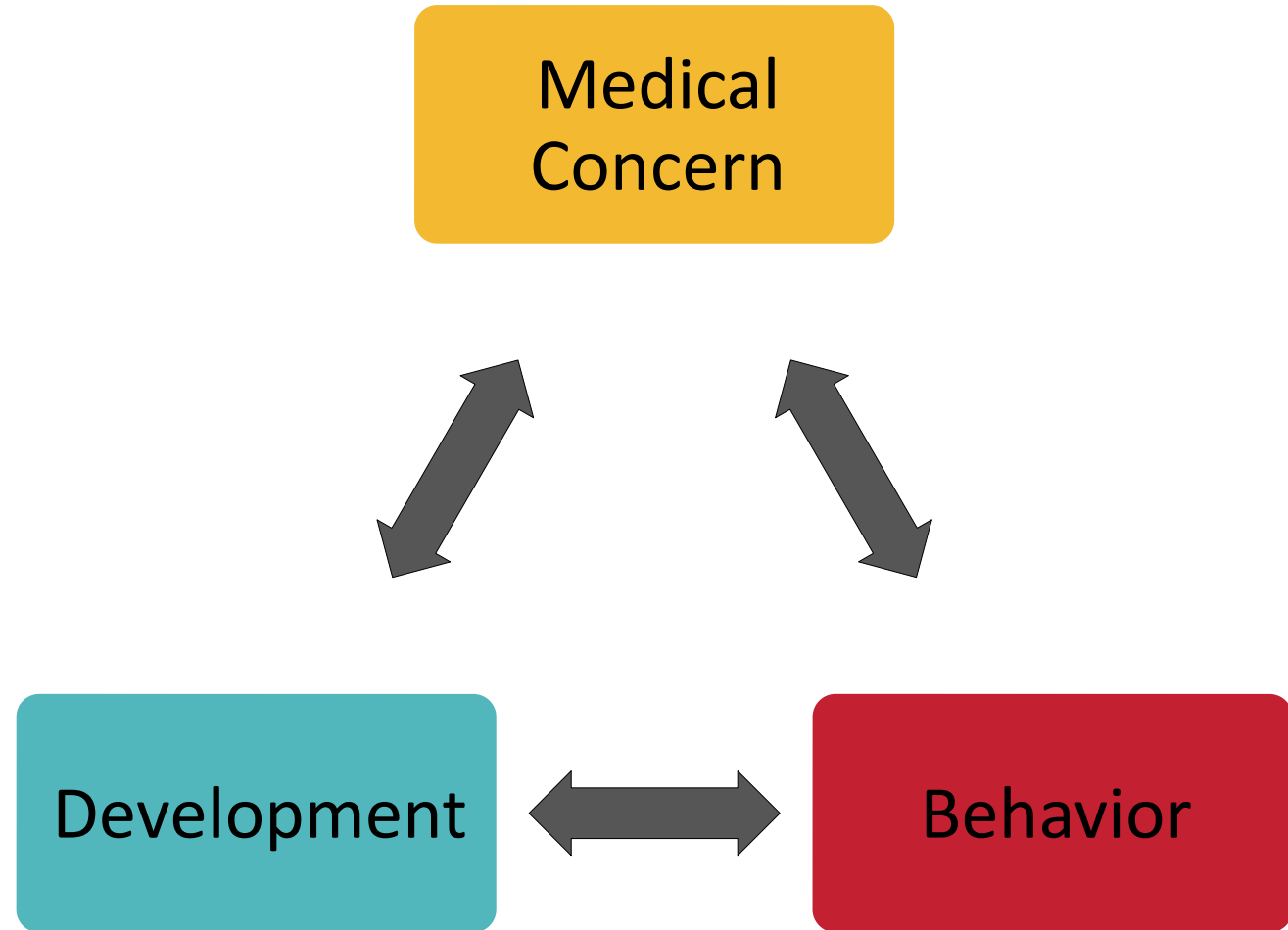
Things to Consider

- Screen for underlying medical issues
 - Sleep (50-80%)
 - Constipation (40-60%)
 - Seizures (10-20%)
 - Hearing
 - Feeding
 - Pica
- Refer for evaluation



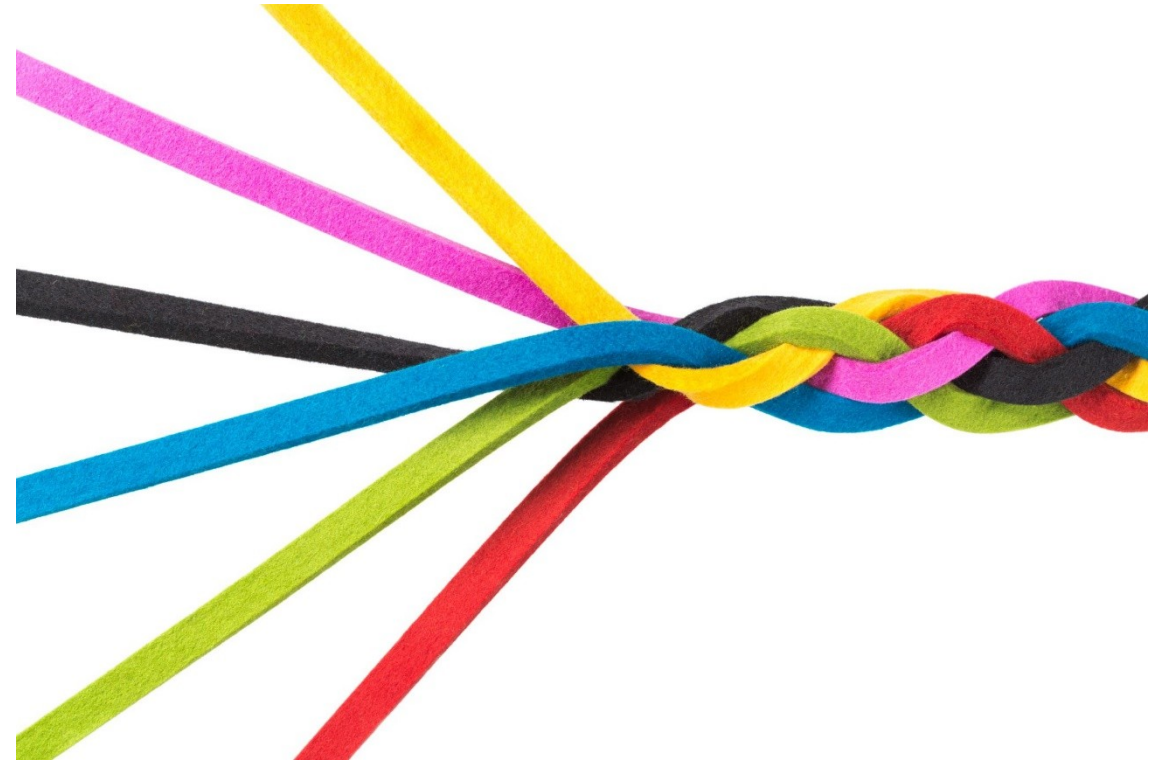
Things to consider

- Dental caries
- Eczema
- Staring spells
- Abuse/neglect
- Trauma



Common Psychiatric Comorbidities

- Anxiety (up to 80%)
- ADHD (40-60%)
 - Inattentive presentation
 - Hyperactive Presentation
 - Combined presentation
- Irritability (~30%)
 - With and without aggression

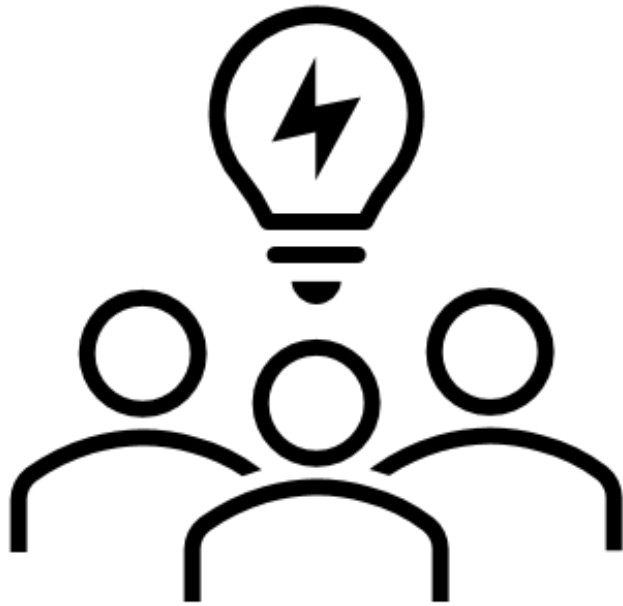


Multidisciplinary Care



- Primary Care
- Longitudinal autism medical monitoring
- Educational team
- Other medical specialists
- Autistic person
- Caregiver/parent

Practice Tips



- Detailed history with collateral from more than one setting
 - Changes
 - Transitions
 - Frequency, duration, intensity
- Ask the autistic person/child
- Ask the parent/caregiver
- Physical exam + observations
- Behavior as communication, Communication as behavior

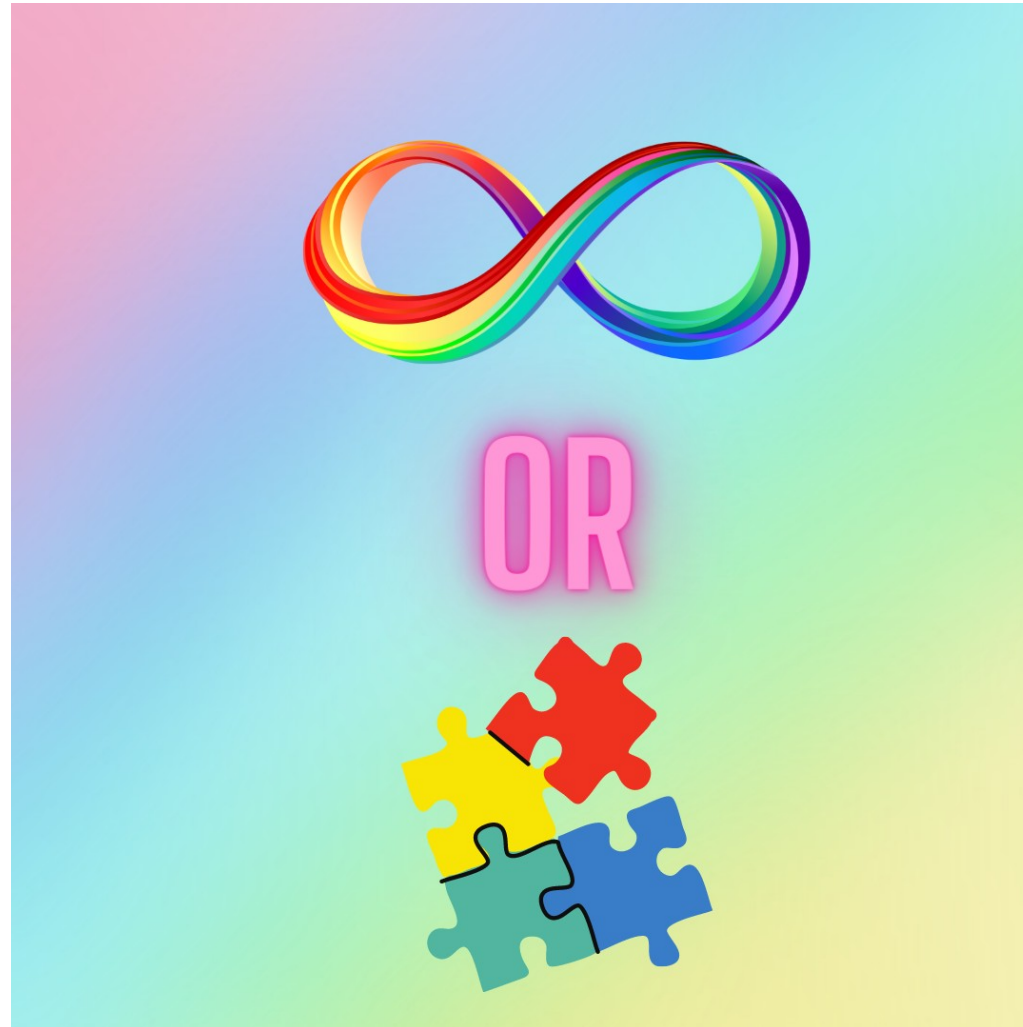
Anticipatory Guidance

- Be proactive and anticipate what may happen next
 - Kindergarten – visit the school, meet the teachers, experience the noises, social story
 - Puberty – mood and body changes
 - Middle school – bullying, signs of anxiety/depression
 - Transition to adulthood – discuss life skills development at every visit starting at age 12, guardianship, living/work opportunities post high school

Every Visit, Every Time

- Sleep concerns – onset, night wakings, snoring, daytime drowsiness
- Constipation – hard, painful or infrequent stools
- Diet – variety
- Seizures – staring spells
- Medication monitoring
 - Atypical antipsychotics – BMI and abnormal movements at every visit. Fasting lipids, fasting glucose at baseline, at 6 months and then annually
 - Stimulants – height and weight velocity, heart rate
 - Alpha-2 Agonists – heart rate, blood pressure

Beyond Awareness



Join Us



Primary Care



Advance Diagnosis



Behavior Solutions in Hospitals



Mental Health



Early Intervention



Behavior Solutions in Schools



Advocates



MOADD (Dual Diagnosis)



Pediatrics
School of Medicine
University of Missouri