

Applied Behavior Analysis

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Developed By: Medical Necessity Criteria Committee

I. Description

“Applied Behavior Analysis” (ABA) refers to a variety of psychosocial interventions that use behavioral principles to shape an individual’s behavior. Examples include Lovaas therapy, Discrete Trial Training, Early Intensive Behavior Intervention, Pivotal Response Training, and Responsive Education and Prelinguistic Milieu Therapy. These services are commonly provided to children with Autism Spectrum Disorder.

ABA treatment goals include improving daily living skills, decreasing harmful behaviors, improving social functioning and play skills, improving communication skills, and developing skills that result in greater independence. It is important for treatment to focus on how learned skills can be generalized and family involvement is crucial in this regard.

ABA interventions are commonly provided by paraprofessionals working under the supervision of individuals trained and certified as Board Certified Behavior Analyst (BCBA) or Board Certified Assistant Behavior Analyst (BCaBA). Oregon has established a Behavior Analysis Regulatory Board to license Behavior Analysts and Assistant Behavior Analysts and register Behavior Analysis Interventionists.

Telehealth may be an effective and cost-effective tool in delivering parent education. There is evidence that telehealth can be an effective way to achieve positive outcomes and quicker results. The Behavior Analyst Certification Board supports telehealth as a way to provide ABA services.

Much of the research on Applied Behavior Analysis suggests positive effects in younger children but does not meet commonly accepted evidentiary standards for the effectiveness of medical treatments. A comprehensive review of treatments for Autism Spectrum Disorders by the Oregon Health Resources Commission (2008) found insufficient evidence to demonstrate the effectiveness of ABA services. An updated review in 2014 found:

Applied behavior analysis (ABA), including early intensive behavioral intervention (EIBI), is recommended for coverage for treatment of autism spectrum disorder (*strong recommendation*).

Rationale: This strength of recommendation was based on sufficient (moderate quality) evidence and expert input, including testimony on parent/caregiver values and preferences. The evidence

does not lead to a direct determination of optimal intensity. Studies of EIBI ranged from 15-40 hours per week. . . .There is no evidence that increasing intensity of therapy yields improved outcomes. Studies for these interventions had a duration from less than one year up to 3 years. (Health Evidence Review Commission, 2014, p. 18).

The 2014 HERC report drew heavily from an AHRQ review which studied the treatments for children ages 2- 12 (Effective Healthcare Program, 2014). The 2014 AHRQ report found evidence for the effectiveness of ABA, but did not show effectiveness of intensive ABA in children over the age of 7.

The American Academy of Pediatrics (2007 and reaffirmed in December, 2010) found ABA to be effective as an educational approach. It found that ABA was effective in producing “sustained gains in IQ, language, academic performance, and adaptive behavior as well as some measures of social behavior” (p. 1164). A review of twenty-six outcomes studies found evidence of effectiveness of ABA in preschool children and some evidence of effectiveness of ABA in children up to 7 years of age at intake (Eikeseth, 2009). A review of individual-level data from 16 studies of young children found that high intensity treatment was superior to low intensity (Elevik, et al, 2010). A randomized, controlled study of the Early Start Denver Model (2010) showed positive effects for children receiving two years of therapy beginning at age 18 to 30 months.

Most research has focused on the effectiveness of ABA treatment for preschool and school-aged children. There is not much clinical evidence of the effectiveness of ABA treatment for children under age two or adolescents. Older children requiring ABA treatment may be more impaired and ABA may be most effective with these individuals by targeting specific needs rather than broad deficits.

The Individuals with Disabilities Education Act (IDEA) requires states and school districts to provide early intervention, special education, and related services appropriate to the needs of children with disabilities including Autism Spectrum Disorder. This requirement specifically includes services for children from birth to age 3 (Part C) as well as for older children (Part B).

State mandates for ABA apply in Alaska and Oregon; not all plans administered by Moda Health are subject to state mandates and some plans may not have benefit for ABA.

II. Criteria: CWQI: BHC-0002

A. Criteria for Authorization of Initial Assessment of ABA Services:

Authorization of the initial assessment and development of the treatment plan for ABA services is indicated by **ALL** of the following:

1. Diagnosis of Autism Spectrum Disorder has been made or confirmed by a provider meeting **Any** of the following qualifications:
 - a. Behavioral Pediatrician
 - b. Child Psychiatrist
 - c. Child Clinical Psychologist with training in Autism Spectrum Disorder
 - d. Pediatric Neurologist

2. Patient shows clinically significant impairment consistent with the diagnosis of Autism Spectrum Disorder.

B. Criteria for Initial Authorization of ABA Services:

Authorization for initial ABA services upon completion of initial assessment and treatment plan is indicated by **ALL** of the following:

1. The treatment plan includes ALL of the following elements:
 - a. Developed by a Masters Level Behavior Analyst with certification and/or licensure appropriate to the state in which the Behavior Analyst practices.
 - b. Face-to-face treatment with an appropriately registered, certified, or licensed interventionist or clinician
 - c. Frequency and intensity of treatment: number of hours per week of direct services to the member and family
 - d. Planned interventions consistent with ABA techniques
 - e. Target behaviors and achievable goals in quantifiable terms
 - f. Achievable goals appropriate to the patient's symptoms, resources, and functioning.
 - g. Parental Involvement: description of participation of family in patient's treatment including interventions being employed with family, family education, training, and plan for transferring effective interventions to the family.
 - h. Promotes the family's ability to foster the child's development and independently manage symptoms.
 - i. Evidence of coordination of care with other service and educational providers
 - j. Appropriate schedule for supervision by a certified/licensed Behavior Analyst. Per the Behavior Analysis Certification Board, the general standard of care is 2 hours of supervision for every 10 hours of direct service.
 - k. Plan for reassessment and treatment plan modification
2. Patient shows clinically significant impairment consistent with the diagnosis of Autism Spectrum Disorder.
3. Treatment is appropriate to the patient's age. Requests for intensive ABA for patients under age 2 and patients 7 years and older will be approved only with individually compelling evidence of need and expected effectiveness given weak evidence regarding treatment for this age group.
4. Treatment is expected to produce clinically significant results including **ANY** of the following:
 - a. Measureable improvement in functioning that would not be expected in the absence of treatment
 - b. Prevention of regression which would be expected in the absence of treatment
5. Treatment is provided at the lowest level of intensity appropriate to the patient's clinical needs and goals.

6. Treatment plan takes into account the child's and family's ability to tolerate and make use of interventions
7. For treatment in excess of 25 hours per week, **ALL** of the following criteria must be met:
 - a. Less intensive treatment has been tried and failed
 - b. Clinical assessment indicates a reasonable likelihood that more intensive treatment will produce measureable, clinically meaningful improvement
8. For treatment in an educational setting, **ALL** of the following criteria must be met:
 - a. Treatment goals and interventions target symptoms that appear in the specific context of the educational setting and cannot be adequately treated in any other setting.
 - b. Treatment interventions are expected to ameliorate the targeted symptoms resulting in clinically meaningful improvement in adaptive functioning.
 - c. Clinical staff do not supplant, in whole or in part, the role of educational staff in providing appropriate educational supports, accommodations and interventions to the student.
 - d. The treatment plan includes a realistic plan for promoting the school's ability to independently manage the student's behaviors without ongoing support from clinical staff.
 - e. Clinical staff regularly review clinical goals, interventions and outcomes with educational staff.

C. Criteria for Continued Authorization of ABA Services:

Continued authorization for ABA is indicated by **ALL** of the following:

1. The patient continues to meet criteria for initial authorization of ABA.
2. The patient is expected to continue making progress, or maintain improvements, with the continuation of treatment.
3. The patient has the capacity to retain and generalize treatment gains.
4. Parent(s) are actively involved in the patient's treatment and making progress in applying behavioral techniques as taught by provider. (Presence alone does not constitute active participation.)
5. Documentation includes evidence of coordination with other service providers and educational providers when applicable.
6. Parents are not yet able to independently provide effective interventions without the ongoing support of ABA providers.
7. The treatment plan includes a realistic plan for termination and promotes the patient's and family's ability to independently continue treatment gains.
8. Plus **1 or more** of the following:
 - i. Continued measurable improvements in symptoms and/or functioning.
 - ii. Continued progress toward the ability to independently maintain treatment gains.
 - iii. Treatment plan revision expected to resolve a lack of progress.

D. Termination Criteria:

Termination of continued authorization is indicated by **1 or more** of the following:

1. The patient no longer meets criteria for initial authorization of ABA.
2. The patient no longer meets criteria for continued authorization of ABA.
3. Parents are not engaging in treatment and have declined treatment recommendations.
4. The patient’s behaviors and symptoms are being exacerbated by treatment interventions.
5. Patient has achieved a stable level of functioning and further treatment is not expected to produce significant improvement.
6. Parents are able to independently provide effective interventions without the ongoing support of ABA providers.

III. Annual Review History

Review Date	Revisions	Effective Date
05/2013	Annual Review. Added table with review date, revisions, and effective date. Refined criteria for intensive ABA.	05/2013
05/2014	Annual Review. Added description of state mandates.	05/2014
10/2014	Update to reflect new HERC and AHRQ reports and Oregon and Washington regulatory changes.	10/2014
05/2015	Annual Review. Simplified reference to state mandates. Included additional literature. Clarified requirements regarding ABA in educational settings.	05/2015
07/2016	Annual Review. Added one continued treatment criterion and two discharge criteria.	07/2016
07/2017	Annual Review. Added telehealth. Added references. Added criteria related to parental involvement.	09/2017
07/2018	Annual Review. No changes	09/2018

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