Corporate Medical Policy

Adaptive Behavioral Treatment for Autism Spectrum Disorders

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Description of Procedure or Service

Adaptive Behavioral Treatment (ABT) refers to empirically-supported behavioral and developmental interventions that can be used in various community settings, e.g., clinics, schools, and homes, to diminish substantial deficits in a recipient's adaptive functioning or significant behavioral challenges due to autism spectrum disorder (ASD). ABT applies interventions to address three core areas of behavioral functioning:

1. Deficits in developmentally appropriate skills and behaviors include; but are not limited to:
   a. Feeding
   b. Grooming
   c. Activities of daily living (e.g. dressing, preparing for school or work)
   d. Preoccupation with one or more restricted, stereotyped patterns of behavior that are abnormal in intensity or focus
   e. Inflexible adherence to specific, nonfunctional routines or rituals
   f. Persistent preoccupation with parts of objects

2. Impairments in social communicative adaptive skills include; but are not limited to:
   a. Delay in or lack of spoken language
   b. Lack of functional leisure and play skill repertoires
   c. Inability to sustain adequate conversation with others
   d. Impairment in non-verbal behaviors in social interaction
   e. Failure to develop peer relationships
   f. Lack of spontaneous seeking to share emotions in relationships
   g. Lack of social or emotional reciprocity

3. Prevention of harm to self or others (safety concerns) include; but are not limited to:
   a. Aggression directed to self or others (e.g. hitting, biting)
   b. Engaging in dangerous behaviors (e.g. eating nonfood items, running into the street, elopement)
   c. Disruptive behavior (e.g., tantrums)

Adaptive behavior treatment (ABT) includes behavioral and developmental interventions that (1) systematically adapt or alter instructional and environmental factors, (2) directly teach new skills and behaviors that promote learning, communication, social interaction, and self-care through shaping, modeling, and other empirically-valid methods, and/or (3) change the consequences of behavior to increase adaptive behavior and decrease maladaptive behavior. ABT methods have been shown to be clinically effective through research published in peer reviewed scientific journals and based upon randomized, quasi-experimental, or single subject designs. Research has demonstrated that these interventions are effective in targeting a wide range of developmental and behavioral deficits in children and adolescents with autism spectrum disorder. These deficits include delays in social-

communicative, cognitive, play, and motor domains as well as challenging behaviors including aggression and self-injurious behavior. ABT includes a range of systematic intervention approaches, including applied behavioral analytic interventions (e.g., discrete trial training, antecedent-based interventions), naturalistic developmental behavioral interventions (e.g., Early Start Denver Model, Pivotal Response Training), and structured teaching (e.g. TEACCH). Therapists integrate different strategies based on the established evidence base as well as on the recipient's chronological and developmental level, needs and target goals.

General ABT goals in autism spectrum disorder include: (1) increasing selected behaviors, (2) teaching new skills, (3) maintaining selected behaviors, (4) generalizing or transferring selected behaviors, (5) restricting or narrowing conditions under which interfering behaviors occur, (6) reducing interfering behaviors, and (7) parental skill development in the application of those skills in natural settings. Socially significant behaviors frequently targeted include, addressing underlying issues that impair academic and vocational functioning, social skills, communication and adaptive living skills – e.g., gross and fine motor skills, eating and food preparation, toileting, dressing, personal self-care, domestic skills, time and punctuality, money and value, home and community orientation and work skills.

******Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your provider.***

Policy

BCBSNC will provide coverage for Adaptive Behavior Treatment when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

This medical policy relates only to benefits for Adaptive Behavior Treatment as covered under N.C.G.S. § 58-3-192. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

Coverage for services described in this medical policy may be subject to prior authorization by Blue Cross Blue Shield of North Carolina or its designee.

The criteria contained in this medical policy do NOT apply to State Health Plan members. Please refer to the State Health Plan benefits booklets, posted on the Plan's website, for information regarding autism therapy coverage.

Provider qualifications regarding licensure and board certification may vary according to member benefit design and the state in which the member receives services. Please consult the Member Benefit Booklet regarding coverage of services rendered by providers outside the State of North Carolina.

When Adaptive Behavioral Treatment is covered

Criteria to Initiate Care

All of the following criteria must be met:

1. There is an established and current (within 5 years) DSM-5 diagnosis of Autism Spectrum Disorder using one or more validated assessment tool (e.g., Autism Diagnostic Observation Schedule (ADOS), Autism Diagnostic Interview (ADI-R), Childhood Autism Rating Scale (CARS), Social Communication Questionnaire (SCQ), Social Reciprocity Scale (SRS), Gilliam Autism Rating Scale (GARS);
2. Severity assessment of autism symptoms is provided (e.g., Childhood Autism Rating Scale (CARS), Social Communication Questionnaire (SCQ), Social Reciprocity Scale (SRS), DSM-5 functional impairment rating.

3. Functional Behavioral Assessment has been completed within the last 12 months using a validated assessment tool (e.g., this includes but is not necessarily limited to: Vineland Adaptive Behavior Scales, Adaptive Behavior Assessment System).
4. As determined by validated developmental assessment tools, the eligible recipient does not participate at an age appropriate level in home, school or community activities because of the presence of behavioral excess and/or the absence of functional skills that interfere with participation in these activities, and the target behaviors or skill deficits identified for ABT intervention meet one or more of the following:
    a. The target behavior or skill is 1 standard deviation or more below the mean, or
    b. Represents a skill(s) that is important for successful participation in routine home, community, and/or school environments, or
    c. Represents a behavior that poses significant threat of harm to the recipient or others.
5. There is an expectation on the part of a qualified treating health care professional, who has completed an initial evaluation of the recipient's behavioral functioning that the individual's behavior and skills will improve to a clinically meaningful extent, in at least two settings (e.g., home, school, community, with different family members or peers) with ABT provided by, or supervised by, a licensed ABT provider.
6. An assessment of behavior and skills using validated tools has been completed by a qualified treating health care professional whose scope of practice includes treatment of autism spectrum disorder. This assessment will include baseline information on the recipient's functioning within the last 12 months. Example assessment tools include but are not limited to: the Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP), Early Start Denver Model Curriculum Checklist (ESDM curriculum checklist), Assessment of Basic Language and Learning Skills-Revised (ABLLS-R), Assessment of Functional Living Skills (AFLS).
7. The recipient's caregivers commit to participate in the goals of the treatment plan.
8. The recipient is medically stable and does not require 24-hour medical/nursing monitoring or procedures provided in a hospital level of care
9. There is a treatment plan with the following elements:
    a. There are behaviorally specific, quantifiable goals, that relate to developmental deficits or behaviors that are important for successful participation in everyday activities, such as home, school or the community or pose a significant risk of harm to the recipient or others.
    b. Objective, observable and quantifiable metrics are utilized to measure change toward the specific goal behaviors.
    c. Documentation that adjunctive treatments (e.g., psychotherapy, group social skills training, medication services, educational services) have been considered for inclusion in the treatment plan, with the rationale for exclusion.

Criteria for Continued Care

All of the following criteria must be met:

1. The recipient shows improvement from baseline in skill deficits and problematic behaviors targeted in the approved treatment plan using objective, observable, and quantifiable metrics.
2. As determined by validated developmental assessment tools, the eligible recipient still does not participate at an age appropriate level in home, school or community activities because of the presence of behavioral excess and/or the absence of functional skills that interfere with participation in these activities, and the target behaviors or skill deficits identified with ABT intervention meet one or more of the following:
    a. The target behavior or skill is 1 standard deviation or more below the mean, or
    b. Represents a skill(s) that is important for successful participation in routine home, community, and/or school environments, or
    c. Represents a behavior that that poses significant threat of harm to the recipient or others.
3. The recipients' caregivers demonstrate continued commitment to participation in the recipient's treatment plan and demonstrate the ability to apply those skills in naturalized settings as documented in the clinical record.

4. The gains made toward developmental norms and behavioral goals cannot be maintained if care is reduced.
5. Behavioral issues are not exacerbated by the treatment process.
6. The recipient maintains the required cognitive capacity to benefit from the care provided and to retain and generalize treatment gains.
7. Documentation of gains made toward behavioral goals should occur at six (6) month intervals. More frequent documentation may be appropriate as indicated by acute clinical situations where the safety or welfare of the member is of concern.

Criteria for Discharge from Care

One of the following criteria must be met:

1. The recipient shows improvement from baseline in skill deficits and problematic behaviors such that goals are achieved or maximum benefit has been reached.
2. Caregivers have refused treatment recommendations.
3. Behavioral issues are exacerbated by the treatment.
4. Recipient is unlikely to continue to benefit or maintain gains from continued care.

When Adaptive Behavioral Treatment is not covered

Adaptive Behavioral Treatment is considered not medically necessary when the criteria outlined above are not met.

Definitions

Comprehensive Intervention: Services are provided for multiple targets across most or all developmental domains. Comprehensive interventions may close the gap between a recipient's level of functioning and that of a typically developing peer.

Focused Intervention: Services are directed to a more limited set of problematic behaviors or skills deficits in areas such as self-care, social interaction, communication and personal safety. Focused services introduce and strengthen more adaptive behaviors in order to address specific challenges that are problematic for the recipient.

Functional behavior assessment (FBA): A functional assessment that is a rigorous method of gathering information about adaptive functioning and dysfunctional behaviors. The underlying theory of FBA is that most problem behaviors serve some type of an adaptive function reinforced by consequences. FBA is used in both designing a behavioral program for maximum effectiveness and guides development of an individualized treatment plan.

Adaptive Behavioral Treatments: Behavioral and developmental interventions that (1) systematically adapt or alter instructional and environmental factors, (2) directly teach new skills and behaviors that promote learning, communication, social interaction, and self-care through shaping, modeling, and other empirically-valid methods, and/or (3) change the consequences of behavior to increase adaptive behavior and decrease maladaptive behavior, which have been shown to be clinically effective through research published in peer reviewed scientific journals and based upon randomized, quasi-experimental, or single subject designs.

Policy Guidelines

This policy was developed after extensive review of the available literature on intensive behavioral therapies for treatment of autism. A multidisciplinary committee of health care professionals whose scope of practice includes treatment of autism developed and approved the guidelines based on this review. The guidelines were developed in consultation with experts in the treatment of autism from major research and treatment centers like the University of North Carolina at Chapel Hill, Duke University, and the Autism Society of North Carolina. The guidelines rely heavily on known best practices in the treatment of developmental disorders including the requirement for a complete

assessment utilizing validated tools and standardized developmental norms; symptom focused interventions; caregiver participation and measureable goals.

Provider Qualifications

I. Providers performing services within North Carolina

Adaptive Behavioral Treatment must be provided or supervised by one of the following licensed professionals:

1) Licensed Psychologist or Psychological Associate
2) Licensed Psychiatrist or Developmental Pediatrician
3) Licensed Speech and Language Pathologist
4) Licensed Occupational Therapist
5) Licensed Clinical Social Worker
6) Licensed Clinical Mental Health Counselor
7) Licensed Marriage and Family Therapist.

Adaptive behavior treatment may be provided by an unlicensed paraprofessional who meets the following requirements:

1) Is supervised by one of the licensed professionals listed in #1-7 above; AND
2) Is at least 18 years of age; AND
3) Meets either Option A) or B) below:

A. Is currently certified by the Behavior Analyst Certification Board with one of the following certifications:
   a. Board Certified Behavior Analyst – Doctoral
   b. Board Certified Behavior Analyst
   c. Board Certified Assistant Behavior Analyst
   d. Registered Behavior Technician

B. As attested to by the supervising licensed professional, meets all of the following criteria:
   a. Has documented training in all of the following topics:
      - North Carolina's legal and ethical requirements for maintaining confidentiality; and
      - Exceptions to confidentiality in North Carolina including mandated reporting of suspected abuse or neglect; and
      - Professional conduct and ethics of the licensed supervisor's profession; AND

   b. Has documented coursework, didactic training, and/or assigned and verified reading pertinent to Autism Spectrum Disorder and to the ABT being delivered (or the licensed supervisor has documented why this was not considered necessary); AND

   c. Before working independently with the actual client, has documented mastery of the techniques in the empirically-supported ABT plan to be used (or the licensed supervisor has documented why this was not considered necessary); AND

   d. Is receiving documented ongoing supervision by the licensed professional during any period in which the unlicensed individual provides ABT services.

Additional requirements for providers within North Carolina:
Assessments and interventions for adaptive behavior treatment must be ordered by a licensed physician or licensed psychologist.

All services performed must be within the scope of license and ethical boundaries of the licensed professional to be eligible for reimbursement.

Licensed providers must attest to expertise in treatment of autism spectrum disorders. Training in specific evidence-based modalities should include one or more of the following: a) accredited college- or university-based courses; b) workshops, seminars, conferences – including online; c) supervised experience with ASD; d) work experience with ASD; e) other (e.g. worked as a supervisor of ASD treatment; published a peer-reviewed article about ASD treatment).

II. Providers performing services outside North Carolina

Note: these criteria apply only to members insured through ASO client groups opting into NC mandated autism benefits. Please refer to the Member's Benefit Booklet for availability of benefits.

Provider qualifications regarding licensure and board certification may vary according to member benefit design and the state in which the member receives services. Please consult the Member Benefit Booklet regarding coverage of services rendered by providers outside the State of North Carolina.

Adaptive Behavioral Treatment must be provided or supervised by one of the following licensed professionals:

1) Licensed Psychologist or Psychological Associate
2) Licensed Psychiatrist or Developmental Pediatrician
3) Licensed Speech and Language Pathologist
4) Licensed Occupational Therapist
5) Licensed Clinical Social Worker
6) Licensed Clinical Mental Health Counselor
7) Licensed Marriage and Family Therapist.
8) Licensed Behavior Analyst *

* In states where licensing is not available for Behavior Analysts, treatment may be provided by an unlicensed paraprofessional who meets the following requirement:

1) Meets all supervisory requirements of local state licensing boards and local institutional privileging, as applicable; AND
2) Is at least 18 years of age; AND
3) Is currently certified by the Behavior Analyst Certification Board with one of the following certifications:
   - Board Certified Behavior Analyst—Doctoral
   - Board Certified Behavior Analyst
   - Board Certified Assistant Behavior Analyst
   - Registered Behavior Technician AND

Additional requirements for providers outside North Carolina:

Assessments and interventions for adaptive behavior treatment must be ordered by a licensed physician or licensed psychologist, in accordance with licensing and/or certification requirements in the state where the member receives treatment.

All services performed must be within the scope of licensing and/or certification and ethical boundaries of the professional to be eligible for reimbursement.

Providers must attest to expertise in treatment of autism spectrum disorders. Training in specific evidence-based modalities should include one or more of the following: a) accredited college- or university-based courses; b) workshops, seminars, conferences – including online; c) supervised experience with ASD; d) work experience with ASD; e) other (e.g. worked as a supervisor of ASD treatment; published a peer-reviewed article about ASD treatment).

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable service codes: 97151, 97152, 97153, 97154, 97155, 97156, 97157, 97158, 0362T, 0373T

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

Banda, D.R. & Grimmett, E. (2008). Enhancing Social and Transition Behaviors of Persons with Autism through Activity Schedules: A Review. *Education and Training in Developmental Disabilities, 2008*, 43, 324-333.

Comparative efficacy of LEAP, TEACCH and non-model-specific special education programs for preschoolers with autism spectrum disorders. Boyd BA, Hume K, McBee MT, Alessandri M, Gutierrez A, Johnson L, Sperry L, Odom SL. *J Autism Dev Disord*. 2014 Feb;44(2):366-80.

D'Elia, L., Valeri, G., Sonnino, F., Fontana, I., Mammone, A., & Vicari, S. (2014). A longitudinal study of the TEACCH program in different settings: The potential benefits of low intensity intervention in preschool children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 44, 615 – 626.

Dawson, G., Rogers, S., Munson, J., Smith, M., Winter, J., Greenson, J., et al. (2010). Randomized, controlled trial of an intervention for toddlers with autism: The Early Start Denver Model. *Pediatrics, 125*, e17–23.

Estes A, Munson J, Rogers S, Greenson J, Winter J, Dawson G (2015). Long-term outcomes of early intervention in 6 year old children with autism spectrum disorder. *Journal of the American Academy of Child and Adolescent Psychiatry.* Jul;54(7):580-7.

General assembly of North Carolina. Session 2019. Senate bill 537. Licensing & HHS Amends & Rural Health Stable. https://www.ncleg.gov/Sessions/2019/Bills/Senate/PDF/S537v5.pdf

Hirasawa, N. Fujiwara, Y. Yamane, M. (2009). Physical arrangements and staff implementation of function based interventions in school and community settings. *Japanese Journal of Special Education*, 46, 435-446.

Howley, M. (2015). Outcomes of structured teaching for children on the autism spectrum: does the research evidence neglect the bigger picture? *Journal of Research in Special Educational Needs*, 15, 106-119.

Lequia, J., Machalicek, W., & Rispoli, M.J. (2012). Effects of activity schedules on challenging behavior exhibited in children with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders 6*, 480–492.

Mandell D. S., Stahmer, A.C., Shin, S. Xie, M., Reisinger, E., & Marcus, S. C. (2013). The role of treatment fidelity on outcomes during a randomized field trial of an autism intervention. *Autism, 17*, 281 – 295.

McPheeters ML,Weitlauf A, Vehorn A, et al. Screening for Autism Spectrum Disorder in Young Children: A Systematic Evidence Review for the US Preventive Services Task Force: Evidence Synthesis No. 129 [AHRQ Publication No. 13-05185-EF-1]. Rockville, MD: Agency for Healthcare Research and Quality; 2016.

National Autism Center. (2009). *National standards project findings and conclusions.* Randolph, MA: Author.

Odom, S., Hume, K., Boyd, B., & Stabel, A. (2012). Moving beyond the intensive behavior treatment versus eclectic dichotomy: Evidence-based and individualized programs for learners with ASD. *Behavior Modification, 36*, 270– 297.

Reichow, B. (2012). Overview of meta-analyses on early intensive behavioral intervention for young children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 42*, 512–20.

Rogers, S. J. & Vismara, L. A. (2008). Evidence-based comprehensive treatments for early autism. *Journal of Clinical Child & Adolescent Psychology*, *37*, 8–38.

Stahmer, A., Schreibman, L., & Cunningham, A. (2011). Toward a technology of treatment individualization for young children with autism spectrum disorders. *Brain Research*, 1380, 229–239.

Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., . . . Schultz, T. R. (2015). Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder: A Comprehensive Review. Journal of Autism and Developmental Disorders, 45(7), 1951-1966. doi:10.1007/s10803-014-2351-z

Wong, C., Odom, S. L., Hume, K. Cox, A. W., Fettig, A., Kucharczyk, S., … Schultz, T. R. (2013). *Evidence-based practices for children, youth, and young adults with autism spectrum disorder.* Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Autism Evidence-Based Practice Review Group Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., . . . Schultz, T. R. (2015). Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder: A Comprehensive Review. *Journal of Autism and Developmental Disorders,* 45(7), 1951-1966. doi:10.1007/s10803-014-2351-z

Medical Director review – 1/2018

Specialty Matched Consultant Advisory Panel Review 6/2020

Policy Implementation/Update Information

4/29/16	New policy developed. BCBSNC will provide coverage for Adaptive Behavior Treatment when it is determined to be medically necessary because the medical criteria and guidelines outlined in the policy are met. Notification given 4/29/16 for effective date 7/1/16. (an)
8/30/16	Specialty Matched Consultant Advisory Panel Review 7/27/2016. No change to policy. (an)
7/28/17	Specialty Matched Consultant Advisory Panel Review 6/28/2017. No change to policy statement. (an)

1/26/18	Statement added to Benefits Application section: "Provider qualifications regarding licensure and board certification may vary according to member benefit design and the state in which the member receives services. Please consult the Member Benefit Booklet regarding coverage of services rendered by providers outside the State of North Carolina." Policy Guidelines sections reformatted to clarify qualifications for providers inside and outside North Carolina. (an)
7/27/18	Specialty Matched Consultant Advisory Panel Review 6/27/2018. No change to policy statement. (an)
12/31/18	New codes for 2019 added to the Billing/Coding section: *97151, 97152, 97153, 97154, 97155, 97156, 97157, 97158.* Deleted codes: *0359T, 0360T, 0361T, 0363T, 0364T, 0365T, 0366T, 0367T, 0368T, 0369T, 0370T, 0371T, 0372T, 0374T.* (an)
7/30/19	Specialty Matched Consultant Advisory Panel Review 7/10/2019. No change to policy statement. (eel)
7/28/2020	Specialty Matched Consultant Advisory Panel Review 6/2020. Updated Policy Guidelines section, Provider Qualifications I and II: Changed title of Licensed Professional Counselor to Licensed Clinical Mental Health Counselor per NC Bill 537. Reference added. No change to policy statement. (bb)