

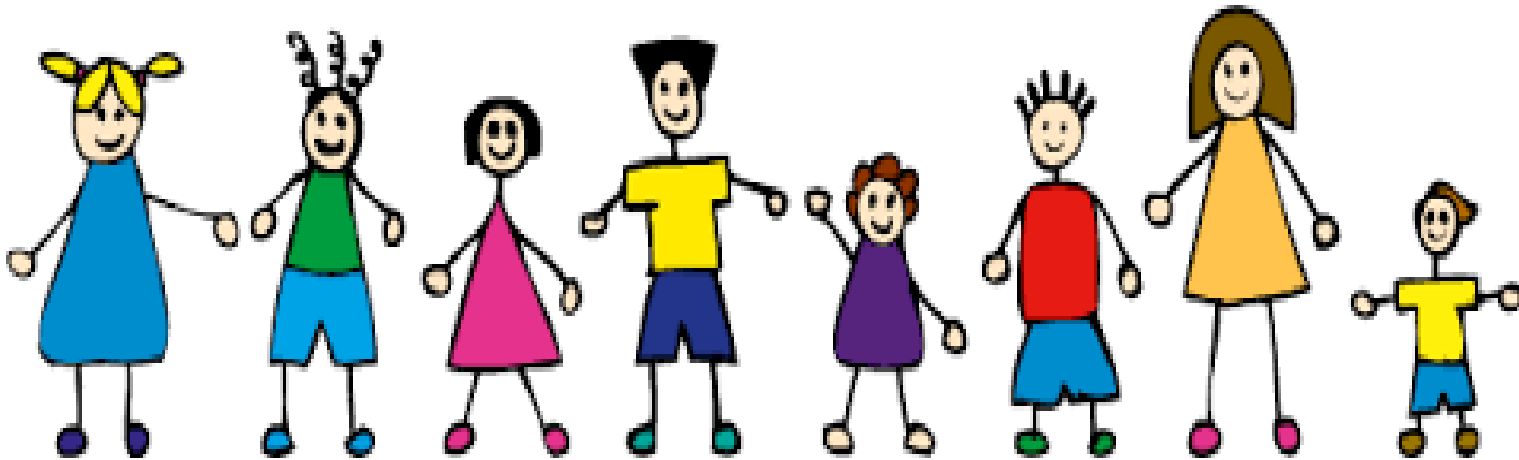


Autism Spectrum Disorder in Children and Adolescents

- ◆ Aura Lee A. Motus, M.D.
- ◆ UNM Department of Psychiatry
- ◆ Division of Child & Adolescent Psychiatry

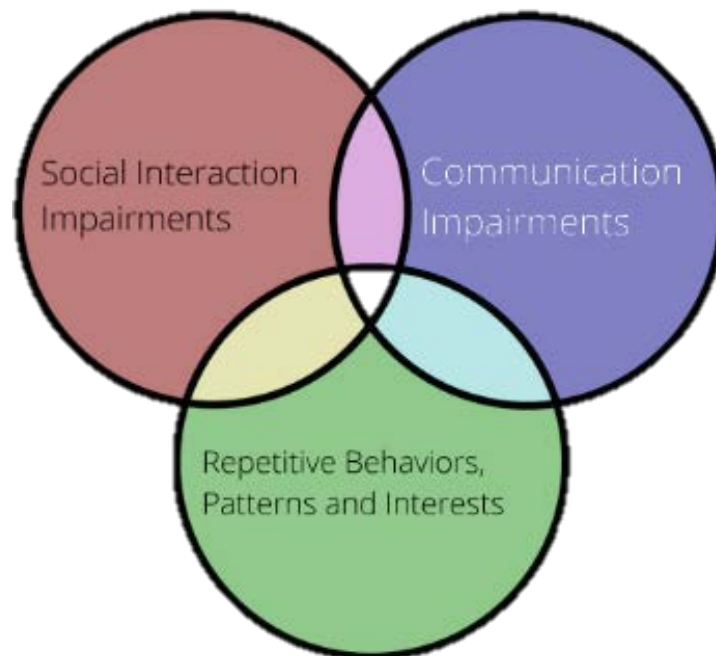
OBJECTIVES

- Recognize Early Signs of ASD
- Review Methods of Assessments
- Discuss Treatment Options



Three Core Features of ASD

- Impairments in communication
- Impairments in social interaction
- Restrictive, repetitive Patterns



Early Signs

- No big smiles or other warm, joyful expressions by 6mos or thereafter
- No back-and-forth sharing of sounds, smiles or other facial expressions by nine months
- No babbling by 12 months



Early Signs

- No back-and-forth gestures such as pointing, showing, reaching or waving by 12 months
- No words by 16 months
- No meaningful, two-word phrases (not including imitating or repeating) by 24 months
- Any loss of speech, babbling or social skills at any age

Social Differences in Children with Autism

- Doesn't keep eye contact or makes very little eye contact
- Doesn't respond to a parent's smile or other facial expressions
- Doesn't look at objects or events a parent is looking at or pointing to
- Doesn't point to objects or events to get a parent to look at them



Social Differences in Children with Autism

- Doesn't bring objects of personal interest to show to a parent
- Doesn't often have appropriate facial expressions
- Unable to perceive what others might be thinking or feeling by looking at their facial expressions
- Doesn't show concern for others
- Unable to make friends or uninterested in making friends



Communication Differences in Children with Autism

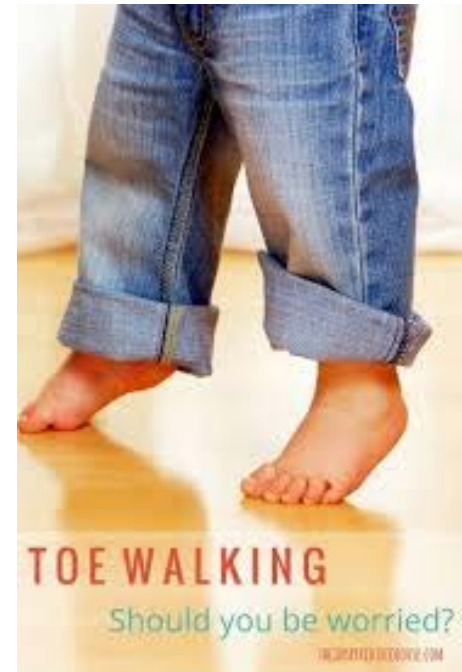
- Doesn't point at things to indicate needs or share things with others
- Doesn't say single words by 16 months
- Repeats exactly what others say without understanding the meaning
- Doesn't respond to name being called but does respond to other sounds
- Refers to self as "you" and others as "I" and may mix up pronouns

Communication Differences in Children with Autism

- Often doesn't seem to want to communicate
- Doesn't start or can't continue a conversation
- Doesn't use toys or other objects to represent people or real life in pretend play
- May have a good memory, especially for numbers, letters, songs, TV jingles, or a specific topic
- May lose language or other social milestones

Behavioral Differences in Children with Autism

- Rocks, spins, sways, twirls fingers, walks on toes for a long time, or flaps hands
- Likes routines, order, and rituals; has difficulty with change
- Obsessed with a few or unusual activities, doing them repeatedly during the day
- Plays with parts of toys instead of the whole toy

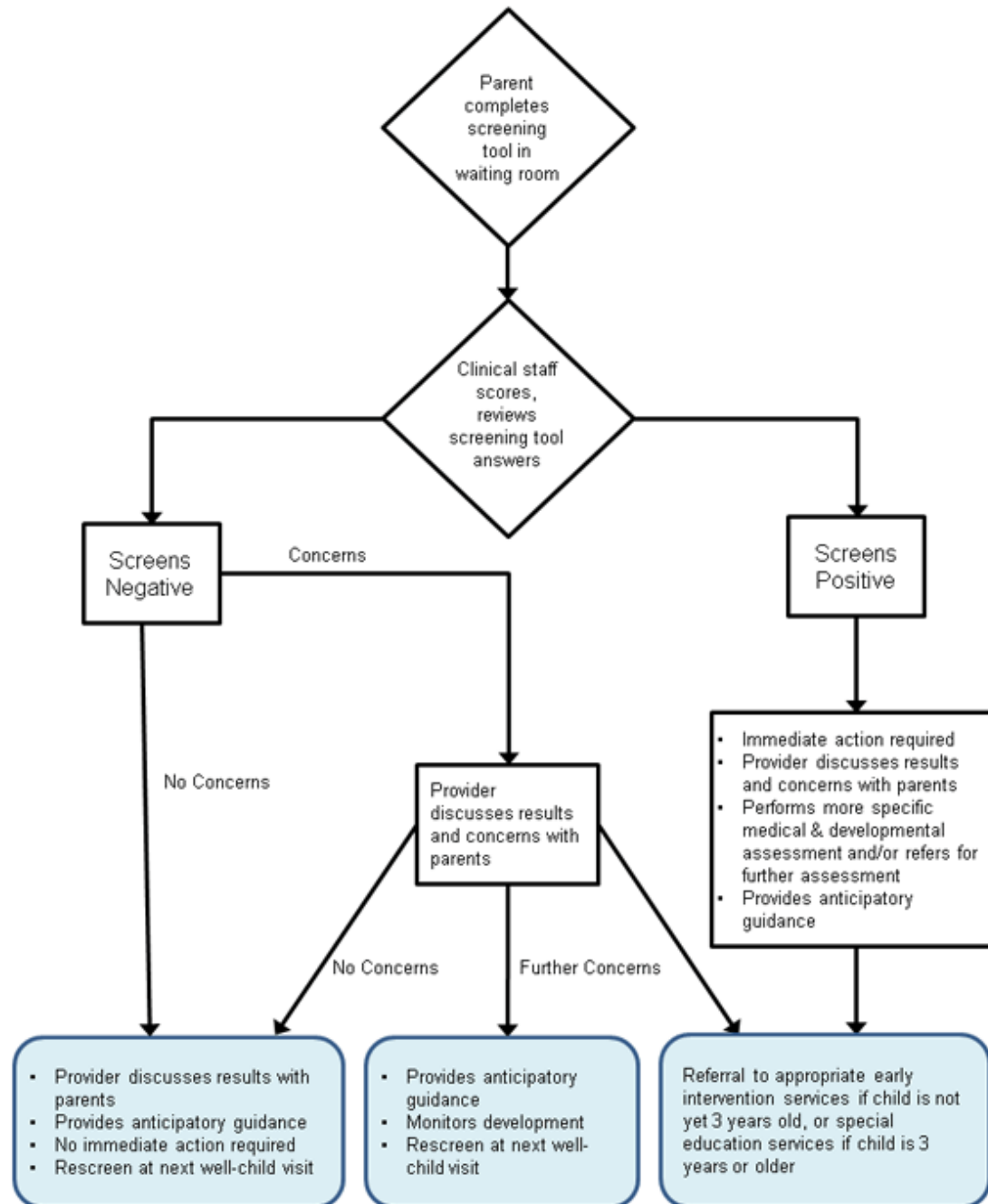


Behavioral Differences in Children with Autism

- Doesn't seem to feel pain
- May be very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch
- Unusual use of vision or gaze—looks at objects from unusual angles



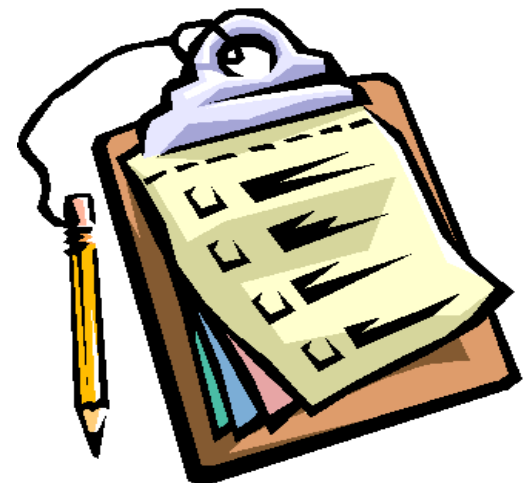
Pediatric Developmental Screening Flowchart



Methods of Assessments

- **SCREENING TOOLS**

- Ages and Stages Questionnaires (ASQ)
- Modified Checklist for Autism in Toddlers (MCHAT)
- Communication and Symbolic Behavior Scales (CSBS)
- Parents' Evaluation of Developmental Status (PEDS)
- Screening tool for Autism in Toddlers and Young Children (STAT)



Treatment Options

- **Early Intervention Services**

- helps children from birth to 3 years old (36 months) learn important skills. Services include therapy to help the child talk, walk, and interact with others



Types of Treatments

- Behavior and Communication Approaches
- Dietary Approaches
- Medication
- Complementary and Alternative Medicine

Behavior and Communication Approaches

- Applied Behavior Analysis
 - Types
 - Discrete Trial Training (DTT)
 - Early Intensive Behavioral Intervention (EIBI)
 - Pivotal Response Training (PRT)
 - Verbal Behavior Intervention (VBI)



Behavior and Communication Approaches

- Developmental, Individual Differences, Relationship Based Approach (DIR)
- Treatment and Education of Autistic and related Communication-Handicapped Children (TEACCH)
- Occupational therapy
- Sensory Integration Therapy
- Speech therapy
- The Picture Exchange Communication System (PECS)



Dietary Approaches

- Special Diets

- Gluten Free Casein free Diet
- Exclusion of Phenolic Compounds and foods High in Salicylates
- Exclusion of Food Additives
- Yeast Free Diet
- Supplements
- Fish Oils and other supplements rich in Omega 3 Fats
- Probiotics and Enzymes



Medications



Class	Action	Drug	Targeted symptoms
Antipsychotics	Typical*	Haloperidol	Aggression/irritability
	Atypical**	Risperidone Aripipazole	Aggression/irritability Aggression/irritability
Stimulants	DRI	Methylphenidate	Hyperactivity/inattention
Antihypertensive	α 2AR agonists	Guanfacine	Hyperactivity/inattention
		Clonidine	Hyperactivity/inattention
Antidepressants	NRI	Atomoxetine	Hyperactivity/inattention
	SSRI	Fluoxetine	Repetitive behavior/impulsivity
		Citalopram	Repetitive behavior/impulsivity
CNS depressant	MT receptors	Melatonin	Sleep problems



Complementary and Alternative Treatment

- Types include:
 - Special diets
 - Chelation
 - Biologicals
 - Body based systems