

Clinical Policy: Autism Spectrum Disorders: Diagnosis and Treatment

Reference Number: CA.CP.MP. 274

Effective Date: 11/05

Last Review Date: 09/21

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

This document addresses screening, diagnostic evaluation, and therapeutic services for individuals with Autism Spectrum Disorders (ASDs).. NOTE: Applied Behavioral Analysis (ABA) is addressed in a separate Centene Clinical Policy on ABA.

Policy/Criteria

- I. It is the policy of California Health & Wellness that the following may be **medically necessary** to screen for autism spectrum disorders:
 - A. Screening for ASD should be performed as a part of routine well-baby checks and ongoing developmental monitoring. Primary care providers (PCPs) should screen all children from birth to age 5 for autism and other developmental delays by:
 - Performing general developmental screenings at ages 9, 18 and 24 or 30 months.
 - Growth parameters, head circumference, physical examination, neurological exam, developmental milestones, screening for hearing and vision, speech and language skills, gross motor and fine motor skills and social skills.
 - Referral for formal vision and hearing assessment when needed
 - Blood testing for lead levels, anemia and other specific tests when needed
 - Discussing with the parents any concerns they have, as they are usually the first to notice that something is not progressing as it should
 - Performing ASD specific screenings at ages 18 and 24 months as recommended by the American Academy of Pediatrics.
 - Asking the parents direct questions regarding the child's functioning core symptoms of ASD, including social relatedness and repetitive or unusual behaviors.
 - Educate parents that there may some children who are more intellectually able and whose social disability may not be detected until a later age.

Screening assessment tools are available, and can be useful in determining the need for further evaluation and assessment, however they are not intended for sole use in making a diagnosis. There is increasing evidence for the efficacy of early intervention, hence the need for periodic screening for autism through the early developmental period, especially between the ages of 18 and 36 months old. Children who screen positive on an initial ASD screening will benefit from referral for developmental services through the Early Intervention or public school system as well as referral for a comprehensive diagnostic assessment. In other words, referral for treatment and further assessment can occur concurrently.

- B. Some ASD specific screening tools include:

CLINICAL POLICY

Autism Diagnosis and Treatment

- Modified Checklist for Autism in Toddlers Revised (M-CHAT-R) and Modified Checklist for Autism in Toddlers-Revised with Follow-Up Interview (M-CHAT-R/F). The M-CHAT is a validated free tool for toddlers between 16 and 30 months of age. The tool is designed to identify children who may benefit from a more thorough developmental and autism evaluation. Reported to have sensitivity 85% and specificity 99%.
 - Screening Test for Autism in Two-Year-Olds (STAT)
 - This is used for children between 24 and 36 months of age. This involves a 20 minute long play sessions with observation of 12 activities in 4 different domains. This validated test has reportedly high sensitivity (92 to 95%) and specificity (73 to 85%) when compared to the ADOS-Generic (ADOS-G) test to verify the diagnosis.
- Infant-Toddler Checklist (ITC).
- The ITC is a 24 item questionnaire that is part of the Communication and Symbolic Behavior Scale (CSBS) Developmental Profile. The ITC screens for communication delays for children 6 to 24 months. .
-
- Parent's Observations of Social Interactions
- This is a parent report assessment for children between 2 and 60 months old. This is part of the Survey of Wellbeing of Young Children (SWYC).
 - Autism Behavior Checklist (ABC), completed by parents or caregiver
 - Childhood Autism Rating Scale (CARS), clinician-rated tool for use with children over two, evaluates body movements, adaptation to change, listening response, verbal communication and relatedness to people
 - Social Communication Questionnaire (SCQ) for children age four and over.
 - Pervasive Developmental Disorders Screening Test – II (PDDST-II) for children from birth to three years old This is not an exhaustive list, but rather an example of the different initial ASD screening tools utilized in practice.
-

II. It is the policy of California Health & Wellness that the following may be **medically necessary** in the diagnostic evaluation for autism spectrum:

- A. Children are referred to a specialist for more definitive ASD diagnostic assessment. The specialist may be a developmental-behavioral pediatrician, child psychologist or child neuropsychologist with expertise in the diagnosis of ASD. Other physicians providing assessments may include: child and adolescent psychiatrist, geneticist, pediatric rehabilitation medicine specialist and/or child neurologist. The physicians often work in close collaboration with a multi-disciplinary team of other health professionals that may include: speech and language therapists, occupational therapists, physical therapists, audiologists, early education

CLINICAL POLICY

Autism Diagnosis and Treatment

teachers, special education teachers and others. The evaluation may occur in an academic center, a regional center, a specialized clinic or a private practitioner's office.

Specialized Autism Diagnostic Testing includes:

Parent interviews:

ADI-R – Autism Diagnostic Interview –

This is a structured interview with the caregiver including 92 questions encompassing language skills, social skills and interests and behaviors.

Revised DICA IV – Diagnostic Interview for Children and Adolescents

Child Observation:

ADOS-2 – Autism Diagnostic Observation Scale

The child is observed in structured and semi-structured situations. The child is rated on their social interactions, communications and stereotypic behaviors. There are different modules according to verbal ability and age. Diagnostic Interview for Social and Communication Disorders (DISCO) structured interview rated by clinician, for use with children and adults

Autism Diagnosis Interview- Revised (ADI-R), structured interview performed with parents or caregiver

- A thorough evaluation (including a parent and/or caregiver interview including siblings) should include the following:
 1. Pre- and Perinatal history
 2. Past medical history, review of systems
 3. Developmental and behavioral history
 4. Academic history if child is of school age
 5. Family medical and mental health history
 6. Family functioning
 7. Coping resources
 8. Direct observation of the child with focus on social interaction and restrictive, repetitive behaviors
 9. Comprehensive evaluation by a speech-language pathologist that includes vocabulary, actual language use skills, both receptive and expressive language, social pragmatic skills, articulation and oral-motor skills.
 10. Evaluation of academic achievement for children six years of age or older
 11. Occupation and physical therapy testing if sensory or motor difficulties are present
 12. Comprehensive medical evaluation that should include:
 - A complete medical history, review of past records and interviews with family and child
 - A thorough physical that includes a careful neurological exam. . Between 20 to 30% of youth with ASD may have epilepsy.
 - Autism associated with motor abnormalities (79%0, gastrointestinal problems (up to 70%), intellectual disability (45%), sleep disorders (50-80%)

CLINICAL POLICY

Autism Diagnosis and Treatment

- A Wood's lamp examination of the skin for signs of tuberous sclerosis
 - Routine hearing and visual screening
 - Measurement of blood lead level if the child exhibits developmental delay and pica, or lives in a high-risk environment
 - Quantitative plasma amino acid testing to detect phenylketonuria
- Genetic Testing may be included when a genetic disorder is suspected as determined by the pediatrician.

13. Comprehensive Diagnostic Testing as part of a multi-disciplinary team may include:

Cognitive or intelligence functioning. Some tests include:

- Mullen Scales of Early Learning
- Bayley-IV Scales of Infant and Toddler Development
- UNIT-2 – Universal Nonverbal Intelligence Test
- DAS-II – Differential Ability Scales
- WPPSI-IV – Wechsler Preschool and Primary Scale of Intelligence
- Leiter-3 –
- Nonverbal test of Cognitive Abilities
- WISC-V – Wechsler Intelligence Scale for Children
- IDA-2 – Infant Toddler Development Assessment
- Stanford-Binet Intelligence Scales (SB-5)

Speech and Language Assessment. Some tests may include:

CCC-2 – Children's Communication Checklist

CELF-5 – Clinical Evaluation of Language Fundamentals PPVT-4 – Peabody

Picture Vocabulary Test

EVT2 – Expressive Vocabulary Test

CASL – Comprehensive Assessment of Spoken Language

- Preschool Language Scale
- McArthur Communicative Development Inventory

Adaptive Functioning. Some tests include:

ABAS-II – Adaptive Behavior Assessment System

VABS (Vineland) III – Adaptive Behavior Scale

SIB-R – Scales of Independent Behavior Revised

Sensory and Motor Skills Assessment by Occupational Therapist and/or Physical Therapist. Some tests include:

PDMS2 – Peabody Developmental Motor Scales, Second Edition Beery VMI –

Beery-Buktenica Developmental Test of Visual-Motor Integration, 6th Edition

BOT-2 – Bruininks-Oseretsky Test of Motor Proficiency, Second Edition

Sensory Profile-2 Caregiver Questionnaire Sensory Profile-2 Caregiver

Questionnaire Infant/Toddler

CLINICAL POLICY

Autism Diagnosis and Treatment

SIPT – Sensory Integration and Praxis Test

Psychiatric Evaluation by a child and adolescent psychiatrist and/or psychologist. An assessment, including a mental status examination, and comprehensive psychiatric history and family history will assess for co-occurring mental health conditions that may be a focus of treatment.

- It is the policy of California Health & Wellness that the following are **investigational** in screening, diagnosing and treating autism spectrum:
 1. Allergy testing (especially food allergy for gluten, casein, candida and other molds)
 2. Auditory integration training (auditory integration therapy)
 3. Chelation therapy
 4. Cognitive rehabilitation
 5. Elimination diets (e.g. gluten and/or milk elimination)
 6. Erythrocyte glutathione peroxidase studies
 7. Event-related brain potentials
 8. Facilitated communication
 9. Hair analysis for trace elements
 10. Holding therapy
 11. Hyperbaric oxygen therapy
 12. Immune globulin infusion
 13. Intestinal permeability studies
 14. Magnetoencephalography/magnetic source imaging
 15. Music therapy and rhythmic entrainment interventions
 16. Neuroimaging studies such as CT, MRI, MRS, PET, SPECT and fMRI, even in the presence of megalencephaly
 17. Nutritional supplements (e.g., megavitamins, high-dose pyridoxine and magnesium, dimethylglycine, omega-3 fatty acids)
 18. Nutritional testing
 19. Pet therapy (e.g., Hippotherapy)
 20. Provocative chelation tests for mercury
 21. Routine EEG studies
 22. Secretin infusion
 23. Sensory integration therapy
 24. Stool analysis
 25. Tests for celiac antibodies
 26. Tests for immunologic or neurochemical abnormalities
 27. Tests for micronutrients such as vitamin levels
 28. Tests for mitochondrial disorders including lactate and pyruvate
 29. Tests for thyroid function
 30. Tests for urinary peptides
 31. Vision therapy
 32. Lupron Therapy
 33. Prism Glasses

CLINICAL POLICY

Autism Diagnosis and Treatment

The American Academy of Neurology and the Child Neurology Society issued the following clinical practice recommendations regarding evaluation of ASD:

1. Genetic testing in children with autism, specifically high-resolution chromosome studies (karyotype) and DNA analysis for Fragile X, should be performed in the presence of intellectual disability (or if intellectual disability cannot be excluded), if there is a family history of Fragile X or undiagnosed intellectual disability, or if dysmorphic features are present. However, there is little likelihood of positive karyotype or Fragile X testing in the presence of high-functioning autism.
2. Selective metabolic testing should be initiated by the presence of suggestive clinical and physical findings such as the following: evidence of lethargy, cyclic vomiting, or early seizures; presence of dysmorphic or coarse features; evidence of intellectual disability cannot be ruled out; or if occurrence or adequacy of newborn screening is questionable.
3. There is inadequate evidence to recommend an electroencephalogram study in all individuals with autism. Indications for an adequate sleep-deprived electroencephalogram with appropriate sampling of slow wave sleep include clinical seizures or suspicion of subclinical seizures and a history of regression (clinically significant loss of social and communicative function) at any age, but especially in toddlers and preschoolers.
4. Recording of event-related potentials and magnetoencephalography are research tools at the present time, without evidence of routine clinical utility.
5. There is no clinical evidence to support the role of routine clinical neuroimaging in the diagnostic evaluation of autism, even in the presence of megalencephaly.
6. There is inadequate supporting evidence for hair analysis, celiac antibodies, allergy testing (particularly food allergies for gluten, casein, *Candida*, and other molds), immunologic or neurochemical abnormalities, micronutrients such as vitamin levels, intestinal permeability studies, stool analysis, urinary peptides, mitochondrial disorders (including lactate and pyruvate), thyroid function tests, or erythrocyte glutathione peroxidase studies.

<https://www.cdc.gov/ncbddd/autism/hcp-recommendations.html>

Background

Autism Spectrum Disorder is a developmental disorder that presents in the developmental period and profoundly interferes with the individual's lifelong functioning especially in areas of social skills, communication and restricted patterns of behavior and interests. Since 2013 with the publication of the DSM-5, the term Autism Spectrum Disorder refers to individuals with previous diagnoses of Pervasive Developmental Disorder Not Otherwise Specified (PDD NOS), Asperger's Syndrome, Rett disorder and Childhood Disintegrative Disorder. According to the DSM-5 ASD is characterized by impairment in two core areas:

1. Deficits in social interaction and social communication across multiple contexts, such as
 - Deficits in social-emotional reciprocity
 - Deficits in nonverbal communicative behaviors used for social interaction

CLINICAL POLICY

Autism Diagnosis and Treatment

- Deficits in developing, maintaining and understanding relationships
- 2. Restricted, repetitive patterns of behaviors, interests or activities that must include at least two of the following:
 - Stereotyped or repetitive motor movements, use of objects, or speech
 - Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior
 - Highly restricted interests, fixated interests that are abnormal in intensity or focus
 - Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment
- 3. Specify current /Severity:
 - Severity is based on social communication impairments and restricted, repetitive patterns of behavior
 - Level 1: Requiring Support
 - Level 2: Requiring Substantial Support
 - Level 3: Requiring Very Substantial Support

The degree of impairment in these areas varies widely from child to child. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life.

Prevalence of Autism Spectrum Disorder:

The prevalence of ASD is approximately 1 in 54 children in the US. Whereas 1 in 34 boys are identified with ASD, only 1 in 144 girls are identified.

The Autism and Developmental Disabilities Monitoring (ADDM) Network estimates the prevalence of ASD for children aged 8 years old within 11 ADDM Network states. For 2016, ASD prevalence was 18.5 per 1000 (one in 54) children aged 8 years. ASD was 4.3 times as prevalent among boys as girls. Prevalence varied by site, ranging from 13.1 (CO) to 31.4 (NJ). Among children with ASD with IQ testing data available, 33% were classified with Intellectual Disability; slightly higher among girls than boys (39% vs. 32%), and among black and Hispanic than white youth (47%, 36% and 27%). Black children with ASD were less likely to have a first evaluation by age 36 months than white children (40% vs. 45%). The median age at earliest known ASD diagnosis was 51 months.

In 2016, the overall prevalence of ASD in the Early ADDM Network using DSM-5 criteria (15.6 per 1,000 children aged 4 years) was higher than the 2014 estimate using DSM-5 criteria (14.1 per 1,000). Children born in 2012 had a higher cumulative incidence of ASD diagnoses by age 48 months compared with children born in 2008, which indicates more early identification of ASD in the younger group. The disparity in ASD prevalence has decreased between white and black children. Prevalence of co-occurring intellectual disability was higher than in 2014, suggesting children with intellectual disability continue to be identified at younger ages. More children received evaluations by age 36 months in 2016 than in 2014, which is consistent with *Healthy People 2020* goals. Median age at earliest ASD diagnosis has not changed considerably since 2014.

CLINICAL POLICY

Autism Diagnosis and Treatment

More children aged 4 years with ASD are being evaluated by age 36 months and diagnosed by age 48 months, but there is still room for improvement in early identification. Timely evaluation of children by community providers as soon as developmental concerns have been identified might result in earlier ASD diagnoses, earlier receipt of evidence-based interventions, and improved developmental outcomes.

Etiology

The etiology of ASD is unknown. It is a disorder involving multiple and diverse neural systems, but no single unifying explanation exists. There is strong support for ASD being genetically determined, at least in part. The recurrence risk for ASD in siblings (2-18.7%), and even higher concordance in identical twins, provides some of this support. In addition, ASD is associated with other conditions that are known to be inherited, such as fragile X syndrome and tuberous sclerosis. Other genetically determined conditions, such as untreated phenylketonuria and methylmalonic aciduria are associated with ASD-like behaviors.

Environmental factors, such as viruses, are being studied. It used to be thought that parental actions caused autism, but this has never been substantiated and in fact parents are nearly always their autistic child's most effective advocates. Another environmental agent that has been discredited is thimerosal, a preservative that was used in many vaccines until its use was discontinued in 1999. The main *Lancet* study that suggested a link between thimerosal and autism was found to be flawed and, as a result, the article has been withdrawn from the journal.

Known risk factors are close spacing of pregnancies, older maternal or paternal age and extreme prematurity (less than 36 weeks gestational age).

Some Developmental Indicators of ASD

The infant does not babble by 12 months; or

The infant does not gesture (e.g. pointing, waving bye-bye) by 12 months; or

The toddler is not speaking single words by 16 months; or

The toddler is not speaking spontaneous two-word phrases by 24 months (not just the immediate and involuntary repetition of words or phrases spoken by others); or

The toddler does not respond to their own name;

Loss of any language or social skills at any age.

Other possible indicators:

- Poor eye contact
- Not knowing how to play with toys
- Excessively lines up toys or objects
- Is attached to one particular toy or object
- Doesn't smile
- At times, seems to be hearing impaired but at other times not

Symptoms associated with ASD

Individuals with an ASD may display a range of behaviors that can include:

CLINICAL POLICY

Autism Diagnosis and Treatment

- Hyperactivity
- Short attention span
- Self-injurious behavior
- Impulsivity
- Aggressiveness
- Temper tantrums, especially in young children or in unfamiliar situations
- Repetitive behaviors and compulsions
- Fixation on certain activities or objects

Individuals with an ASD can experience abnormalities in:

- Eating (preference for few foods and peculiar tastes)
- Sleeping (recurrent waking with rocking)
- High pain tolerance
- Oversensitivity to being touched, or to sounds or lights
- Fascination with certain stimuli or objects
- Abnormal reaction to danger (lack of response to real dangers but excessive fear of harmless objects)

Most children with an ASD demonstrate impairments in one or more of the three core areas by the age of 18 months. In most cases they seem to be affected from birth, while in others the child appears to develop normally until age one or two and then regresses. However, it is estimated that about half of all cases are not diagnosed until the child is age 4-6, resulting in a delay in an appropriate assessment and implementation of medical treatment and other behavioral strategies.

ASD is often diagnosed when parents become concerned that their child:

- May be deaf (child is unresponsive to speech, parents' voices or is not learning to talk)
- Seeks affection mainly on his or her own terms (fails to cuddle, shows indifference or aversion to affection or physical contact, doesn't respond to smiles)
- Seems bored or uninterested in conversation or play going on in those around him or her or has little sense of other people's boundaries (can be inappropriately intrusive in social situations, as though no one else exists)
- Does not call attention to things he or she finds interesting (may use parent's or another person's hand to obtain a desired object without looking at the person whose hand it is)

Treatment

There is no cure for individuals with ASD, but there is available treatment. Generally, the sooner the child is referred for specialized treatment, the better that youth' outcome will be. Youth with ASD fall on a wide spectrum, with varying capabilities and challenges, hence outcomes are variable. The outcomes may be best for children with better language skills and low normal to high IQs who do not have significant medical comorbidities such as seizures or co-occurring psychiatric disorders. Nevertheless, psychiatric disorders are very common, including: 28% for ADHD, 20% for anxiety disorders, 13% for sleep-wake disorders, 12% for disruptive, impulse-

CLINICAL POLICY

Autism Diagnosis and Treatment

control and conduct disorders, 11% for depressive disorders, 40% for obsessive-compulsive disorder, 5% for bipolar disorders and 4% for schizophrenia spectrum disorders. Interventions should be selected based on utilizing the child's existing functional strengths, enhancing social and communication skills, improving adaptive skills and addressing any learning disability or other challenges.

There is no broad-based consensus on which clinical and academic strategies are most effective, but many interventions have been developed to address the social, communication and behavioral problems that are the core features of ASD. Therefore, clinicians, the school system, other public resources and parents need to work collaboratively in the optimal management of the child's disorder. Because of the many clinicians, teachers and government agencies that will be involved in the treatment of each child, it is best for one clinician to be the point person in coordinating the overall treatment efforts.

Services that medical clinicians may need to provide, in addition to regular well-child care, include:

- Management of seizure disorder by a neurologist
- Interventions to improve verbal and nonverbal communication skills by a speech- and language pathologist when medically necessary.
- Some youth benefit from augmentative and alternative communication such as by using gestures, writing, and pictures, including PECS (Picture Exchange Communication System).
- Physical and occupational therapy for co-morbid physical sensory or motor impairments when medically necessary

Services that behavioral health clinicians may need to provide include:

Psychiatric interventions

- Evaluation for comorbid conditions, which are not infrequent in children with ASD
- Medication management for specific target symptoms or comorbid conditions:
 - The FDA has approved two atypical antipsychotics, risperidone (Risperdal), and aripiprazole (Abilify) to assist with managing challenging behaviors such as aggression, irritability and self-injury in children with ASD. Risperdal is approved by the FDA to treat autism-related irritability for children 5 years and older. Aripiprazole is approved by the FDA for the treatment of irritability in children ages 6 to 17 years old with ASD. However, the atypical agents in particular have significant side effects, including weight gain, metabolic syndrome and extrapyramidal symptoms, which can limit their use.
 - Psychostimulants have been used to manage symptoms of inattention, impulsivity and hyperactivity. Youth with co-occurring Attention Deficit Hyperactivity Disorder (ADHD) may also benefit from treatment with psychostimulants.
 - Alpha 2 Adrenergic Receptor Agonists may be helpful in youth with co-occurring ADHD. These agents include clonidine and guanfacine. They may help manage some symptoms such as impulsivity, hyperactivity, inattention, and sleep difficulties associated with ADHD.
 - Mood stabilizers which are used for bipolar related disorders have been

CLINICAL POLICY

Autism Diagnosis and Treatment

- used to help manage some associated symptoms such as repetitive behavior, irritability and impairment of social behavior. However, results have been inconsistent and these agents are not FDA approved to treat behaviors associated with ASD. Many of these agents also require blood testing for safety and adherence.
- Norepinephrine reuptake inhibitors (Atomoxetine HCL) has been helpful in managing associated symptoms such as hyperactivity and inattention.
 - SSRI anti-depressants may be helpful in the treatment of co-occurring mental health disorders such as anxiety, depression or obsessive-compulsive disorder.
 - Tricyclics are another type of antidepressants used to treat depression and obsessive-compulsive behaviors. They can cause more minor side effects than SSRIs but sometimes are more effective for treating certain people and certain symptoms.
 - Anti-anxiety medications can help relieve anxiety and panic disorders which are often associated with ASD.
- Inpatient hospitalization if there is an acute onset of aggression towards others or danger to self.

Psychotherapeutic interventions

- Family therapy to help parents and siblings cope with the diagnosis and the child's behaviors
- Brief psychotherapy to teach behavioral modification techniques to parents to assist in managing their child.
- Individual cognitive-behavioral psychotherapy (CBT) for adolescent and young adult individuals with an ASD who are capable of insight and who become anxious and/or depressed when they realize the seriousness of their impairment, or for anger management.
- Applied Behavioral Analysis (ABA) is an evidence based treatment that is founded on a Functional Behavioral Assessment (FBA) and other types of behavioral measurement as well as behavioral interventions. The specific behavioral intervention aim to decrease the youth's maladaptive behaviors and increase the youth's functional adaptive skills. Parent involvement and parent training is an essential component of the treatment. It is often effective in the home, school, workplaces and clinics.

Complementary and Alternative Medicine (CAM)

It is not uncommon for families of children with ASD to use alternative or complementary treatments as a part of their own treatment of their child or children, in spite of the fact that these types of approaches have very limited empirical support for their use. The clinician who is treating the child must, therefore, be familiar with these approaches and inquire as to whether or not they are being used. Open, non-judgmental, educational discussions need to take place about the cost of these treatments, the evidence for or against them and which treatments may pose a danger for the child. For example, intravenous infusion of secretin, and oral vitamin B6 and magnesium have repeatedly been shown to not work. Randomized, controlled trials to study the gluten-free, casein-free diet, the use of omega-3 fatty acids and administration of oral human immunoglobulin do not support the use of these approaches. Finally, some treatments pose an

CLINICAL POLICY

Autism Diagnosis and Treatment

actual risk to the child, such as the mortality and morbidity that is associated with chelation. Some “natural” compounds have contaminants that can put the child at risk. Finally, all of these approaches consume resources, both financial and personal.

The Public School System

An important source of support for children with autism is the IDEA (Individuals with Disabilities Education Act). PL 94-142 Education of the Handicapped Act (EHA) of 1970 was revised in 1975 as the Education for all Handicapped Children Act (EAHCA). The act required federally funded public schools to provide a free appropriate public education (FAPE) to each child with a disability. The act was revised in 1984 providing transitions to adult living, in 1986 introducing Part C for infants and toddlers less than 3 years old, and in 1990 officially becoming IDEA (Individuals with Disabilities Education Act). Previously there was the Rehabilitation Act of 1973.

Each public school accepting federal funds is mandated to provide handicapped children with a free, appropriate public education (FAPE) from age 3 years through the age of 21. Disabled students are to be placed in the least restrictive environment that affords the student opportunity to interact with non-disabled students. The school district is required to evaluate each child and, with the parents, develop an Individual Education Program (IEP) for ages 3 to 21 years old. For youth with ages less than 3 years old there is an Individualized Family Service Plan (IFSP).

After referral, and consent to testing, a special education assessment will be conducted which will vary depending on the child’s developmental stage. The assessment process may include testing by a multi-disciplinary such as:

- Developmental or cognitive assessment, based on the child’s age.
- Academic achievement assessment
- Adaptive skills assessment across multiple domains of functioning.
- Speech, language and communication testing that include vocabulary, actual language use skills, both receptive and expressive, articulation and oral-motor skills. This may include social pragmatic skills testing.
- Occupational and physical therapy assessment of fine motor and gross motor skills.
- The Individualized Education Program is developed by the IEP Team, which includes the child, the child’s parents, a general education teacher, a special education teacher, a person who conducts and/or interprets the assessment and others as deemed appropriate.
-
- Once the assessments are completed and the information is combined with information from other sources, the IEP is developed by the IEP team, taking into consideration the child’s needs as well as strengths. The IEP should document specific and/or measurable goals and how these will be achieved. The plan will determine the educational setting that is most appropriate for the child. Goals are both academic and behavioral/social and the educational setting needs to address both. The IEP is revised periodically, with updated testing as necessary, to allow for changes to be made in response to the child’s progress or the presentation of new challenges.
-

CLINICAL POLICY

Autism Diagnosis and Treatment

- Two structured educational models provided by some schools have been found to have efficacy for young children with ASD. These are the Early Denver Start Model for youth 12 to 48 months old and the Treatment and Education of Autism and related Communications Handicapped Children (TEACCH) program. Early Intensive Behavioral Intervention (EIBI) utilizes applied behavior analysis for very young children.

Parents

Parent training and education should be an ongoing part of any intervention program. Parent or caregiver training programs offer evidence based treatments for youth with ASD. Parents need to learn about positive reinforcement and how to use behavioral strategies. The same behavioral strategy needs to be used in the home, school or pre-school setting, so parents, teachers and caregivers need to work together to ensure consistency. All children's needs change as they grow, so the behavioral strategy will need to be modified over time to meet new needs.

The parents, caregivers and siblings of an autistic child need support and respite. There are a number of organizations, such as the Autism Society of America, that provide ongoing support and education. The Autism Society lists affiliate networks throughout the USA. They offer a hotline for assistance: **800-3-AUTISM (800-328-8476)**.

<https://www.autism-society.org/about-the-autism-society/affiliate-network/>

<https://www.autismspeaks.org/parent-training-0>

The federal government, through Part C of the Individuals with Disabilities Education Act (IDEA), mandates an Early Intervention (EI) program to find and treat children with special needs from birth to two years of age and less than 3 years old. The programs vary from state to state but the package of services available is consistent, requiring access and programming in a natural setting such as the home or another place familiar to the child. All services are free of charge, independent of the family's income. <https://www.cdc.gov/ncbddd/cp/treatment.html>

<https://www.cdc.gov/ncbddd/autism/accessing-services-for-autism-spectrum-disorder.html>

List of state services for Early Intervention:

<https://www.cdc.gov/ncbddd/actearly/parents/states.html>

Information on Early Intervention Services: <https://www.parentcenterhub.org/babies/>

Medicaid Autism Services:

This report outlines services in the different states: Autism Spectrum Disorders (ASD): State of the States of Services and Supports for People with ASD January 24, 2014

https://www.medicaid.gov/sites/default/files/2019-12/asd-state-of-the-states-report_0.pdf

<https://www.medicaid.gov/medicaid/benefits/autism-services/index.html>

Listing of the California Regional Centers:

<https://www.dds.ca.gov/rc/listings/>

State mandates related to ASD are available at:

<http://www.asha.org/Advocacy/state/States-specific-Autism-Mandates/>

CLINICAL POLICY

Autism Diagnosis and Treatment

Part B of IDEA encompasses services for school aged children from 3 to 21 years old. This program covers services such as special education, physical, occupational and speech therapy, supplementary aids and services, such as adaptive equipment or special communication systems.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2015, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to

DD-9 codes, DSM-IV-TR/DSM-V Codes and Description related to this policy

CPT® Codes	Description
99080	Special reports such as insurance forms, more than the information conveyed in the usual medical communications or standard reporting form
90801	Psychiatric diagnostic interview examination
90804	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services
90805	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services
90806	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services;
90807	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services
90808	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services
90809	Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services

CLINICAL POLICY

Autism Diagnosis and Treatment

90810	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient;
90811	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services
90812	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient;
90813	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services
90814	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient;
90815	Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services
90847	Family psychotherapy (conjoint psychotherapy) (with patient present)
90853	Group Psychotherapy (Other than of a multiple-family group)
90857	Interactive group psychotherapy
90862	Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy
96118	Neuropsychological testing (eg, Halstead-Reitan Neuropsychological Battery, Wechsler Memory Scales and Wisconsin Card Sorting Test), per hour of the psychologist's or physician's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report.
96119	Neuropsychological testing (eg, Halstead-Reitan Neuropsychological Battery, Wechsler Memory Scales and Wisconsin Card Sorting Test), with qualified health care professional interpretation and report, administered by technician, per hour of technician time, face-to-face
96120	Neuropsychological testing (eg, Wisconsin Card Sorting Test), administered by a computer, with qualified health care professional interpretation and report
96152	Health and behavior intervention, each 15 minutes, face-to-face; individual
H0031	Mental health assessment, by non-physician
H0032	Mental health service plan development by non-physician
H2019	Therapeutic behavioral services, per 15 minutes
0360T 0362T	Observational behavioral follow-up assessment
0373T	Exposure adaptive behavioral treatment

CLINICAL POLICY

Autism Diagnosis and Treatment

HCPCS Codes	Description

ICD-10-CM Code	Description
F84	Pervasive Developmental Disorders*
F84.0	Autistic disorder (Autism Spectrum Disorder)
F84.2	Rett's syndrome*
F84.3	Other childhood disintegrative disorder*
F84.5	Asperger's syndrome*
F84.8	Other pervasive developmental disorders*
F84.9	Pervasive developmental disorder, unspecified*

Reviews, Revisions, and Approvals	Approval Date
MHN Clinical Practice Committee Approval	June 2006
HN Medical Advisory Council initial approval	July 2006
Medical Advisory Council review of external specialty expert comment – no change in policy	September 2006
Updated – added Hyperbaric oxygen therapy (HBOT) as not medically necessary	December 2006
Code update	March 2007
Update – no revisions – further rationale and references added	November 2007
Update – no revisions	January 2008
HN Medical Advisory Committee	May 2008
MHN Clinical Practice Committee Review	October 2008
Updated by MHN and approved by the Medical Advisory Council Removed LOVASS et al from investigational list to educational interventions	December 2008
Update. No revisions. Codes reviewed.	February 2010
MHN, no revisions	March 2011
Update, revisions made related to state mandates for ABA coverage, MHN and HN Medical Advisory Board	November 2011
Added section on early intensive behavioral intervention to the Scientific Rationale and added specific CPT codes and a link to state mandates	January 2012
MHN, No revisions	December 2012
Update. No clinical revisions.	January 2013
MHN, nomenclature revision only to reflect publication of DSM-V	December 2013
Update, no clinical revisions MHN update, clinical revisions HN MAC update, clinical revisions, Codes updated	January 2014 September 2014 November 2014

CLINICAL POLICY

Autism Diagnosis and Treatment

MHN update, no clinical revisions HN MAC, update, no clinical revisions	September 2015 November 2015
Reviewed by MHN medical director and HN Medical Advisory Council No changes	November 2016
Added codes: 0360T, 0362T, 0373T, Removed S5108	March 2017
New template, removed references to ABA and added reference to separate policy on Applied Behavioral Analysis policy	May 2017
MHN annual review: No revisions	November 2017
Reviewed by MHN Health Net Medical Advisory Council	November 2018 November 2019
Reviewed by MHN Health Net Medical Advisory Council	November 2020 November 2021

References

1. Hyman SL, Levy SE, Myers SM, COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS. Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. *Pediatrics* 2020; 145.
2. <https://www.cdc.gov/ncbddd/autism/screening.html>.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5220395/pdf/AURT2016-4624829.pdf>
4. Autism Spectrum Disorder Screening Instruments for Very Young Children: A Systematic Review, Patricia O. Towle, Patricia A. Patrick, *Autism Research and Treatment* Volume 2016, Article ID 4624829, 29 pages
<http://dx.doi.org/10.1155/2016/4624829>
5. Autism: AAP guidance includes updates, searchable topics, executive summary by Susan L. Hyman M.D., FAAP; Susan E. Levy M.D., FAAP
6. Agency for Healthcare Research and Quality. Therapies for Children with Autism Spectrum Disorders. Multiple articles.
7. American Academy of Child and Adolescent Psychiatry. Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. Volkmas F, Siegel M, Woodbury-Smith M, King B, McCracken J, State M, and the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues. *J Am Acad Child Adolesc Psychiatry*. 2014;53(2): 237-257.
8. American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition*. American Psychiatric Publishing, Inc., Washington, D.C., May, 2013.
9. Association for Science in Autism Treatment (ASAT).
10. Broadstock M, Doughty C, Eggleston M. Systematic review of the effectiveness of pharmacological treatments for adolescents and adults with autism spectrum disorder. *Autism*. 2007
11. Practice Parameter for the Assessment and Treatment of Children and Adolescents With Autism Spectrum Disorder Fred Volkmar, MD, Matthew Siegel, MD, Marc Woodbury-Smith, MD, Bryan King, MD, James McCracken, MD, Matthew State,

CLINICAL POLICY

Autism Diagnosis and Treatment

- MD, PhD, and the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI), DOI:<https://doi.org/10.1016/j.jaac.2013.10.013>
12. Promoting Optimal Development: Identifying Infants and Young Children With Developmental Disorders Through Developmental Surveillance and Screening, Paul H. Lipkin, Michelle M. Macias and COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS, *Pediatrics* January 2020, 145 (1) e20193449; DOI: <https://doi.org/10.1542/peds.2019-3449>
 13. A review of Identification, Evaluation, and Management of Children with Autism Spectrum Disorder Hyman, S. L., Levy, S. E., & Myers, S. M. (2019). Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*, 145(1), doi:10.1542/peds.2019-3447
 14. Identification, Evaluation, and Management of Children With Autism Spectrum Disorder: Hyman SL, Levy SE, Myers SM, AAP COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS. Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. *Pediatrics*. 2020;145(1):e20193447
 15. Autism Spectrum Disorder: consensus guidelines on assessment, treatment and research from the British Association for Psychopharmacology Oliver D Howes, MRC Psych, PhD, Dr Maria Rogdaki, MBBS, James L. Findon, MSc, Dr Robert H. Wichers, BSc, Tony Charman, PhD, Bryan H. King, MD, MBA, Eva Loth, PhD, Dr Gráinne M. McAlonan, James T. McCracken, MD, Dr Jeremy R Parr, MBChB, Paramala Santosh, PhD, FRCPsych, Simon Wallace, PhD, Declan G. Murphy, FRCPsych, *J Psychopharmacol*. 2018 January; 32(1): 3–29. doi:10.1177/0269881117741766.
 16. Whitney Guthrie, Kate Wallis, Amanda Bennett, Elizabeth Brooks, Jesse Dudley, Marsha Gerdes, Juhi Pandey, Susan E. Levy, Robert T. Schultz and Judith S. Miller *Pediatrics* October 2019, 144 (4) e20183963; DOI: <https://doi.org/10.1542/peds.2018-3963>
 17. Primary Care Autism Screening and Later Autism Diagnosis Paul S. Carbone, MD, Kathleen Campbell, MD, MHSc, Jacob Wilkes, BS, Gregory J. Stoddard, MPH, MBA, Kelly Huynh, MStat, Paul C. Young, MD, Terisa P. Gabrielsen, PhD *Pediatrics* August 2020, 146 (2) e20192314; DOI: <https://doi.org/10.1542/peds.2019-2314>
 18. Standards of diagnostic assessment for autism spectrum disorder, Posted: Oct 24, 2019, Jessica A. Brian, Lonnie Zwaigenbaum, Angie Ip; Canadian Paediatric Society, Autism Spectrum Disorder Guidelines Task Force. *Pediatric Child Health* 2019 24(7):444–451.
 19. ECRI Institute. Comprehensive Educational and Behavioral Interventions for Autism Spectrum Disorders). Plymouth Meeting (PA): ECRI Institute Health Technology Assessment Information Service; 2009 February. 187 p. (Evidence Report; no. 167). Available at URL address: <http://www.ecri.org>.
 20. Eikeseth S, Smith T, Jahr E, Eldevik S. Outcome for children with autism who began intensive behavioral treatment between ages 4 and 7: a comparison controlled study. *Behav Modif*. 2007 May;31(3):264-78.

CLINICAL POLICY

Autism Diagnosis and Treatment

21. Eikeseth S. Outcome of comprehensive psycho-educational interventions for young children with autism. *Res Dev Disabil.* 2009;30(1):158–78.
22. Eldevik S, Eikeseth S, Jahr E, Smith T. Effects of low-intensity behavioral treatment for children with autism and mental retardation. *J Autism Dev Disord.* 2006 Feb;36(2):211-24.
23. Eldevik S, Hastings RP, Hughes JC, Jahr E, Eikeseth S, Cross S. Meta-analysis of Early Intensive Behavioral Intervention for children with autism. *J Clin Child Adolesc Psychol.* 2009;38(3):439–50.
24. Eldevik S, Hastings RP, Hughes JC, Jahr E, Eikeseth S, Cross S. Meta-analysis of Early Intensive Behavioral Intervention for children with autism. *J Clin Child Adolesc Psychol.* 2009 May;38(3):439-50.
25. Filipek PA, Steinberg-Epstein R, Book TM. Intervention for autistic spectrum disorders. *NeuroRx.* 2006 Apr;3(2):207-16.
26. Gordon I, Vander Wyk BC, Bennett RH et.al. Oxytocin enhances brain function in children with autism. Proceedings of the National Academy of Sciences, Dec. 2, 2013 online publication. <http://www.pnas.org/content/early/2013/11/27/1312857110>
27. Granpeesheh D, Tarbox J, Dixon DR. Applied behavior analytic interventions for children with autism: a description and review of treatment research. *Ann Clin Psychiatry.* 2009 Jul-Sep;21(3):162-73.
28. Hayward D, Eikeseth S, Gale C, Morgan S. Assessing progress during treatment for young children with autism receiving intensive behavioural interventions. *Autism.* 2009 Nov;13(6):613-33.
29. Herman GE, Henninger N, Ratliff-Schaub K, et al. Genetic testing in autism: how much is enough? *Genet Med.* 2007 May;9(5):268-74.
30. Holmboe K, Rijdsik FV, Hallett V, et. Al. Strong genetic influences on the stability of autistic traits in childhood. *Child and Adolescent Psychiatry*, 25 November 2013 online publication.
31. Howlin P, Magiati I, Charman T. Systematic review of early intensive behavioral interventions for children with autism. *Am J Intellect Dev Disabil.* 2009 Jan;114(1):23-41.
32. Johnson CP, Myers SM; American Academy of Pediatrics Council on Children with Disabilities. Identification and evaluation of children with autism spectrum disorders. *Pediatrics.* 2007 Nov;120(5):1183-215. Epub 2007 Oct 29.
33. Johnson, CR, Myers, SM and the Council on Children with Disabilities. Identification and Evaluation of Children with Autism Spectrum Disorders. *Pediatrics*, November 2007; 120:1183-1215.
34. Kagan-Kushnir T, Roberts SW, Snead OC 3rd. Screening electro encephalograms in autism spectrum disorders: Evidence-based guideline. *J Child Neurol.* 2005;20(3):197-206. Available at: <http://jcn.sagepub.com/cgi/content/abstract/20/3/197>
35. Kasari C, Lawton K. New directions in behavioral treatment of autism spectrum disorders. *Curr Opin Neurol.* 2010 Apr;23(2):137-43.
36. Krebs Seida J, Ospina MB, Karkhaneh M, Hartling L, Smith V, Clark B. Systematic reviews of psychosocial interventions for autism: an umbrella review. *Dev Med Child Neurol.* 2009;51(2):95–104.

CLINICAL POLICY

Autism Diagnosis and Treatment

37. Luckett T, Bundy A, Roberts J. Do behavioural approaches teach children with autism to play or are they pretending? *Autism*. 2007 Jul;11(4):365-88.
38. Magiati I, Charman T, Howlin P. A two-year prospective follow-up study of community-based early intensive behavioural intervention and specialist nursery provision for children with autism spectrum disorders. *J Child Psychol Psychiatry* 2007;48(8):803–12.
39. Matson JL, Matson ML, Rivet TT. Social-skills treatments for children with autism spectrum disorders: an overview. *Behav Modif*. 2007 Sep;31(5):682-707.
40. McPheeter ML, et. al. (2011). A Systematic Review of Medical Treatments for Children With Autism Spectrum Disorders. *Pediatrics* 2011; 127(5) 1312-1321.
41. Minschew NJ, Williams DL. The new neurobiology of autism: cortex, connectivity, and neuronal organization. *Arch Neurol*. 2007 Jul;64(7):945-50.
42. Myers SM, Johnson CP, Council on Children with Disabilities (2007). Management of Children with Autism Spectrum Disorders. *Pediatrics* November 2007; 120 (5) 1162-1182.
43. Myers SM, Johnson CP; American Academy of Pediatrics Council on Children with Disabilities. Management of children with autism spectrum disorders. *Pediatrics*. 2007 Nov;120(5):1162-82.
44. Myers SM. The status of pharmacotherapy for autism spectrum disorders. *Expert Opin Pharmacother*. 2007 Aug;8(11):1579-603.
45. National Institute of Mental Health (NIMH). Autism Spectrum Disorders <http://www.nimh.nih.gov/publicat/autism.cfm>
46. National Research Council (NRC). 2001. Educating Children with Autism. Committee on Educational Interventions for Children with Autism. Catherine Lord and James P. McGee, eds. Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press. Accessed December 11, 2011 Available at URL address: <http://books.nap.edu/openbook.php?isbn=0309072697>
47. Odom SL, Boyd BA, Hall LJ, Hume K. Evaluation of comprehensive treatment models for individuals with autism spectrum disorders. *J Autism Dev Disord*. 2010 Apr;40(4):425-36.
48. Ospina MB, Krebs Seida J, Clark B, Karkhaneh M, Hartling L, Tjosvold L, et al. Behavioural and developmental interventions for autism spectrum disorder: a clinical systematic review. *PLoS One*. 2008;3(11):e3755.
49. Reichow B, Wolery M. Comprehensive synthesis of early intensive behavioral interventions for young children with autism based on the UCLA Young Autism Project model. *J Autism Dev Disord*. 2009;31(1):23–41.
50. Remington B, Hastings RP, Kovshoff H, degli Espinosa F, Jahr E, Brown T, et al. Early intensive behavioral intervention: outcomes for children with autism and their parents after two years. *Am J Ment Retard*. 2007 Nov;112(6):418-38.
51. Rogers, Sally J., Vismara, Laurie A. Evidence Based Comprehensive Treatments for Early Autism *J Clin Child Adolesc Psychol*. 2008 Volume 37 Issue 1 p8-38
52. Rossignol DA, Rossignol LW, Smith S, et al. Hyperbaric treatment for children with autism: A multicenter, randomized, double-blind, controlled trial. *BMC Pediatr*. 2009;9:21.
53. Scottish Intercollegiate Guidelines Network (SIGN145- Assessment, diagnosis and

CLINICAL POLICY

Autism Diagnosis and Treatment

- interventions for autism spectrum disorders. A national clinical guideline June 2016.
54. Seida JK, Ospina MB, Karkhaneh M, Hartling L, Smith V, Clark B. Systematic reviews of psychosocial interventions for autism: an umbrella review. *Dev Med Child Neurol.* 2009 Feb;51(2):95-104.
 55. Shattuck PT, Grosse SD. Issues related to the diagnosis and treatment of autism spectrum disorders. *Ment Retard Dev Disabil Res Rev.* 2007;13(2):129-35.
 56. Spreckley M, Boyd R. Efficacy of Applied Behavioral Intervention in Preschool Children with Autism for Improving Cognitive, Language, and Adaptive Behavior: A Systematic Review and Meta-analysis. *J Pediatr.* 2008 Oct 22.
 57. Spreckley M, Boyd R. Efficacy of applied behavioral intervention in preschool children with autism for improving cognitive, language, and adaptive behavior: a systematic review and meta-analysis. *J Pediatr.* 2009;154(3):338-44.
 58. Stephenson J, Carter M. The use of weighted vests with children with autism spectrum disorders and other disabilities. *J Autism Dev Disord.* 2009;39(1):105-114.
 59. Tager-Flusberg H, Caronna E. Language disorders: autism and other pervasive developmental disorders. *Pediatr Clin North Am.* 2007 Jun;54(3):469-81, vi.
 60. The 2011 Interagency Autism Coordinating Committee Strategic Plan for Autism Spectrum Disorders Research – January 18, 2011.
<http://www.iacc.hhs.gov/strategic-plan/2011/index.shtml>
 61. US Preventive Services Task Force. Autism Spectrum Disorder in Young Children: Screening. February 16, 2016.
<https://www.uspreventiveservicestaskforce.org/uspstf/document/RecommendationStatementFinal/autism-spectrum-disorder-in-young-children-screening>
 62. Virués-Ortega J. Applied behavior analytic intervention for autism in early childhood: meta-analysis, meta-regression and dose-response meta-analysis of multiple outcomes. *Clin Psychol Rev.* 2010 Jun;30(4):387-99. Epub 2010 Feb 11.
 63. Vorgraft Y, Farbstein I, Spiegel R, Apter A. Retrospective evaluation of an intensive method of treatment for children with pervasive developmental disorder. *Autism.* 2007 Sep;11(5):413-24.
 64. Warren z, et. al. A Systematic Review of Early Intensive Intervention for Children with Autism Spectrum Disorders. *Pediatrics* 2011; 127 (5) 1303-1311.
 65. Yield of additional genetic testing after chromosomal microarray for diagnosis of neurodevelopmental disability and congenital anomalies: a clinical practice resource of the American College of Medical Genetics and Genomics (ACMG), Waggoner, D et al *Genetics in Medicine* (2018) 20:1105–1113; <https://doi.org/10.1038/s41436-018-0040-6> <https://www.acmg.net/PDFLibrary/Genetic-Testing-Additional-Neurodevelopmental.pdf>
 66. Manning M, Hudgins L. Array-based technology and recommendations for utilization in medical genetics practice for detection of chromosomal abnormalities. *Genet Med.* 2010;12:742–745. <https://doi.org/10.1097/GIM.0b013e3181f8baad>
 67. Systematic evidence-based review: outcomes from exome and genome sequencing for pediatric patients with congenital anomalies or intellectual disability, Malinowski, J. et al, *GENETICS in MEDICINE* Volume 22 | Number 6 | June 2020 |

CLINICAL POLICY

Autism Diagnosis and Treatment

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members

CLINICAL POLICY

Autism Diagnosis and Treatment

and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

©2016 Centene Corporation. All rights reserved. All materials are exclusively owned by Centene Corporation and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Centene Corporation. You may not alter or remove any trademark, copyright or other notice contained herein. Centene® and Centene Corporation® are registered trademarks exclusively owned by Centene Corporation.