Medical Policy

Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

Joint Medical Policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and is therefore subject to change.

***Current Policy Effective Date: 11/1/24**
(See policy history boxes for previous effective dates)

Title: Autism Spectrum Disorder Services

Description/Background

Autism spectrum disorder is a disorder of neural development. Classical autism spectrum disorder is characterized by impaired social function, problems with verbal and nonverbal communication and imagination, and unusual or severely limited activities and interests. Symptoms of autism spectrum disorder usually appear by three years of age and continue throughout life. Autism spectrum disorder involves many parts of the brain; how this occurs is still not well understood. These disorders can vary widely in severity and symptoms. Individuals with autism spectrum disorder may exhibit repeated body movements (hand flapping, rocking), show unusual responses to people, excessive attachments to objects and may resist changes in routines. In some cases, aggressive and/or self-injurious behavior may be present. For many individuals with autism spectrum disorder, epilepsy develops during adolescence, and approximately two thirds of those who are diagnosed with autism spectrum disorder will test in the range of developmental disability. Autism spectrum disorder is about four times more likely in males than females. In 2021, the CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network estimated that about 1 in 44 children aged 8 years has been identified with autism spectrum disorder (ASD). Although various causes of autism spectrum disorder have been proposed since its appearance in the medical literature in the 1940s, it is now believed to have a genetic origin.

Treatment of ASD must be evidence based and includes the following care as determined by a licensed physician or a licensed psychologist:

- Behavioral health treatment (applied behavior analysis),
- Pharmacy care,
- Psychiatric care,
- Psychological care, and/or
- Therapeutic care (such as physical therapy, occupational therapy or speech therapy)

The treatment of children with autism spectrum disorder has undergone substantial change in the past 20 years, with behavior modification replacing psychotherapy as the dominant and preferred treatment modality. In behavioral therapy programs, operant conditioning techniques are used to help individuals with autism spectrum disorder develop skills with social value aimed at improving cognitive and social functioning of children with autism spectrum disorder.

These programs are referred to as applied behavior analysis (ABA), intensive behavioral intervention (IBI), early intensive behavioral intervention (EIBI) or Lovaas therapy.

Applied behavior analysis (ABA) therapy involves highly structured teaching techniques that are administered on a one-to-one basis by a trained therapist or paraprofessional 25 to 40 hours per week for two to three years. In classic ABA therapy, the first year of treatment focuses on reducing self-stimulatory and aggressive behaviors, teaching imitation responses, promoting appropriate toy play and extending treatment into the family. In the second year, expressive and abstract language is taught, as well as appropriate social interactions with peers. Treatment in the third year emphasizes development of appropriate emotional expression, pre-academic tasks, and observational learning from peers involved in academic tasks. In an ABA therapy session, the individual is directed to perform an action. Successful performance of the task is rewarded with a positive reinforcer, while noncompliance or no response receives a neutral reaction from the therapist. Food is usually most effective as a positive reinforcer for children with autism spectrum disorder, although food rewards are gradually replaced with “social” rewards, such as praise, tickles, hugs or smiles. Parental involvement is considered essential to long-term treatment success; parents are taught to continue behavioral modification training when the child is at home and may sometimes act as the primary therapist.

A complex plan of care for autism spectrum disorder may additionally include services such as physical therapy, occupational therapy, speech therapy; nutritional counseling and other mental health and medical services used to diagnose and treat autism, as determined to be necessary by the treating provider. These services are not the focus of this policy.

Regulatory Status

N/A

Medical Policy Statement

The effectiveness of treatment for autism spectrum disorder has been established. It may be a useful therapeutic option when inclusionary and certificate guidelines are met.

Inclusionary and Exclusionary Guidelines

Refer to member's certificate for benefit specific coverage guidelines.
As of 1/1/2022, age restrictions do not apply.

Inclusions:

- Full diagnostic criteria for Autism Spectrum Disorder, as published in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual", are met.
- The maladaptive behavior must impact the individual's personal safety, the safety of others within the individual's environment, or must significantly interfere with the individual's ability to function.
- Services **in** Michigan must be provided or supervised by:
  - a clinician who is a Licensed Behavior Analyst (LBA), or
  - a psychiatrist who has the appropriate training, or
  - a licensed psychologist who has the appropriate education, training and experience, or
  - a person who holds a license, certificate or registration that authorizes them to perform services included in applied behavior analysis.

  Services **outside** of Michigan must be provided by a clinician who meets their state requirements to provide ABA therapy.
- Interventions
  - Are individually-centered
  - Define target behaviors
  - Record objective measures of baseline levels and progress
  - Identify and documents specific interventions and techniques
  - Document transitional and discharge plans

Exclusions:

- Individuals who do not meet the diagnostic criteria based on the most recent criteria by the American Psychiatric Association (ie, most current version of the Diagnostic and Statistical Manual)
- In Michigan, therapy delivered or supervised by clinicians who are not licensed behavior analysts (LBA), or those who do not meet state requirements to provide ABA therapy; Outside of Michigan, therapy delivered or supervised by clinicians who do not meet their state requirements to provide ABA therapy

Autism Services Allowed via Telemedicine Synchronous Care:

- Specific autism services allowed via telemedicine synchronous care are noted in the CPT section.
- Adaptive behavior interventions (97153) are allowed if the individual meets appropriateness criteria.
  - At a minimum, the individual should exhibit basic skills of: joint attention, basic discrimination, basic echoic, basic motor imitation. The individual should be able to follow common one-step instructions, participate in sessions with limited caregiver assistance, and sit independently at a computer or tablet for 8 to 10 minutes. Safety concerns and challenging behaviors must be minimal.

- For complete guidelines to consider, see the document titled Guidelines for autism interventions delivered via telemedicine. Autism services provided via telemedicine may not be effective for all individuals. When services are provided via telemedicine and the individual does not show progress, it is expected that the interventions would be modified to face-to-face interactions.

Autism services delivered via telemedicine are synchronous care only; asynchronous care is not appropriate for autism services.

CPT/HCPCS Level II Codes *(Note: The inclusion of a code in this list is not a guarantee of coverage. Please refer to the medical policy statement to determine the status of a given procedure.)*

State of Michigan Mandated codes for autism services (not intended to be a complete list):

97151*	97152	97153**	97154*	97155*	97156*
97157*	97158*				
H0031	H0032	H2014	H2019		
S5108*	S5111*	0362T	0373T		

*May be delivered via telemedicine.
**May be delivered via telemedicine when the individual meets ”Guidelines for Autism Interventions” (see document).

NOTE: Autism services delivered via telemedicine are synchronous care only; asynchronous care is not appropriate for autism services. Refer to the “Telemedicine Services” policy.

Other codes (not a covered benefit for autism services as mandated by the State of Michigan - BCBSM/BCN will require the use of the established procedure codes listed above to report autism services):

N/A

Note: Individual policy criteria determine the coverage status of the CPT/HCPCS code(s) on this policy. Codes listed in this policy may have different coverage positions (such as established or experimental/investigational) in other medical policies.

Rationale

Behavioral modification has evolved to be the preferred treatment modality in Autism Spectrum Disorder. Therefore, this review focuses on the effectiveness of behavioral therapy programs such as ABA.

The available studies include the original work by Lovaas and a subsequent long-term follow-up study that compared outcomes in young children with autism spectrum disorder who underwent intensive therapy with outcomes in children who received minimal treatment. In addition, there were two small nonrandomized studies comparing intensive therapy with minimal or school-based interventions and three randomized or quasi-randomized trials. The latter three trials included one early study that compared residential, outpatient, and home-

based interventions and two studies that compared Lovaas-based therapy with minimal or eclectic therapy. Several studies provided relatively long term follow-up data, in some cases up to 10 years following enrollment in the study. All of the available studies involved small numbers of children with autism spectrum disorder, who were mostly between the ages of three and seven years, although two studies included younger children as well. There are no published studies on the effectiveness of ABA in children after age seven.

Lovaas (1987) reported that almost half of the children receiving intensive therapy passed normal first grade and had an IQ that was at least average. In contrast, none of the children in the minimal treatment group passed normal first grade or had an IQ score in the normal range. This study has been criticized for its small size and failure to randomize subjects to treatment groups. The methodology flaws appear to have had a significant impact on study outcomes since subsequent studies of intensive behavioral therapy have found that it provides limited positive results that are not comparable with those obtained by Lovaas. The Lovaas and subsequent studies excluded low-functioning subjects with autism spectrum disorder, and this may have contributed to the high degree of success they obtained.

In recent years, autism spectrum disorder and different treatment modalities have been studied and evaluated. Practice guidelines have been developed, and updated, and early interventions have been proposed. In 2013 the American Academy of Pediatrics (AAP)[1] recommended guidelines and further research needs for children with autism spectrum disorder. The focus of comprehensive intervention for children with autism spectrum disorder and criteria for future research was identified. The guidelines were developed by a Technical Expert Panel (TEP) consisting of practitioners, researchers and parents of children with autism spectrum disorder. The panel agreed that the more intense the treatment and the longer the treatment period, the better the outcomes were for children with autism spectrum disorder. They recommended at least 25 hours per week of comprehensive therapy be directed to addressing issues with social communication, language, play and maladaptive behaviors. They also made recommendations for addressing gaps in research on the effectiveness of autism therapies.

A 2012 Cochrane review found that children receiving early intensive behavioral intervention (a treatment based on the principles of ABA), for two years, performed better than children in a comparison group on tests of adaptive behavior, intelligence, social skills, communication and language. They noted improved quality of life and reduction in the symptoms of autism spectrum disorder. They also noted that the evidence did support intensive therapy for children with autism spectrum disorder; however, the quality of the evidence was low due to the small number of children involved in the studies.

An update to the 2012 Cochrane review was published in 2018. Early intensive behavioral intervention (EIBI) delivered for multiple years at an intensity of 20 to 40 hours per week, is one of the more well-established treatments for ASD. The objective of the review was to systematically review the evidence for the effectiveness of EIBI in increasing functional behaviors and skills, decreasing autism severity, and improving intelligence and communication skills for young children with ASD. The results of five studies, one RCT and four controlled clinical trials, with a total of 219 children, were synthesized. There was evidence at post-treatment that EIBI improves adaptive behavior, IQ and expressive and receptive language skills. However there was no evidence that EIBI improves autism symptom severity

and problem behavior. Once again, the quality of the evidence was graded as low due to small studies that did not have optimal designs.

There are a number of challenges in assessing the treatment of autism spectrum disorder. Interventions vary and the degree of severity of the disorder in each child can vary widely. Due to these challenges it is also difficult to perform large randomized trials that provide robust evidence for the effectiveness of a specific therapy or group of therapies. Although the available evidence is based on small studies with methodological flaws, ABA does appear to provide some benefit. Active research into the comparative effectiveness of this modality should be continued.

Government Regulations

National:

There is no national coverage determination specific for this treatment.

Local:

There is no local coverage determination specific for this treatment.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

Related Policies

Telemedicine Services
Digital Health Technologies: Diagnostic Applications

References

1. AAP 2013. Autism Spectrum Disorder: Updated Guidelines from the American Academy of Pediatrics | AAFP accessed 8/1/24
2. Blue Cross Blue Shield Association. Special Report: Early Intensive Behavioral Intervention based on Applied Behavior Analysis among Children with Autism Spectrum Disorders. Technology Evaluation Center (TEC), Assessment Program. Volume 25, No. 9, February 2009, pp. 1-61.
3. Centers for Disease Control and Prevention. Data & Statistics on Autism Spectrum Disorder. https://www.cdc.gov/ncbddd/autism/data.html Accessed 5/31/24.
4. Cohen H. Early Intensive Behavioral Treatment: Replication of the UCLA Model in a Community Setting. Developmental and Behavioral Pediatrics. 2006, Vol. 27, No. 2, pp. 196-206.

5. Eikseth S. Intensive Behavioral Treatment at School for 4 to 7 year old Children with Autism: A one year Comparison Controlled Study. Behavioral Modification. 2002, Vol. 26, No. 49, pp. 49-68.
6. Eikseth S. Outcomes for Children with Autism who Began Intensive Behavioral Treatment Between ages 4 and 7: A Comparison Controlled Study. Behavioral Modification. 2007, Vol. 31, pp. 264-278.
7. Eldevik S. Meta-Analysis of Early Intensive Behavioral Intervention for Children with Autism. Journal of Clinical Child and Adolescent Psychology. 2009, Vol. 38, No. 3, pp. 439-450
8. Grindle C. Parents Experiences of Home Based Applied Behavioral Analysis Programs for Young Children with Autism. Journal of Autism Developmental Disorders. 2009, Vol. 39, pp. 42-56.
9. Lovass O. Behavioral Treatment and Normal Educational and Intellectual Functioning in Young Autistic Children. Journal of Consulting and Clinical Psychology. 1987, Vol. 55, No. 1, pp. 3-9.
10. Maglione M, et al. Nonmedical interventions for children with ASD: Recommended guidelines and further research needs. Pediatrics. 2012, Vol. 130, Supp. 2, pp. S169-S178.
11. Myers S. Management of Children with Autism Spectrum Disorder. Pediatrics. 2007, Vol. 120, pp. 1162-1182.
12. Reichow B. Overview of Meta-Analyses on Early Intensive Behavioral Intervention for young children with autism spectrum disorders. Journal of Autism Development Disorders. 2012, Vol.42, pp. 512-520.
13. Reichow B et al. Early intensive behavioral intervention (EIBI) for young children with autism spectrum (ASD). Cochrane Database System Rev, 2012, doi: 10.1002/14651858.CD009260.pub2.
14. Remington B. Early Intensive Behavioral Interventions: Outcomes for Children with Autism and Their Parents After Two Years. American Journal on Mental Retardation. 2007, Vol. 112, No. 6, pp. 418-438.
15. Smith T. Randomized Trial of Intensive Early Intervention for Children with Pervasive Developmental Disorders. American Journal on Mental Retardation. 2000, Vol. 15, No. 4, pp. 269-285.
16. Symes M. Early intensive behavioral intervention for children with autism: Therapists perspective on achieving procedural fidelity. Research and Development in Disabilities. 2006, Vol. 27. pp. 30-42.
17. Reichow B, et al. Early intensive behavioral intervention (EIBI) for increasing functional behaviors and skills in young children with autism spectrum disorders (ASD). Cochrane Database Systematic Reviews 2018, Issue 5.

The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through 5/31/24, the date the research was completed.

Joint BCBSM/BCN Medical Policy History

Policy Effective Date	BCBSM Signature Date	BCN Signature Date	Comments
3/1/08	1/29/08	1/2/08	Joint policy established
3/1/09	12/9/08	12/9/08	Routine maintenance
3/1/10	12/8/09	12/8/09	Routine maintenance
3/1/12	12/13/11	12/31/11	Routine maintenance
7/1/13	4/16/13	5/20/13	Routine maintenance, status changed to established when inclusionary and certificate guidelines are met.
11/1/14	8/19/14	8/19/14	Routine maintenance, code update.
7/1/16	4/19/16	4/19/16	Routine maintenance Removed procedure code G9012
1/1/17	2/21/17	2/21/17	Routine maintenance Moved t-codes 0359T – 0374T from E/I to Established 7/31/17: changed effective date from 5/1/17 to 1/1/17.
5/1/18	2/20/18	2/20/18	Routine maintenance
7/1/19	4/16/19		Routine maintenance T codes deleted (0359T-0374T); new category I codes added (97151-97158). Code 90849 removed.
7/1/20	5/1/20		Routine maintenance Information added re: LBA, and other eligible providers of ABA services. Inclusions/exclusions updated. Telemedicine services clarified. Ref 17 added to rationale.
7/1/21	4/20/21		Routine maintenance S5108 added as appropriate via telemedicine.
11/1/21	8/17/21		Additional codes identified that will be allowed via telemedicine, with new section in Inc/Exc. Title of policy changed from “Applied Behavior Analysis for Autism Spectrum Disorder” to “Autism Spectrum Disorder Services”.

			“ABA” changed to “autism services” in most of the policy.
7/1/22	4/19/22		Policy review prior to annual review date due to removal of age limits per mandate. Added to inclusions: As of 1/1/2022, age restrictions no longer apply.
11/1/22	8/16/22		Routine maintenance (ls) Ref 3 added
11/1/23	8/15/23		Routine maintenance (jf) Vendor Managed: New Directions PPO In the inclusions/exclusions: added “interventions” and removed “treatment plan” Added additional ASD services (PT, OT, ST, and nutrition) in the description/background.
11/1/24	8/20/24		Routine maintenance (jf) Vendor Managed: NA Added Ref 1

Next Review Date: 3rd Qtr, 2025

BLUE CARE NETWORK BENEFIT COVERAGE
POLICY: AUTISM SPECTRUM DISORDER SERVICES

I. Coverage Determination:

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Refer to the member's certificate for coverage guidelines.
BCNA (Medicare Advantage)	Refer to the member's certificate for coverage guidelines.
BCN65 (Medicare Complementary)	Coinsurance covered if primary Medicare covers the service.

II. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- Coverage is based on each member's certificate and is not guaranteed. Please consult the individual member's certificate for details. Additional information regarding coverage or benefits may also be obtained through customer or provider inquiry services at BCN.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Payment is based on BCN payment rules, individual certificate and certificate riders.
- Appropriate copayments will apply. Refer to certificate and applicable riders for detailed information.
- CPT - HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.