

Optum Health Education™

Autism Spectrum Disorder

Treatment for Children with ASD

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Disclosures

Disclosure

- We have nothing to disclose.

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Learning objectives

At the end of this educational activity, participants should be able to:

1. Discuss the different evidence-based treatments for autism spectrum disorder (ASD).
2. Determine the safety profiles of some Complementary and Alternative Medicine (CAM) for the treatment of ASD.
3. Describe the role that telehealth can play in the treatment of ASD.
4. Explain the role and principles of Applied Behavior Analysis (ABA) services as a form of treatment for children with ASD.
5. Compare and contrast different types of Autism therapies

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Evidence-Based Treatment

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Autism and co-occurring conditions



Behavioral health

- Attention deficit hyperactivity disorder (ADHD)
- Communication disorders
- Intellectual disabilities
- Depression
- Anxiety
- Bipolar disorder
- Trauma related disorders



Medical

- Seizures/Epilepsy
- Down syndrome
- Genetic abnormalities
- Gastrointestinal issues
- Sleep challenges
- Food related challenges

Source: Autism Speaks. Medical conditions associated with autism. autismspeaks.org/medical-conditions-associated-autism. Accessed May 16, 2022.

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Medical and behavioral benefits for autism

Treatment of autism spectrum disorder (ASD) can require access to both medical benefits and mental health benefits



Behavioral benefits

- Psychiatric management
- Family therapy
- Individual therapy
- Applied behavior analysis (ABA)
- Social Skills development



Medical benefits

- Pediatric neurology
- Developmental pediatrics
- Occupational therapy
- Speech therapy
- Gastrointestinal/Feeding

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ASD Interventions

How to Choose?

- Evidence of effectiveness
- Professional judgement
- Family preference
- Capacity to implement intervention



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Psychopharmacology

To Treat Comorbidities

- Anxiety / phobias
- OCD
- ADHD
- Depression
- Bipolar disorder
- Disruptive behavior

To Treat Autism Irritability and Aggression

- Risperidone
- Aripiprazole



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Complementary and Alternative Medicine

- Very little to no evidence of benefit
- 95% of parents use some type of CAM therapy
 - *Levy and Hyman, Child Adol Psychiatr Clin N Am. 2008 October*
 - [Complementary and Alternative Medicine Use in a Large Pediatric Autism Sample | Pediatrics | American Academy of Pediatrics \(aap.org\)](#)
- Gluten-free diets:
 - 88% of gluten-free foods for children are unhealthy
 - *Pediatrics, July 2018*
- Hyperbaric Oxygen Chamber
- Other therapies might include herbal supplements, vitamins, animal therapies, art therapies

AMA Journal of Ethics, Complementary and Alternative Treatments for Autism part 2, updated April 2015, accessed 08/04/2023

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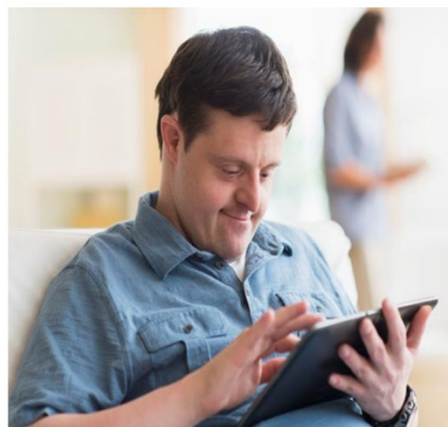
Mindfulness and Stress Management for Caregivers

For parents / caregivers

- Stress reduction is important. Can assist with frustration, sadness, feelings of being overwhelmed.
- Caregivers of a child with special needs are more likely to experience anxiety and depression
- improved interactions

Types of Interventions

- Mindfulness
- Support Groups
- Outpatient Therapy
- Talking to caregivers about the importance of exercise, sleep, eating well
- Relaxation Exercises
- Seeking family/friend support



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Early Intervention Services

- Children under 3 years old
- Part C of IDEA
- Developmental Delay / Disability
 - Physical
 - Cognitive
 - Communication
 - Social or emotional
 - Adaptive
- Individual Family Service Plan
- Early Childhood Special Education
 - Also called Special Needs Preschool or Developmental Preschool (with an IEP)
 - 3-5 years old

Interventions may include:

- Assistive Technology
- Audiology
- Family Training, counseling & home visits
- Nursing
- Nutrition
- Occupational therapy
- Physical therapy
- Psychological services
- Service coordination
- Sign Language
- Social work services
- Speech / language
- Special instruction
- Transportation

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School Services After Preschool

IEP Under:

- Autism
- Intellectual Disability
- Speech / Language Impairment
- Specific Learning Disability
- Other Health Impairment
- Vision / Hearing Impairment
- Orthopedic Impairment
- Multiple Disabilities
- Emotional Disability
- Traumatic Brain Injury

504 Plans:

- ADHD
- Chronic Illness
- Anxiety / Depression
- High-functioning Autism / Asperger
- Milder impairments that do not reach criteria for IEP

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Intensive behavioral therapy including applied behavior analysis

Intensive behavioral therapy (IBT)

Umbrella term for a variety of outpatient behavioral interventions to treat ASD

Applied behavior analysis (ABA)

- Most common intensive behavioral therapy for autism spectrum disorder
- Interventions to reduce problem behavior and develop alternative behaviors and skills



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ABA: Recommended treatment for autism

United States Surgeon General¹



Thirty years of research demonstrated the efficacy of applied behavioral methods in reducing inappropriate behavior and in increasing communication, learning and appropriate social behavior.”

American Academy of Pediatrics²



The effectiveness of ABA-based intervention in ASDs has been well-documented through five decades of research. ... Children who receive early intensive behavioral treatment have been shown to make substantial, sustained gains in IQ, language, academic performance and adaptive behavior, as well as some measures of social behavior, and their outcomes have been significantly better than those of children in control groups.”

1. Mental Health: A Report of the Surgeon General. <https://profiles.nlm.nih.gov/101584932X120>

2. American Academy of Pediatrics Clinical Report January 2020, Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. <https://publications.aap.org/pediatrics/article/145/1/e20193447/369171/Identification-Evaluation-and-Management-of-Autologincheck-redirected>

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ABA is an Umbrella Approach



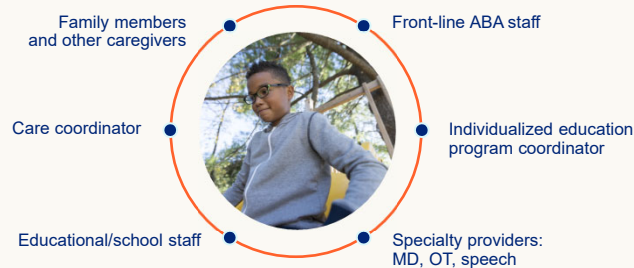
- Discrete Trial Instruction
- Pivotal Response Training/Treatment
- Script/Script Fading
- Self-Management
- Functional Assessment
- Incidental Teaching
- Modeling
- Functional Communication Training
- Chaining
- Shaping
- Errorless Learning
- Direct Instruction
- Verbal Behavior
- Video Modeling
- Lovaas
- Peer mediated social skills training
- Pivotal Response Training
- Precision Teaching
- Picture Exchange Communication System (PECS)

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ABA is a comprehensive approach

Goal: Promote optimal functioning in all natural environments

The provider, also known as the ABA supervisor or board-certified behavior analyst (BCBA), will involve all caregivers and other treating professionals in treatment:



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Elements of ABA treatment

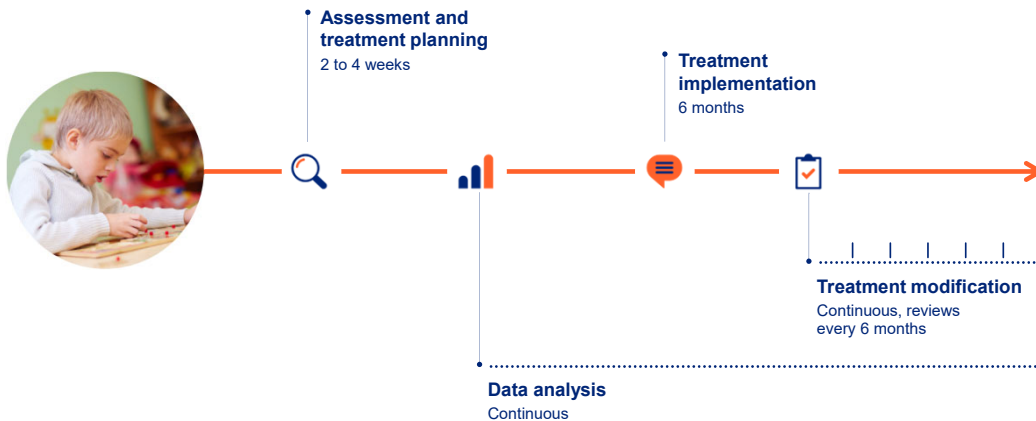


Supervision by a behavior analyst

- Description of behavior at baseline
- Direct assessment, analysis and adjustments to the treatment plan
- Direct observational data
- Direct support
- Establish small units of behavior to build upon
- Function-based and value-focused intervention
- Management of the treatment environments
- Training of family and other involved professionals
- Written treatment protocols that are implemented repeatedly, frequently and consistently across multiple environments

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Treatment review process

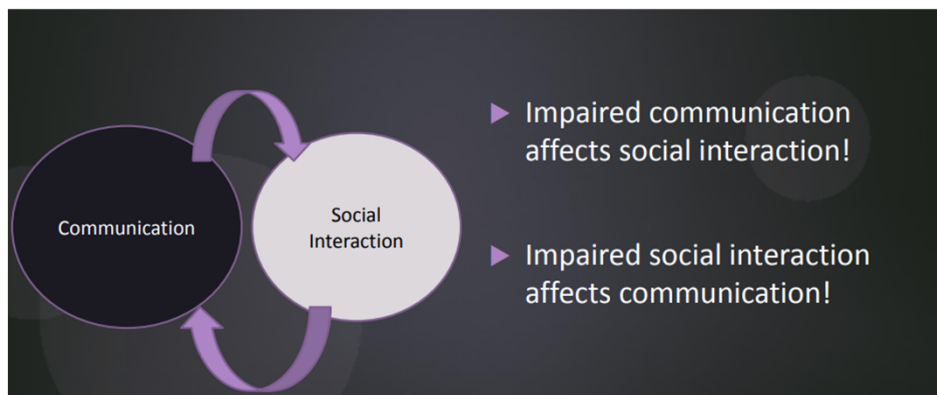


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Adjunctive Treatment Strategies for Individuals With Autism

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Relationship Between Communication and Social Interaction



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Autism and Language Problems

Receptive Language:

- Vocabulary
- Word meanings and relationships
- Underlying grammar and syntax
- Concepts
- Memory challenges
- Processing

Expressive Language

- Impaired acquisition of words
- Word retrieval
- Language formulation
- Narrative language
- Conversation
- Repetitive talking about their own narrow topics of interest
- Use of scripted language
- Echolalia – repetition of words spoken by other people

Nonverbal Communication:

- Body language (posture and positioning)
- Gesture
- Facial expression
- Eye gaze (shifts)
- Difficulty reading the situation

Social Communication:

- Weak social attention
 - Orienting to people in a social environment
 - Joint attention
- Recognizing intent
- Taking the listener's perspective
- Inflexible thinking / behavior
- Turn-taking

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Treatment

Speech Language Pathologist's Role: Evaluate and describe the communication disorder and social concerns in relation to the autism

Treatment is based on:

- Age
- Understanding of language
- Ability to expressively communicate
- Intellectual development
- Social development
- Behavior

Treatment Can Include:

- interventions to encourage more functional communication systems: PECS, sign language, AAC, verbal
- improve foundational language skills and precursors to language
- Relationship-based interventions

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Other Treatment Interventions for Autism Spectrum Disorder

- Occupational Therapy
- Feeding Therapies
- Outpatient Therapy
- Family therapy
- Family psychoeducation
- Higher level of care
- Vocational Rehabilitation/Job Coaching
- Technology/Apps

Interventions can occur across settings to assist with generalization

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Telehealth and ASD



- Improve access to specialists
- Improve medication management
- Parent-Mediated Interventions
- Telehealth can be available for a variety of services including:
 - Parent coaching
 - Medication check-ups
 - Outpatient behavioral health
 - Virtual coaching visits
 - ABA: Supervision and parent coaching

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People First Language: Essential for Family-Centered Care

A disability descriptor is simply a medical diagnosis

People First Language respectfully puts the person before the disability

A person with a disability is more *like* people without disabilities than different!

- **NOT** the Downs Kid – The child with Down syndrome
- **NOT** the Autistic Kid – The child with Autism
- **NOT** the Retarded Kid – The child with an intellectual disability

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Q&A

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Resources

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CAM

Resources	Link
National Autism Center	www.nationalautismcenter.org
National Center for Complementary and Integrative Health	www.nccih.nih.gov
Autism Speaks	http://www.autismspeaks.org/what-autism/treatment/complementary-treatments-autism
Perrin, et al	Pediatrics 2012; 130;S77
Use of Complementary treatments in ASD, Levy and Hyman	Child Adol Psychiatr Clin N Am. 2008 October

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Web-based

Resources	Link
CServ ABA therapy	www.cservtelehealth.com
ReThink	www.rethinkbenefits.com
Autism Speaks Family Toolkits	https://www.autismspeaks.org/family-services/tool-kits
UC Davis Mind Institute	http://www.ucdmc.ucdavis.edu/mindinstitute/
OCALI	www.autisminternetmodules.org www.ocali.org/project/asd_intro

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Articles and Books

Article/Book Title and Authors	Journal
The Clinician's Guide to Autism, John Harrington and Korrie Allen	Pediatrics in Review, 2014;35;62
Telehealth and Autism: Treating Challenging Behavior at a Lower Cost Lindgren, et al	Pediatrics, February 2016, Vol 137/ Issue Supplement 2
Teaching Social Communication to Children with Autism: A Manual for Parents	Brooke Ingersoll and Anna Dvortcsak
An Early Start for your Child with Autism: Using Everyday Activities to Help Kids Connect, Communicate, and Learn	Sally Rogers, Geraldine Dawson, and Laurie Vismara
Visual Supports for People with Autism: A guide for Parents and Professionals	Marlene Smith and Donna Sloan

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Interventions

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