

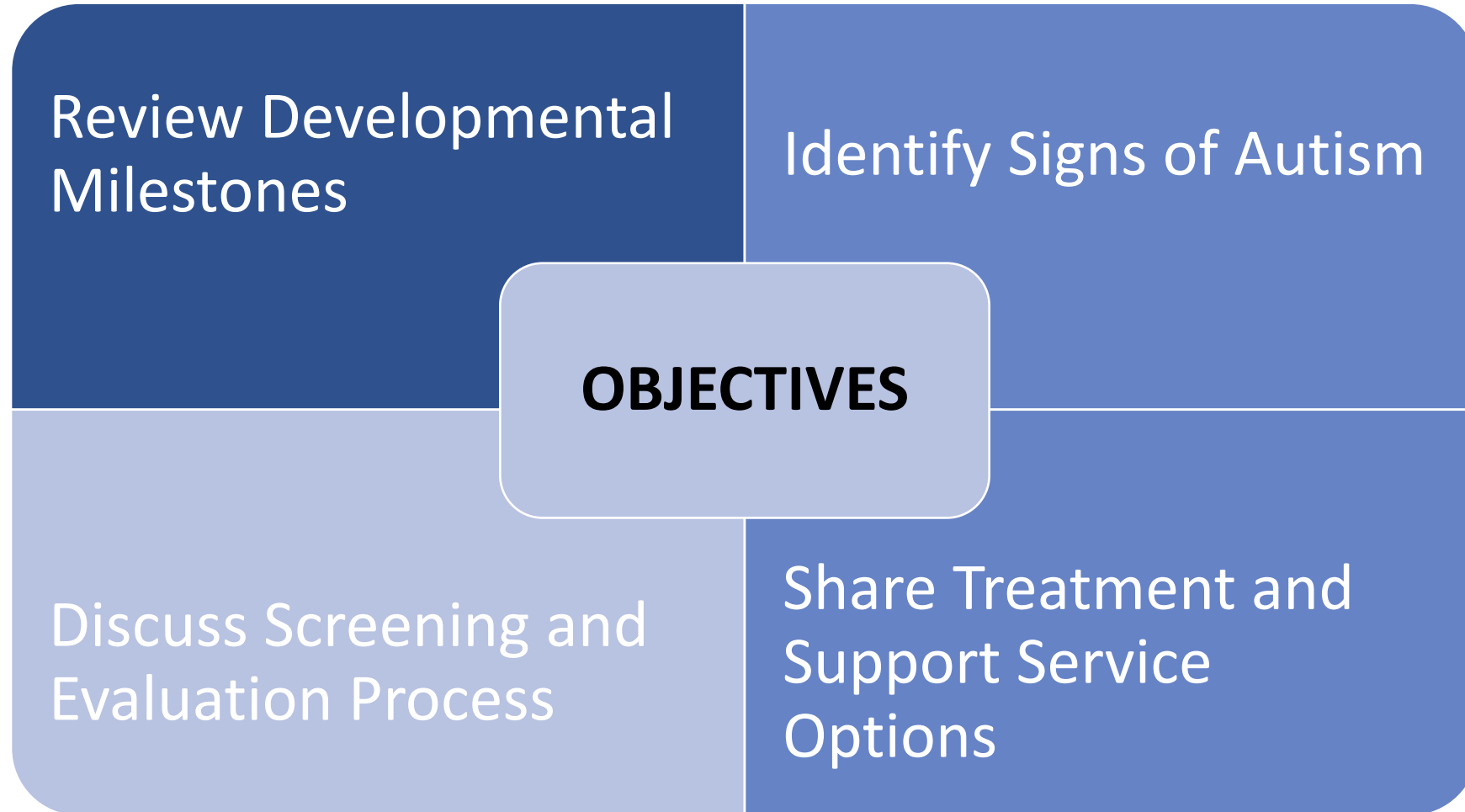


CHANGING THE WORLD FOR CHILDREN WITH AUTISM™



# Navigating Autism Diagnosis

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# Signs of Delayed Milestone Development



**By 6 months:** No big smiles or other warm, joyful expressions



**By 9 months:** No back-and-forth sharing of sounds, smiles, or other facial expressions



**By 12 months:** Lack of response to name



**By 12 months:** No babbling or "baby talk"



**By 12 months:** No back-and-forth gestures, such as pointing, showing, reaching, or waving



**By 16 months:** No spoken words



**By 24 months:** No meaningful two-word phrases that don't involve imitating or repeating

# What are some common signs of Autism?

Failure to respond to speech or social cues

Difficulty with demonstrating gestures

Difficulty with shifting eye gaze

No response or inconsistent response to name

Inappropriate toy play

Inability to relate to others

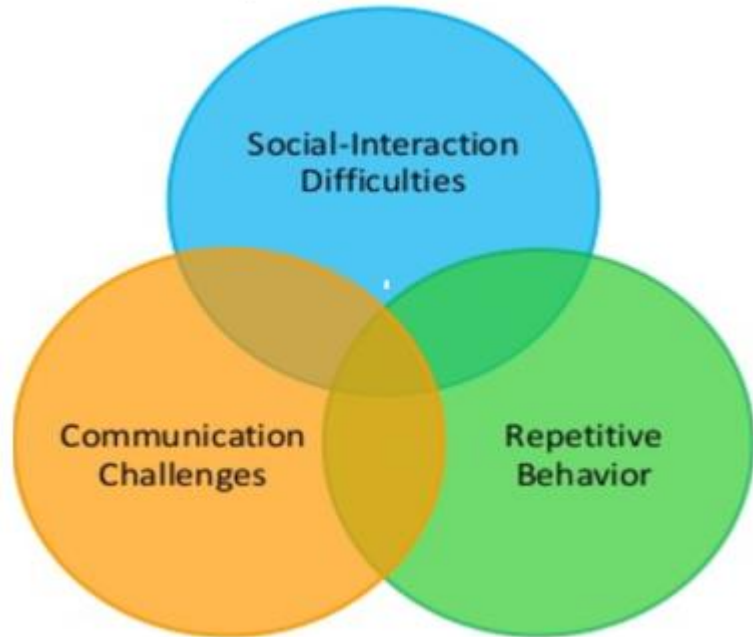
Difficulty dealing with changes to routine

Strange or odd interest in objects

Oversensitive or under sensitive to environmental stimuli

# Autism Spectrum Disorder (ASD)

- Neurological disorder that impacts the brain and subsequent behaviors and communication. Jeste, Spurling, Shafali, (April 2012), *The Neurology of Autism Spectrum Disorders*



DIAGNOSTIC AND STATISTICAL  
MANUAL OF  
MENTAL DISORDERS

FIFTH EDITION

DSM-5

AMERICAN PSYCHIATRIC ASSOCIATION

# Diagnostic Criterion:

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- 1. **Difficulties in social emotional reciprocity**, including trouble with social approach, back and forth conversation, sharing interests with others, and expressing/understanding emotions.
- 2. **Difficulties in nonverbal communication** used for social interaction including abnormal eye-contact and body language and difficulty with understanding the use of nonverbal communication like facial expressions or gestures for communication.
- 3. **Deficits in developing and maintaining relationships** with other people (other than with caregivers), including lack of interest in others, difficulties responding to different social contexts, and difficulties in sharing imaginative play with others.

## Level 1

### Requiring very substantial support

#### **Social Communication:**

- Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others.

#### **Restricted, repetitive behaviors:**

- Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great difficulty changing focus or action.

## Level 2

### Requiring substantial support

#### **Social Communication:**

- Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures

#### **Restricted, repetitive behaviors:**

- Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus

## Level 3

### Requiring Support

#### **Social Communication:**

- Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful response to social overtures of others. May appear to have decreased interest in social interactions.

#### **Restricted, repetitive behaviors:**

- Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence.



# Rates



According to the CDC ASD occurs in 1 in 59 children



Increases in rates due, in part, to changes in diagnostic classification over the years from the DSM III to DSM 5.



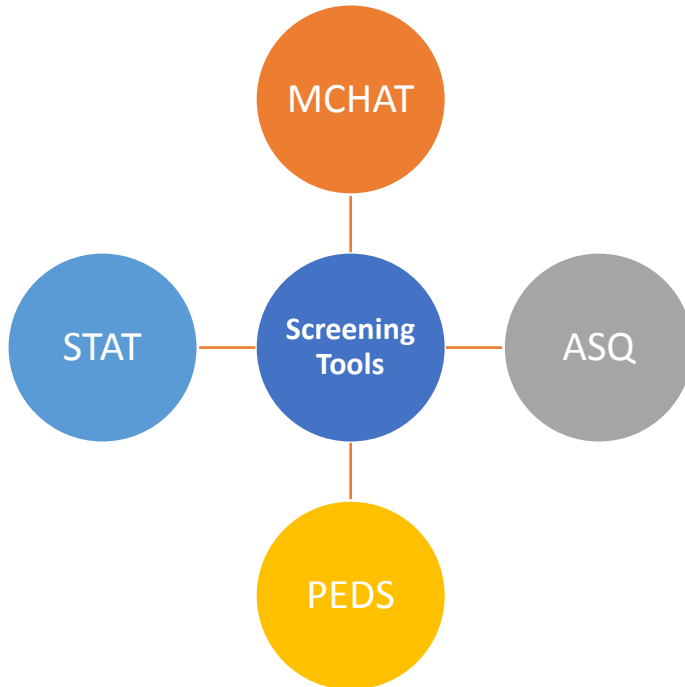
Prevalence of ASD in girls and racial/ ethnic minorities appears to be underestimated (these subgroups tend to receive formal diagnoses later in life or not at all)



More evolved diagnostic instruments, including capturing younger children



# Screening Tools:



- Screening tools are designed to help identify children who might have developmental delays.
- Screening tools can be specific to a disorder (Autism) or they may be general, encompassing multiple areas of concern.
- Screening tools are not designed to provide a confirmatory diagnosis.
- Comprehensive testing should follow positive screening results, could also be necessary after negative results.
- The American Academy of Pediatrics (AAP) recommends that all children be screened for developmental delays and disabilities during regular well-child doctor visits at: 18, 24 & 30 months.

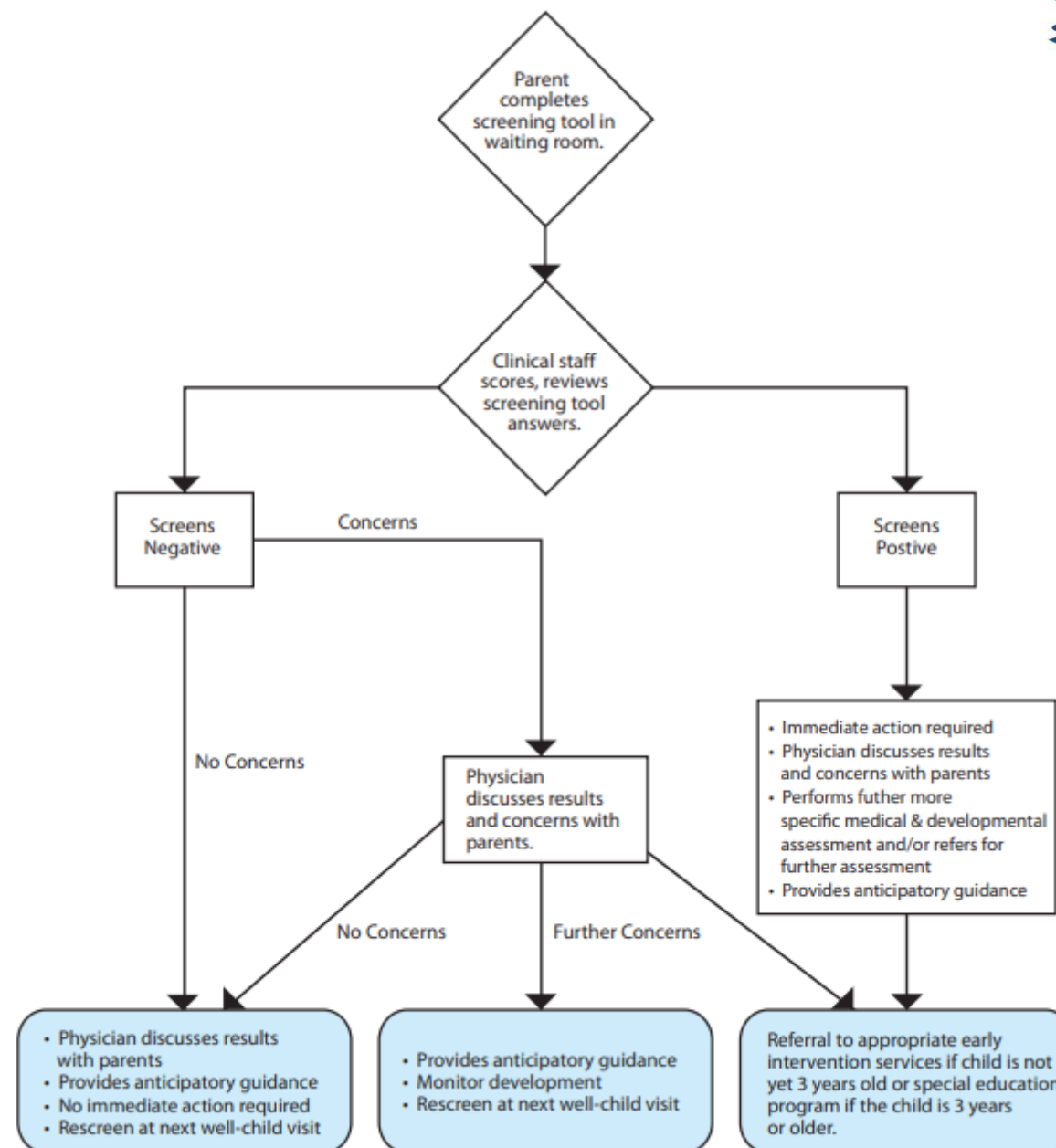
# Common Screening Tools

- There are many different developmental screening tools.
- CDC does not approve or endorse any specific tools for screening purposes. This list is not exhaustive, and other tests may be available.
- Examples:
  - Modified Checklist for Autism in Toddlers (MCHAT)
  - Ages & Stages Questionnaire (ASQ)
  - Parents Evaluation of Developmental Status (PEDS)
  - Screening for Autism in Toddlers (STAT)

# Examples of Screening Tools

- **Parents' Evaluation of Developmental Status (PEDS)**
  - General developmental screening tool.
  - Parent, single-response interview form
  - May be used as a surveillance tool
- **Modified Checklist for Autism in Toddlers (MCHAT)**
  - Parent-completed questionnaire
  - Designed to identify children at risk for autism
- **Ages and Stages Questionnaires (ASQ)**
  - General developmental screening tool
  - Parent-completed questionnaire
  - Series of 19 age-specific questionnaires
  - Screens communication, gross motor, fine motor, problem-solving, and personal adaptive skills;
  - results in a pass/fail score for domains.
- **Screening Tool for Autism in Toddlers and Young Children (STAT)**
  - Interactive screening tool
  - consists of 12 activities assessing play, communication, and imitation skills
  - 20 minutes to administer.

# Screening Flowchart



# Diagnostic Tools



Diagnostic tools usually rely on two main sources of information—parents’ or caregivers’ descriptions of their child’s development and a professional’s observation of the child’s behavior (Self-Report Vs. Task Based) .



In most cases, the primary care provider (PCP) will refer the child and family to a specialist for further assessment and diagnosis.



*Diagnosing autism spectrum disorder (ASD) can be difficult, since there is no medical test, like a blood test, to diagnose the disorders. Doctors look at the child’s behavior and development to make a diagnosis.*



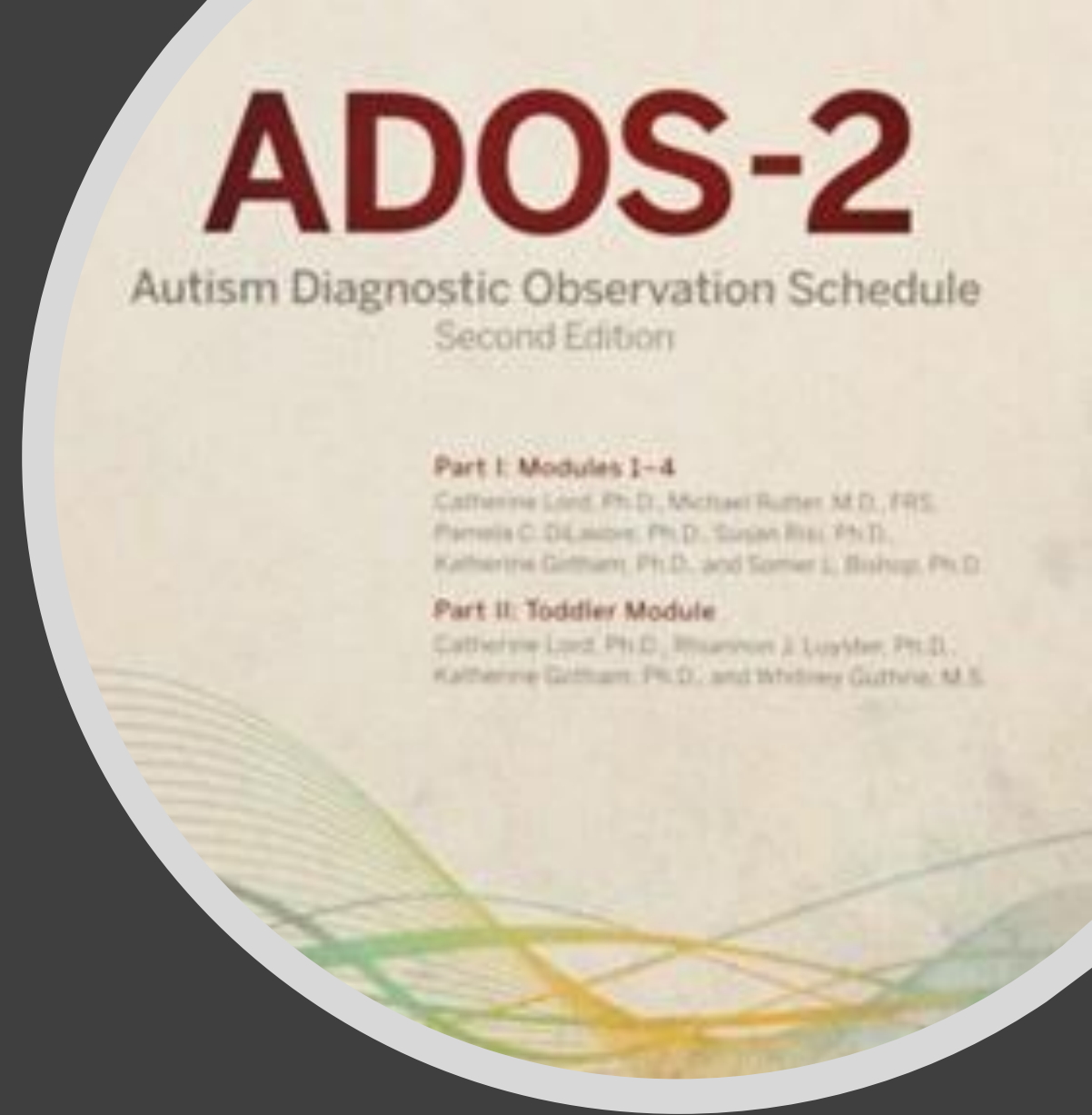
Even though ASD can be diagnosed as early as age 12 months, In the United States, the average age of diagnosis with an autism spectrum disorder (ASD) is around 4 years of age.

# Common Diagnostic Tools

- Autism Diagnostic Observation Schedule (ADOS)
  - **Considered the Gold Standard**
- Childhood Autism Rating Scale (CARS)
- Autism Diagnosis Interview-Revised (ADI-R)
- Gilliam Autism Rating Scale-Third Edition (GARS-3)
- In addition to the tools above, the American Psychiatric Association's Diagnostic and Statistical Manual, Fifth Edition (DSM-5) provides standardized criteria to help diagnose ASD

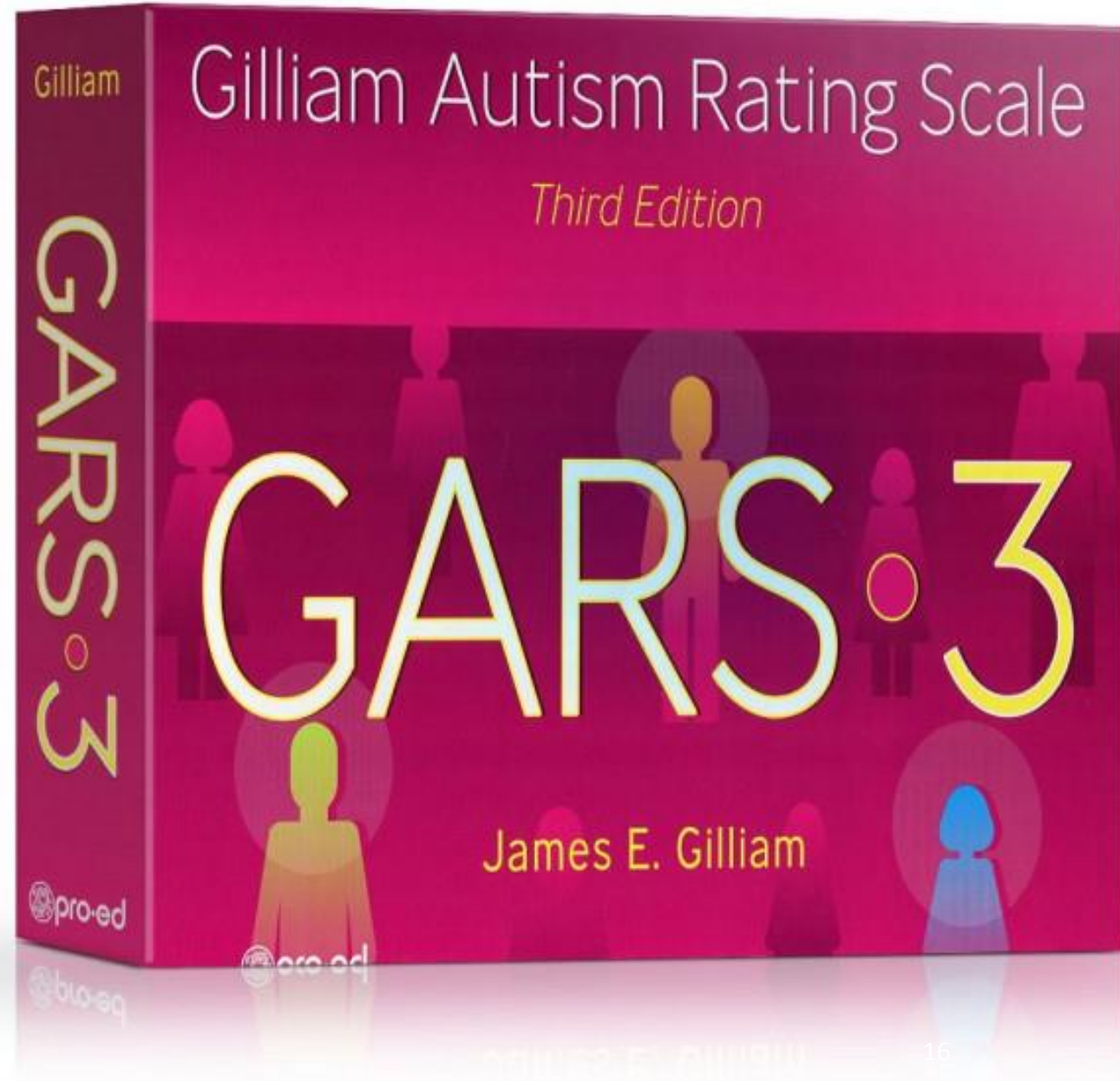
# ADOS

- A semi-structured, standardized assessment of social interaction, communication, play, and imaginative use of materials for individuals suspected of having ASD.
- Includes five modules, each requiring 40 to 60 minutes to administer.
- The individual being evaluated is given only **one** module, selected on the basis of his or her expressive language level and chronological age.



# GARS-3

- The Gilliam Autism Rating Scale, Third Edition (GARS-3) helps clinicians identify autism, assess its severity, and determine appropriate intervention.
- Items in the third edition reflect criteria for diagnosing Autism Spectrum Disorder (ASD) found in the DSM-5.
- Fifty-six items clearly describe typical behaviors of individuals with ASD, and are grouped into six subscales:
  - Restrictive and Repetitive Behaviors
  - Social Interaction
  - Social Communication
  - Emotional Responses
  - Cognitive Style
  - Maladaptive Speech
- Administration of the GARS-3 provides standard scores, percentile ranks, severity level, and probability of autism.





# Who Can Diagnose?



**Must be of DOCTORAL level of education and training (MD or PHD)**



**There are a number of professionals who can diagnose ASD. Each type of professional has different training.**

# Diagnosing Providers

1

**Developmental Pediatrician** is a pediatrician who has advanced training in developmental behavioral medicine. Developmental Pediatricians evaluate, counsel, and provide treatment for children, adolescents, and their families with a wide range of developmental and behavioral difficulties, including ASD.

2

**Pediatric Neurologist** is a pediatrician who has advanced training in pediatric neurology. Child neurologists treat children from birth into young adulthood and often diagnose, treat, and manage neurological conditions, including ASD.

3

**Child Psychiatrist** is a physician who specializes in the diagnosis and the treatment of disorders of thinking, feeling, and/or behavior, which affect children, adolescents, and their families. Many do have specializations that include diagnosing ASD.

4

**Child Psychologist** holds a PhD (doctorate) degree. Psychologists may have many different specialties. Those who specialize in diagnosing and treating individuals with ASD may have experience using psychometric evaluative measures, including the ADOS and the ADI-to diagnose ASD.

# MEDICAL DIAGNOSIS VS. EDUCATIONAL ELIGIBILITY FOR SPECIAL SERVICES:

- A medical diagnosis of ASD is made by a doctor using symptom criteria set in the Diagnostic and Statistical Manual of Mental Disorders (DSM), a book published by the American Psychological Association (APA)
- Educational eligibility is decided by a team comprised of various school professionals and a student's parents. The team must find that the student qualifies for services under IDEA. To be eligible, IDEA requires that a student have at least one of 14 specified disabilities and in need of special services. Autism is one of the 14 categories
- Educational evaluation = Category of eligibility for services



# Why is Early Intervention so Important ?

- An early diagnosis could mean that a child begins accessing effective treatment and accesses resources when they can be most effective. Without a diagnosis, funding through public or private insurance is less likely
- Therapy is shown to be most effective on toddlers and young children because their brains are not completely developed and have increased potential for developing new learning pathways.
- Children who receive early intervention have improved outcomes and increased success and independence in the long run.

# Support Services and Treatment

There is no one size fits all approach to autism treatment and intervention.

Each autism intervention or treatment plan should be individualized to address the person's specific needs

## Examples of services:

- Early Childhood Intervention (ECI)
- Preschool Program for Children With Disabilities (PPCD)
- Speech Therapy (ST)
- Occupational Therapy (OT)
- ABA Therapy
  - Recommended therapy for Autism

ECIPPCDSTOTABA

# Early Childhood Intervention (ECI)

- ECI: General term referring to services for infants and toddlers up to age 3
- To be eligible for ECI services your child must meet one of the following three criteria:
  - [Medically Diagnosed Condition](#)
  - [Auditory or Visual Impairment](#)
  - [Developmental Delay](#)

**Who Provides the Services?** A team of licensed or credentialed providers evaluates the child and plans and provides services. The team may include:

- Speech and language pathologists
- Physical and occupational therapists
- Psychologists
- Dietitians
- Social workers

**Where are Services Provided?**

- ECI providers work with the child and in natural environment which may include home and community settings.



# Educational Services

- The public school program for young children, ages 3-5, is called the Preschool Program for Children with Disabilities (PPCD).
- Based on a completed evaluation, your child needs to be determined as eligible for services. If your child is eligible, you will have an ARD/IEP meeting where you and the school will decide on the services to be provided.
- A student over age 3 with a developmental delay is subject to educational services, however hours of instruction can vary.
- PPCD services are provided in a group ratio, specific guidelines for teacher to student ratio vary per state
- Special education classrooms often include children with a variety of disabilities including physical disabilities, medically fragile, and emotional behavior challenges.



# Speech Therapy

Speech-language pathologists (SLP) also referred to as “speech therapists.”

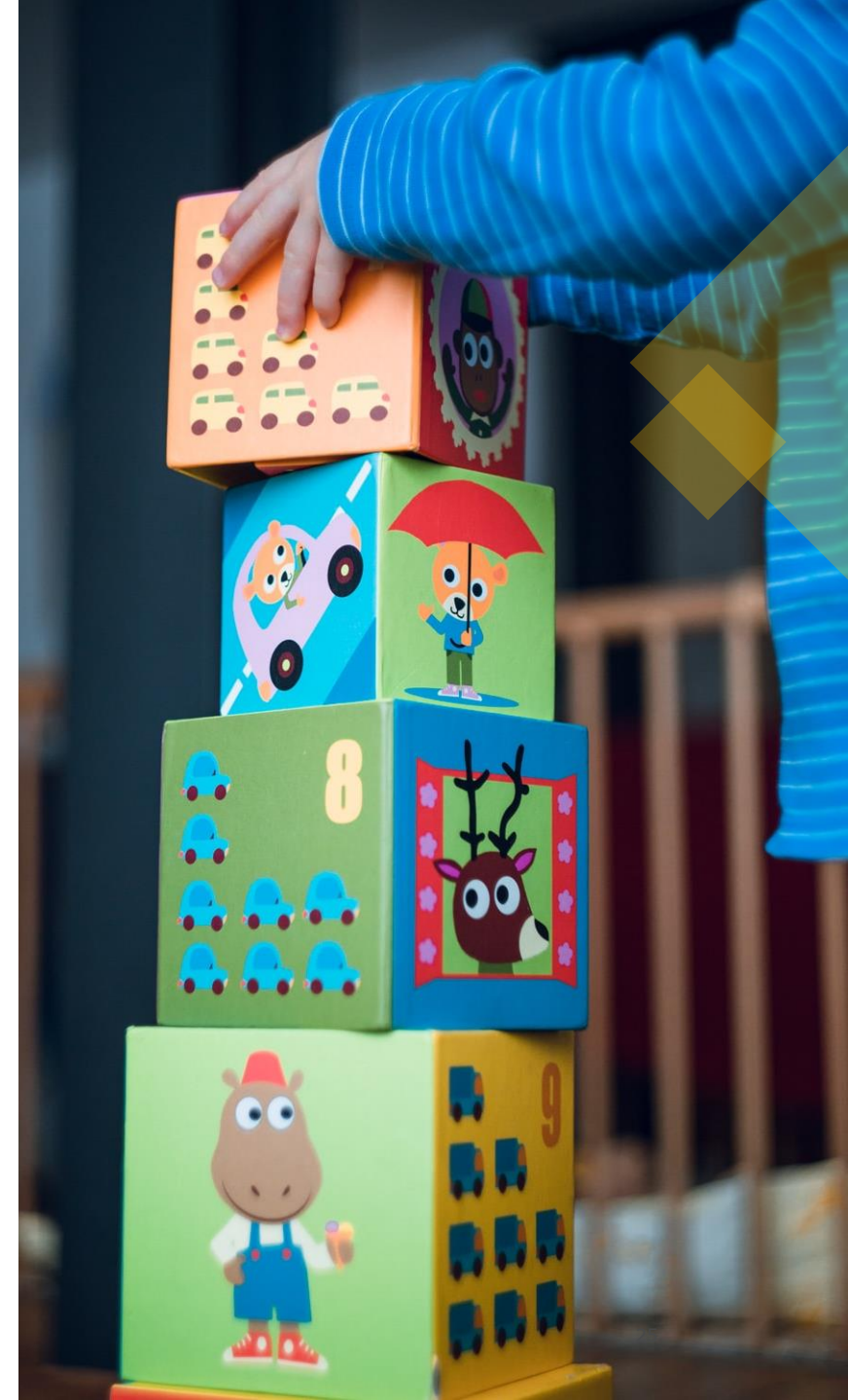
- The scope of practice for SLP professionals focuses on communicative enhancement, although the types of problems requiring intervention are diverse (e.g., developmental and acquired language disorders, speech production impairments, voice and fluency problems, augmentative and alternative communication needs)
  - Speech therapist may specialize in particular areas. It’s important to find one with training and experience helping children and/or adults with autism.
- For many people with autism, speech-language pathologists help with social communication skills.
- A speech-language pathologist can help non-verbal children and adults find and use the most appropriate means of alternative communication.





# Occupational Therapy

- The job of the pediatric occupational therapist (OT) is to help children do the work of childhood better.
  - That means helping children play, take care of themselves, and participate in their school program as fully as possible. The occupations or “jobs” of children can be broken down into three areas: play, self-care, and learning/school.
  - The OT will first assess the child to determine his or her developmental level and to determine whether or how the child’s issues are getting in the way of “learning” the jobs of childhood.





# What Exactly is ABA?

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- Applied Behavior Analysis (ABA) is a scientific, evidence-based discipline that strives to understand and improve socially significant behaviors.
- ABA examines the interactions between an individual and the environment to determine the effects the environment has on a person's behavior ("why" a behavior occurs).
- In clinical practice, ABA is used to teach new skills, improve performance in already acquired skills & decrease unwanted and challenging behaviors.
- Treatment of Choice: only scientifically validated treatment for Autism and is recommended by the US Surgeon General.

# ABA Therapy



- In clinical practice, ABA is used to
  - **Teach** new skills such as independent living skills, social skills, play skills, communication skills, etc.)
  - **Improve performance** in already acquired skills (i.e., faster task completion, more accurate responding, etc.)
  - **Decrease unwanted and challenging behaviors** such as aggression, stereotypy, self-injurious behavior, noncompliance, and other socially inappropriate behaviors.
- ABA is considered an evidence-based “best” practice treatment by the US Surgeon General and by the American Psychological Association. “Evidence based” means that ABA has passed scientific tests of its **usefulness, quality, and effectiveness**.

## ABA IN A NUTSHELL:

Understanding and Modifying  
behavior in context of  
environment

**BEHAVIOR:** Refers to all kinds of  
actions and skills (Not just  
misbehavior)

**ENVIRONMENT:** Includes all sorts  
of physical and social events that  
might change or be changed by  
one's behavior

# Components of ABA

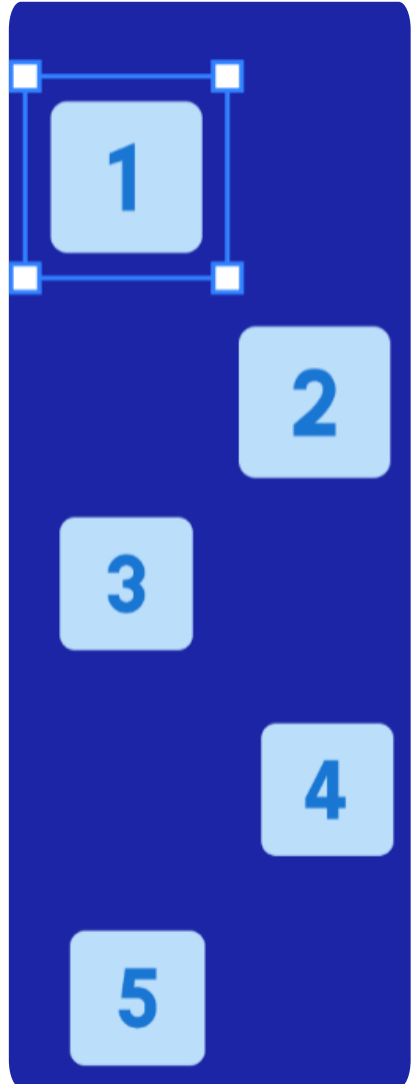
- Build language and communication skills
- Develop appropriate play and social skills
- Overcome behavioral challenges
- Develop self-help and daily living skills
- Produce meaningful behavior change
- Focusing on Behavior that is

**Observable**



**Measurable**

# Collaboration of Services



- Common Goals
- Multiple Perspectives
- Shared Purpose- Team Building
- Improved Communication
- Increase Generalization (Carry over of skills)



# Plan of Action

## Identify

- Become familiar with childhood developmental milestones
- Learn signs of Autism

## Screen

- If you have concerns with child's development, speak to pediatrician
- Ask for developmental screener

## Evaluate

- Get referral for specialist to conduct additional testing
- Research available treatment and support services in your area

## Treatment

- Gain referral and prescription for therapy services (treatment)
- Don't wait, start intervention services right away

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# Thank You

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The children and families we serve are at the heart of everything we do.

