



# Applied behavior analysis medical necessity guide

**Note:** If there is a discrepancy between this guideline and a member's plan of benefits, the benefits plan will govern. Also, a state or federal government, or CMS for Medicare and Medicaid members, may mandate some coverage (and coverage limits).\*

## Purpose

This applied behavior analysis (ABA) guideline is for use by clinicians. It's meant to aid in the decision-making process to determine the type and intensity of services a member with a condition on the autism spectrum needs. If the treatment is provided in an inpatient, residential or partial hospitalization setting, applicable medical necessity for coverage at that level of care is used and specific authorization for ABA is not needed in addition. Reviews using other applicable medical necessity criteria occur at a frequency commensurate with the level of care. Prior to discharge from one of these higher levels of care, a review using the guideline below for medical necessity of ABA is needed.

## Guideline development

These guidelines come from extensive review of the literature on the use of ABA to treat Autism Spectrum Disorder (ASD) and a comparative review of the guidelines of other health insurers. A multidisciplinary committee of health care professionals within and external to Aetna® Behavioral Health developed and approved the guidelines based on these reviews. The guidelines are based upon the reviews and known best practices in the treatment of ASD, including:

- The requirement for a complete assessment using validated tools and standardized developmental norms
- Focused interventions
- Caregiver participation
- Repeated measurement with standardized measures to assess progress

## Philosophy

ABA is a scientifically supported model of treatment to remediate the functional impairments typically found in people with ASD. It is a time-limited treatment that should result in progressive, measurable gains in functioning on a standardized measure.

\*[Exhibit A](#), attached to this guide, addresses medical necessity review for plans in Maryland subject to the law of the state. Other state laws and regulations may apply in other states.

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## Type, duration and intensity of applied behavioral analysis (ABA)

ABA intervention type	Definition	Typical age range	Typical intensity	Typical duration
Comprehensive	Skills and behaviors in multiple affected domains are targeted for treatment, which often include maladaptive behaviors.	0-7 years	10-25 hrs/week	1-2 years
Focused	Services are directed to a limited number of skill and behavioral targets.	All ages	1-20 hrs/week	Variable 1-4 years

### Quality of care essential elements:

The elements listed below are the components of ABA that ensure quality care. This list is a guide for providers, and is distinct from the medical necessity criteria addressed later in this document.

1. There is a DSM-V diagnosis of Autism Spectrum Disorder (ICD-10/ F84.0; F84.3 - F84.9) obtained by an appropriate provider (i.e. licensed psychologist/psychiatrist, physician or other health care professional qualified to diagnose mental health conditions within their scope of practice).
2. There are identifiable target behaviors having an impact so the member cannot adequately participate in developmentally appropriate activities such as school. Or there may be a significant risk of harm to self or others. The ABA is not custodial in nature (which Aetna® defines as care provided when the member "has reached the maximum level of physical or mental function and such person is not likely to make further significant improvement" or "any type of care where the primary purpose of the type of care provided is to attend to the member's daily living activities which do not entail or require the continuing attention of trained medical or paramedical personnel.") Plan documents may have variations on this definition and need to be reviewed.
3. There is engagement and commitment from parent(s) (or guardians) to participate in treatment to generalize gains.
4. There is a time-limited, individualized treatment plan developed that is member-centric, strengths-specific, family-focused, community-based, multi-system culturally competent, and least intrusive. This treatment plan has specific target behaviors that are clearly defined: frequency, rate, symptom intensity or duration, or other objective measures of baseline levels are recorded, and quantifiable criteria for progress are established. The plan describes behavioral intervention techniques appropriate to the target behavior, reinforcers selected, and strategies for generalization of learned skills are specified. And there is documentation of planning for transition through the continuum of interventions, services and settings, as well as titration and discharge criteria.

5. There is a review of the member's history as well as ongoing collaboration and coordination with existing providers and/or the school district, as applicable. There is involvement of, or referrals to, appropriate health care, community or supplemental resources.
6. Services must be provided directly or billed by licensed behavior analysts (in states with behavior analyst licensure laws), board-certified behavior analysts, or licensed psychologists where behavior analysis is within their scope of practice definition, unless state mandates, plan documents or contracts require otherwise. If state mandates, plan documents or contracts allow authorization for services that are not directly provided by individuals licensed by the state or certified by the Behavior Analyst Certification Board as noted above, there must be supervision and direction of the unlicensed or non-certified providers in line with practice standards, unless state mandates, plan documents or contracts require otherwise.

### **Medical necessity criteria for applied behavior analysis (ABA)**

All the following criteria must be met:

1. There is a DSM-V diagnosis of Autism Spectrum Disorder (ICD-10: F84.0; F84.3 - F84.9) obtained by an appropriate provider.
2. Services must be provided directly or billed by the appropriately licensed provider.
3. There is demonstration of functional impairment on a standardized scale of functioning in the past 12 months. For instance, the Vineland Adaptive Behavior Scales 3 (VABS-3), the Adaptive Behavior Assessment Scale (ABAS), VB-MAPP or ABLLS. The impairment must be at least one standard deviation below the population mean OR represent a significant risk of harm to self or others.
4. The treatment plan documents have specific identified target behaviors related to the condition that are clearly defined: frequency, rate, symptom intensity or duration, or other objective measures of baseline levels are recorded, and quantifiable criteria for progress are established. The plan describes behavioral intervention techniques appropriate to the target behavior, reinforcers selected, and strategies for generalization of learned skills are specified. And there is documentation of planning for transition through the continuum of interventions, services and settings, as well as titration and discharge criteria. The treatment plan documents a gradual tapering of higher intensities of intervention and a shifting to supports from other sources (school, as an example) as progress occurs.
5. In order to support clinical appropriateness for ABA services, (1) In instances where the frequency of the target behavior has improved over the course of treatment, documentation is included OR (2) If there has NOT been improvement, there is documentation of modification of the treatment, additional assessments that have been conducted, and/or there has been appropriate consultations from other staff or experts.
6. The level of impairment (calculated below) justifies the number of hours requested.

<b>Assessment of symptom severity</b> (This can be used as a guide)				
	<b>None</b> <1SD below	<b>Mild</b> >1 SD below	<b>Moderate</b> >1.5 SD below	<b>Severe</b> >2SD below
<b>Functional impairment</b>	0 Hours/Wk	1 to 4 Hours/Wk	4 to 7 Hours/Wk	7 to 10 Hours/Wk
<b>Maladaptive behavior:</b> aggression, self-injury, property destruction, restrictive/repetitive behaviors and interests; abnormal, inflexible or intense preoccupations				
<b>Social communication:</b> Problems with expressive or receptive language, poor understanding or use of nonverbal communications, stereotyped or repetitive language, lack of social/emotional reciprocity, failure to seek or develop shared social activities				
<b>Self-care:</b> Difficulty recognizing danger/risks, or advocating for self; problems with grooming/eating/toileting skills which are impeded by symptoms of autism				
Based on functional impairment and assessment of symptom severity, additional authorization may be provided for QHP protocol modification and direction at 1 to 2 hours per 10 hours of treatment by protocol, as well as authorization for caregiver training.				

**All criteria above must be evaluated.** Authorized hours will be based on documented severity of impairments as listed above (i.e., maladaptive behavior, social communication and self-care).

### **Termination of coverage of applied behavior analysis (ABA)**

**Termination:** A member's progress is to be evaluated every six months. A member not making progress will be transitioned to other appropriate services. When it becomes clear that a treatment is ineffective, or the treatment is no longer needed, this must be communicated to the family and provider.

Coverage of the service will end when one of the following criteria is met:

1. Medical necessity is no longer met.
2. There has been improvement of two or more standard deviations in multiple domains.
3. There has been improvement of one or more standard deviations in multiple domains in a Focused ABA intervention plan.
4. There has been improvement of less than one standard deviation in all domains for successive authorization periods.

## References

Behavior Analyst Certification Board. Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers (2nd ed.). 2014.

Behavior Analyst Certification Board. Clarifications Regarding Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers (2nd ed.). 2019.

Boyle M, Keenan G, Forck K, et al. Treatment of elopement without blocking with a child with autism. Behavior modification. 2019; 43(1): 132-145. Available at: <https://doi.org/10.1177/0145445517740871>

Cohen H, Amerine-Dickens M, Smith T. Early intensive behavioral treatment: replication of the UCLA model in a community setting. Journal of developmental and behavioral pediatrics. 2006; 27(2 Suppl), S145-S155. Available at: <https://doi.org/10.1097/00004703-200604002-00013>

Dawson G, Burner K. Behavioral interventions in children and adolescents with autism spectrum disorder: a review of recent findings. Current opinion in pediatrics. 2011; 23(6), 616-620. Available at: <https://doi.org/10.1097/MOP.0b013e32834cf082>

Dawson G, Rogers S, Munson J, et al. Randomized, controlled trial of an intervention for toddlers with autism: The Early Start Denver Model. Pediatrics. 2010; 125(1), E17-23. Available at: <https://doi.org/10.1542/peds.2009-0958>

Doehring P, Reichow B, Palka T, et al. Behavioral approaches to managing severe problem behaviors in children with autism spectrum and related developmental disorders: a descriptive analysis. Child and Adolescent Psychiatric Clinics of North America. 2014; 23(1), 25-40. Available at: <https://doi.org/10.1016/j.chc.2013.08.001>

Eikeseth S. Outcome of comprehensive psycho-educational interventions for young children with autism. Research in Developmental Disabilities. 2009; 30(1), 158-178. Available at: <https://doi.org/10.1016/j.ridd.2008.02.003>

Eikeseth S, Smith T, Jahr E, et al. Intensive behavioral treatment at school for 4- to 7-year-old children with autism: A 1-year comparison controlled study. Behavior Modification. 2002; 26(1), 49-68. Available at: <https://doi.org/10.1177/0145445502026001004>

Eikeseth S, Smith T, Jahr E, et al. Outcome for children with autism who began intensive behavioral treatment between ages 4 and 7: a comparison controlled study. Behavior Modification. 2007; 31(3), 264-278. Available at: <https://doi.org/10.1177/0145445506291396>

Eldevik S, Hastings R, Hughes J, et al. Meta-analysis of Early Intensive Behavioral Intervention for children with autism. Journal of Clinical Child & Adolescent Psychology. 2009; 38(3), 439-450. Available at: <https://doi.org/10.1080/15374410902851739>

Eldevik S, Hastings R, Hughes J, et al. Using participant data to extend the evidence base for intensive behavioral intervention for children with autism. American journal on intellectual and developmental disabilities. 2010; 115(5), 381-405. Available at: <https://doi.org/10.1352/1944-7558-115.5.381>

Eldevik S, Hastings R, Jahr E, et al. Outcomes of behavioral intervention for children with autism in mainstream pre-school settings. *Journal of Autism and Developmental Disorders*. 2012; 42(2), 210-220. Available at: <https://doi.org/10.1007/s10803-011-1234-9>

Eldevik S, Eikeseth S, Jahr E, et al. Effects of Low-Intensity Behavioral Treatment for children with Autism and Mental Retardation. *Journal of Autism and Developmental Disorders*. 2006; 36(2), 211-224. Available at: <https://doi.org/10.1007/s10803-005-0058-x>

Green G. Behavioral foundations of effective autism treatment. Cornwall-on-Hudson, NY: Sloan Pub. 2011.

Hassiotis A, Canagasabay A, Robotham D, et al. Applied behaviour analysis and standard treatment in intellectual disability: 2-year outcomes. *British Journal of Psychiatry*, 2011; 198(6), 490-491. Available at: <https://doi.org/10.1192/bjp.bp.109.076646>

Leaf J, Leaf J, Milne C, et al. An evaluation of a behaviorally based social skills group for individuals diagnosed with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. 2017; 47(2), 243-259. Available at: <https://doi.org/10.1007/s10803-016-2949-4>

Linstead E, Dixon D, Hong E, et al. An evaluation of the effects of intensity and duration on outcomes across treatment domains for children with autism spectrum disorder. *Translational Psychiatry*. 2017; 7(9) e1234. Available at: <https://doi.org/10.1038/tp.2017.207>

Lovaas O. Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology*. 1987; 55(1), 3-9. Available at: <https://doi.org/10.1037/0022-006X.55.1.3>

Ozonoff S, Cathcart K. Effectiveness of a home program intervention for young children with autism. *Journal of autism and developmental disorders*. 1998; 28(1), 25-32. Available at: <https://doi.org/10.1023/A:1026006818310>

Peters-Scheffer N, Didden R, Mulders M, et al. Low intensity behavioral treatment supplementing preschool services for young children with autism spectrum disorders and severe to mild intellectual disability. *Research in developmental disabilities*. 2010; 31(6), 1678-1684. Available at: <https://doi.org/10.1016/j.ridd.2010.04.008>

Reichow B. Overview of meta-analyses on early intensive behavioral intervention for young children with autism spectrum disorders. *Journal of autism and developmental disorders*. 2012; 42(4), 512-520. Available at: <https://doi.org/10.1007/s10803-011-1218-9>

Reichow B, Hume K, Barton E, et al. Early intensive behavioral intervention (EIBI) for young children with autism spectrum disorders (ASD). *The Cochrane database of systematic reviews*. 2018; 5(5), CD009260. Available at: <https://doi.org/10.1002/14651858.CD009260.pub3>

Roane H, Fisher W, Carr J. Applied Behavior Analysis as Treatment for Autism Spectrum Disorder. *The Journal of pediatrics*. 2016; 175, 27-32. Available at: <https://doi.org/10.1016/j.jpeds.2016.04.023>

Roscoe E, Schlichenmeyer K, Dube W. Functional analysis of problem behavior: A systematic approach for identifying idiosyncratic variables. *Journal of applied behavior analysis*. 2015; 48(2), 289-314.

Available at: <https://doi.org/10.1002/jaba.201>

Sarcia B. The Impact of Applied Behavior Analysis to Address Mealtime Behaviors of Concern Among Individuals with Autism Spectrum Disorder. *Child and adolescent psychiatric clinics of North America*. 2020; 29(3), 515-525. Available at: <https://doi.org/10.1016/j.chc.2020.03.004>

Severini K, Ledford J, Robertson R. Systematic Review of Problem Behavior Interventions: Outcomes, Demographics, and Settings. *Journal of autism and developmental disorders*. 2018; 48(10), 3261-3272. Available at: <https://doi.org/10.1007/s10803-018-3591-0>

Smith I, Koegel R, Koegel L, et al. Effectiveness of a novel community-based early intervention model for children with autistic spectrum disorder. *American journal on intellectual and developmental disabilities*. 2010; 115(6), 504-523. Available at: <https://doi.org/10.1352/1944-7558-115.6.504>

Virues-Ortega J. Applied behavior analytic intervention for autism in early childhood: meta-analysis, meta-regression and dose-response meta-analysis of multiple outcomes. *Clinical psychology review*. 2010; 30(4), 387-399. Available at: <https://doi.org/10.1016/j.cpr.2010.01.008>

Vismara L, Rogers S. Behavioral treatments in autism spectrum disorder: what do we know?. *Annual Review of Clinical Psychology*. 2010; 6(1), 447-468.

Available at: <https://doi.org/10.1146/annurev.clinpsy.121208.131151>

Warren Z, McPheeters M, Sathe N, et al. A systematic review of early intensive intervention for autism spectrum disorders. *Pediatrics*. 2011; 127(5) e1303e1311.

Available at: <https://doi.org/10.1542/peds.2011-0426>

Weitlauf A, McPheeters M, Peters B, et al. Therapies for children with autism spectrum disorder: behavioral interventions update. *Agency for healthcare research and quality (US)*. 2014.

Wong C, Odom S, Hume K, et al. Evidence-based practices for children, youth, and young adults with autism spectrum disorder: A comprehensive review. *Journal of Autism and Developmental Disorders*. 2015; 45(7), 1951-1966. Available at: <https://doi.org/10.1007/s10803-014-2351-z>

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# Exhibit A: Medical necessity review for Maryland plans

Pursuant to Maryland insurance regulation COMAR 31.10.39, Aetna® will apply the following criteria when assessing medical necessity for applied behavior analysis for plans subject to Maryland law.

1. The child's primary care provider or specialty physician must perform a comprehensive evaluation identifying the need for applied behavior analysis for the treatment of Autism or Autism Spectrum Disorder.
2. Such primary care provider or specialty physician must prescribe the treatment. Such prescription must include specific treatment goals.
3. Such treatment shall be reviewed annually for medical necessity with the primary care provider or specialty physician, and in consultation with the applied behavior analysis provider. Such utilization review shall include:
  - a. Documentation of benefit to the child
  - b. Identification of new or continuing treatment goals
  - c. Development of a new or continuing treatment plan
4. The applied behavior analysis provider must be licensed, certified or otherwise authorized under the Maryland Health Occupations Article or similar licensing, certification or authorization requirements of another state or U.S. territory where the services are provided.
5. Coverage may be subject to limitations in a health benefit plan relating to coordination of benefits, participating provider requirements, restrictions on services provided by family or household members, case management provisions, and copayments, coinsurance and deductible amounts.
6. Aetna does not deny coverage for applied behavior analysis based solely on the number of hours of applied behavior analysis prescribed.
7. Aetna does not deny coverage for applied behavior analysis based solely upon the location of services being identified as a child's educational setting.<sup>1</sup>
8. Aetna does not deny payment for applied behavior analysis on the basis that it is experimental or investigational.

<sup>1</sup> Pursuant to applicable law, however, Aetna is not required provide services to a child under an individualized education program or any obligation imposed on a public school by the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time.

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