

## Clinical Policy: Applied Behavior Analysis

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[Coding Implications](#)

[Revision Log](#)

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

### Description

Applied Behavior Analysis (ABA) is the application of behavioral principles to everyday situations, intended to increase skills or decrease targeted behaviors. ABA has been used to improve areas such as language, self-help, and play skills, as well as decrease behaviors such as aggression, self-stimulatory behaviors, and self-injury. For those with Autism Spectrum Disorder (ASD), treatment may vary in terms of intensity and duration, complexity, and treatment goals. The extent of treatment provided can be characterized as focused or comprehensive. Focused ABA is direct care provided for a limited number of behavioral targets. Treatment ranges from 10-25 hours per week and is most appropriate for those who need treatment for only a limited number of key functional skills or have such acute problem behavior that its treatment should be the priority. Comprehensive ABA is for treatment of multiple affected developmental domains, such as cognitive, communicative, social, emotional, and adaptive functioning. Intensive treatment ranges from 25 - 40 hours per week (plus direct and indirect supervision and caregiver training) to increase the potential for behavior improvement. When applied to young children, ABA is also referred to as Early Intensive Behavior Intervention (EIBI) or Intensive Behavior Intervention (IBI).

Centene will work with providers to implement best practices and standardization of outcome measures into the Applied Behavior Analysis treatment plan.

### Policy/Criteria

- I. It is the policy of Coordinated Care of Washington, Inc., that Applied Behavioral Health (ABA) services are **medically necessary** when meeting all the following:
  - A. Medical necessity criteria for **behavioral assessment** requires members meeting the following:
    1. Diagnosis of ASD has been made by a Health Care Authority (HCA) defined ABA Center of Excellence (COE) and ABA is recommended by a qualified licensed professional prior to the request for services, and confirmed by one of the following diagnosis specific tests/screening tools below. A qualified licensed professional is a person licensed as a physician, psychologist, social worker, or another appropriate licensed health care practitioner working within their scope of practice and who are qualified to diagnose ASD and recommend ABA. Examples of diagnosis specific tests and screening tools include:
      - a. Checklist for Autism in Toddlers (CHAT)

- b. Modified Checklist for Autism in Toddlers/Modified Checklist for Autism in Toddlers, Revised with follow-up (M-CHAT/M-CHAT-R/F)
  - c. Screening Tool for Autism in Toddlers & Young Children (STAT)
  - d. Social Communication Questionnaire (SCQ)
  - e. Autism Spectrum Screening Questionnaire (ASSQ)
  - f. Childhood Autism Spectrum Test, formerly known as the Childhood Asperger's Syndrome Test (CAST)
  - g. Krug Asperger's Disorder Index (KADI)
  - h. Autism Diagnostic Observation Schedule/Autism Diagnostic Observation Schedule - 2<sup>nd</sup> edition (ADOS/ADOS-2)
  - i. Autism Diagnostic Interview Revised (ADI-R)
  - j. Childhood Autism Rating Scale/ Childhood Autism Rating Scale -2nd edition (CARS/CARS-2)
  - k. Gilliam Autism Rating Scale (GARS-3)
  - l. Other valid form of approved evidence-based assessment result/summary
  2. A DSM Checklist that validates ASD
  3. ABA treatment programs will be delivered or supervised by an ABA credentialed professional.
- B. Medical necessity criteria for the *initiation* of **ABA treatment** requires members to meet the additional following criteria:
1. An industry-standard behavioral assessment for skill acquisition and/or behavior reduction is required to substantiate treatment services.
    - a. The Behavioral Assessment for skill acquisition may include:
      - i. Verbal Behavior Milestones and Assessment Placement Program (VB-MAPP)
      - ii. Assessment of Basic Language and Learning Skills-Revised (ABLLS-R)
      - iii. Assessment of Functional Living Skills (AFLS)
      - iv. Promoting the Emergence of Advanced Knowledge Generalization (PEAK) Skills assessment
    - b. A behavioral assessment for maladaptive behavior may include:
      - i. Functional behavioral assessments
      - ii. Traditional functional analyses
      - iii. Interview-Informed, Synthesized Contingency Analysis (IISCA)
  2. Comprehensive treatment plan that incorporates the results of the behavioral assessment and includes:
    - a. Individualized goals with measurable targeted outcomes,
    - b. Transition and discharge plans,
    - c. Information on coordination of care with other providers, as appropriate,
    - d. Intensity recommendation,
      - i. Treatment intensity for level of care requested meets medical necessity based on the following guidelines:
        - a) Focused ABA treatment meets the following requirements:
          1. Identifies hourly breakout for individual and group hours ranging from 10 - 25 hours per week including 1:1 direct, group, supervision, and caregiver training.
          2. Identifies measurable outcomes for every goal and objective, including caregiver training.

- b) Comprehensive ABA treatment plan meets the following requirements:
  - 1. Identifies hourly breakout for individual and group hours ranging from 25 - 40 hours per week 1:1 direct, and group treatment.
- c) Caregiver training is performance based and parent driven. Identifies measurable outcomes for every goal and objective,
  - ii. The treatment intensity does not exceed the member's functional ability to participate. The treatment plan should outline hours of therapy per day with the goal of increasing or decreasing the intensity of therapy as the member's ability to tolerate and participate permits.
- C. The treatment plan is built upon individualized goals and projected time to achieve those goals with measurable objectives tailored to the member and is strengths-specific, family-focused, community-based, multi-system, culturally competent, and least intrusive.
- D. The level of care requested is deemed medically necessary based on the level of impairment, derived from the validated assessment tool, as well as additional factors such as severity of symptoms, length of treatment history, and response to intervention. All of which should be considered to inform the decision of comprehensive or focused treatment.
- E. The number of service hours necessary to effectively address the skill deficits and behavioral excesses is listed in the treatment plan and considers the member's age, school attendance requirements, and other daily activities when determining the number of hours of medically necessary direct service, group and supervision hours.
- F. The treatment plan includes an initial, individualized transition/discharge plan outlining desired outcomes for treatment goals.
- G. Roles and responsibilities of all providers, as well as effective dates for behavioral targets that must be achieved prior to the next phase of care, should be specified and coordinated with all providers, the member, and family members.
- H. A Behavior Identification Assessment must be completed prior to requesting treatment services. This includes a review of past records, interviews, rating scales, direct observation, to guide the development treatment plan. When a member exhibits problem behaviors that are disruptive and/or dangerous, a functional behavioral assessment (FBA) should be used to identify maladaptive, challenging behaviors and in developing targeted interventions to address these behaviors. An FBA is used to design a behavior program for maximum effectiveness and helps guide the development of an individualized treatment plan.
- I. Parent or caregiver training and support is incorporated into the treatment plan.
- J. Interventions focus on active core symptoms and emphasize generalization and maintenance of skills and focus on the development of spontaneous social communication, adaptive skills, and appropriate behaviors.
- K. Interventions are consistent with ABA techniques and align with the identified areas of need in the assessments.
- L. Member exhibits behavior that presents a clinically significant health or safety risk to self or others (such as self-injury, aggression toward others, destruction of property, elopement, severe disruptive behavior and/or significant interference

with basic home or community activities of daily living).

- M. The member is medically stable and does not require 24-hour medical/nursing monitoring or procedures provided in a hospital level of care.
- N. None of the following apply:
  - 1. ABA treatment will not be authorized for services that are otherwise covered under the Individuals with Disabilities Education Act (IDEA) unless restricted within a state Medicaid benefit, ABA services can occur in coordination with school services and transition plans.
  - 2. ABA treatment will not be authorized for any treatment goals more appropriately conducted in these disciplines:
    - a. Speech therapy
    - b. Occupational therapy
    - c. Vocational rehabilitation
    - d. Supportive respite care
    - e. Recreational therapy
    - f. Orientation and mobility

- II. It is the policy of Coordinated Care of Washington that the continuation of Applied Behavioral Health (ABA) services is medically necessary when meeting all the following:
  - A. The member continues to meet criteria for ASD diagnosis or appropriate diagnosis otherwise specified according to state defined ABA criteria.
  - B. There is reasonable expectation that the member will benefit from the continuation of ABA therapy, as evidenced by mastery of skills defined in initial plan, or a change of treatment approach from the initial plan.
  - C. Interventions are consistent with ABA techniques and align with the updated assessment.
  - D. The treatment plan documents progress toward goals that is commensurate with level of care and is submitted for review 6 months or less as clinically appropriate, or as state mandated.
  - E. The number of service hours are necessary to effectively address the member's skill deficits and behavior reduction goals are listed in the treatment plan and considers the member's age, school attendance requirements, and other daily activities when determining the number of hours of medically necessary for direct service, group and supervision hours.
  - F. Treatment hours are subsequently increased or decreased based on response to treatment and current needs.
  - G. Treatment is not making the symptoms worse.
  - H. There is a reasonable expectation, based on the member's clinical history, that withdrawal of treatment will result in decompensation/loss of progress made, or recurrence of signs and symptoms.
  - I. Assessments, evaluations, treatment plans, and documentation is current within each profession, licensure, and state standards.
  - J. Qualitative data (narrative descriptions) and quantitative data (measured numerical data) should be gathered from ABA providers as well as from parents/guardians, teachers, and other caregivers (such as Speech Therapists,

Occupational Therapists, etc.). These data should also be gathered in multiple settings, such as in clinic, home, and school and should include a description of the change over time on all behaviors and skills that are the focus of treatment. Data should be presented in an easily readable and interpretable format.

- K. Documentation indicating that coordination of care is occurring with services such as but not limited; Speech Therapy, Occupational Therapy, Medication Management, school system supports, inpatient admissions, or other behavioral or physical health occurrences that may impact treatment.
- L. When there has been no evident progress within a 6-month period in goals addressing targeted symptoms or behaviors, or specific goals have not been achieved within the estimated timeframes, there should be an assessment to identify determining factors that may be contributing to inadequate progress. Treatment interventions should be modified or changed to achieve adequate progress. Documentation of such an assessment and subsequent treatment plan change(s) must include:
  - 1. Increased time and/or frequency working on targets.
  - 2. Change in treatment methods and/or assessments.
  - 3. Increased parent/caregiver training.
  - 4. Identification and resolution of barriers to treatment effectiveness.
  - 5. Any newly identified co-existing conditions.
  - 6. Reevaluation of each treatment plan goal.
  - 7. Evaluation for other services that may be helpful for added support: speech therapy, occupational therapy, Psychiatric evaluation, Psychotherapy, case management, family therapy, feeding therapy, school-based supports.
  - 8. Consideration of alternative treatment settings.
- M. When goals have been achieved, either new goals should be identified that are based on targeted symptoms and behaviors or the treatment plan should be revised to include a transition to less intensive interventions.

- III. Transition Planning: A member's progress is to be evaluated at a minimum of every 6 months, or as clinically appropriate if the suitability or effectiveness of ABA is in question. Transition planning and discharge considerations should be made with input from the entire care team. Discharge criteria should be identified at initiation of treatment and reviewed and adjusted as appropriate throughout the course of services. Criteria should be clearly defined and measurable, indicating the point at which services are appropriate for discontinuation and/or transfer to alternative or less intrusive levels of care. This may occur when any of the following criteria are present:
- A. Member no longer meets admission/continued stay criteria and/or meets criteria for another level of care.
  - B. ABA is no longer medically necessary to meet the behavioral needs of the member.
  - C. Member's individual treatment plan and goals have been met.
  - D. Parent / guardian / caregiver is capable of continuing the behavioral interventions.
  - E. Parent/guardian withdraws consent for treatment.
  - F. There is expected transition to the utilization of community resources to alternative treatment, specifically that of a school setting.

- G. Documentation that there has been no clinically significant progress or measurable improvement towards treatment plan goals for a period of at least 6 months, nor is there any expectation of progress.

### **Background**

ABA is the application of behavioral principles to everyday situations to increase skills or decrease targeted behaviors. Based in the science of behavior modification, ABA is the careful application of teaching strategies to promote learning. ABA targets socially significant behaviors, increases social skills, decreases behavioral excesses, and has been documented to be effective in many environments and circumstances. The goal of tailored treatment plans for those utilizing ABA services is to help increase socially adaptive skills and decrease challenging behaviors.

Despite the value of ABA treatment, there is a significant gap in terms of measurement of success and fidelity to the model of care. Through standardization of criteria for initiation of treatment, continuation, and titration of services, and application of ABA therapies, better outcomes can be achieved. To help individuals reach their maximum potential, an improved, more robust industry standard should be implemented for the appropriate dosage, and intensity of treatment that goes beyond the current restrictive model tied to units of time. Industry adoption of evidence-based standards of care is essential. Quality and clinical progress for members should be monitored regularly, and quantitative analyses of outcomes should be conducted. Further research needs to be done to determine the effectiveness of ABA at improving IQ, language skills, social skills, and adaptive behaviors, especially compared to other interventions. In addition, rigorous studies should examine which subgroups of children or adolescents with ASD benefit the most from ABA.

Numerous scientific studies have been conducted evaluating the effectiveness of ABA. The original and long-term follow-up study conducted by O. Ivar Lovaas reported improvements in cognitive function and behavior that were sustained for at least 5 years. Almost half of the ABA group passed normal first grade and had an IQ score that was at least average. The flaws in this study included: small sample size, non-randomization of patients to treatment groups, potential selection bias, and endpoints that may not meet current standards (Hayes Medical Directory). More recent studies have reported effectiveness of ABA interventions in children with autism. A 2010 early intensive behavior intervention study utilized data from over 400 children with autism. For the study, “children were divided into one of three groups: those that had received behavioral intervention, those that had received another intervention of similar intensity, or to a control group where no specific intervention was provided.” The outcomes for the behavioral intervention group were significantly better showing gains in both IQ and ABC scores. (Eldevik, S., Hastings, R.P., Hughes, J.C., Jahr, E., Eikeseth, S., & Cross, S. (2010). *American Journal on Intellectual and Developmental Disabilities*, 115, 381-405.) Similarly, a smaller study examined the content of ABA therapy on skill acquisition and intelligence test scores of twenty-eight children with autism and related disabilities. The study examined three groups: a traditional ABA group utilizing verbal behavior techniques developed by Skinner (Verbal behavior, Appleton-Century-Crofts, New York, 1957), a comprehensive ABA which incorporated additional behavior techniques, and a

control group not receiving ABA therapy. The results indicated that skill acquisition improved equally across both ABA intervention groups, with the comprehensive ABA group showing higher gains in intelligence scores. (Dixon, M.R., Paliliunas, D., Barron, B.F. et al. Randomized Controlled Trial Evaluation of ABA Content on IQ Gains in Children with Autism. *J Behav Educ* 30, 455–477 (2021))

Multiple systematic reviews with meta-analyses have been conducted on ABA studies for ASD, with conflicting results. Ospina and colleagues (2008) systematically reviewed studies comparing behavioral and developmental interventions for ASD. The four randomized control trials (RCTs) reviewed that compared ABA to Developmental Individual-difference relationship- based intervention (DIR) or Integrative/Discrete trial combined with Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH) found no significant difference in outcomes (Ospina et al., p. 4). Seven out of eight studies that reported significant improvements were not RCTs and have significant methodological limitations (Ospina et al., 2008, p. 5). Five other systematic reviews found that ABA was an effective intervention for ASD, but still noted the substantial limitations of included studies, which could affect meta- analysis results and the expected efficacy of ABA (Eldevik 2009; Reichow 2009; Makrygianni 2010; Virues-Ortega 2010; Warren et al. 2011).

Furthermore, Reichow and others (2014) conducted a systematic review of the RCTs, quasi- RCTs, and controlled clinical trials in the ABA literature, commenting that these were not of optimal design. Reichow and others (2014) concluded that the evidence suggests ABA can lead to improvements in IQ, adaptive behavior, socialization, communication and daily living skills. However, they strongly caution that given the limited amount of reliable evidence, decisions about using ABA as an intervention for ASD should be made on a case-by-case basis (Reichow et al. 2014, p. 33). In contrast, Spreckley and Boyd (2009) state in their systematic review that children receiving high intensity ABA did not show significant improvement in cognitive functioning (IQ), receptive and expressive language, and adaptive behavior compared to lesser interventions including parenting training, parent- applied behavior intervention supervised weekly by a therapist, or interventions in the kindergarten.

## I. Screening Recommendations for ASD

A. ASD screening is generally the first step in the diagnostic process. Screenings are typically performed by a general pediatrician but may also be performed by a child developmental-behavioral or neurodevelopmental pediatrician, child psychologist, or neurologist.

1. The American Academy of Pediatrics recommends routine developmental and ASD screenings in toddlers, noting ASD can be diagnosed in children as young as 18 months. Standardized autism specific screening test should occur in primary care setting at 18 and 24 months with ongoing developmental surveillance.
2. ASD specific assessments can be used to identify core symptoms and signs of autism in a child presenting with symptoms of ASD. Some examples include:
  - a. Clinician-administered screening tests: Modified Checklist for Autism in Toddlers (M-CHAT), Screening Tool for Autism in Toddlers and Young Children (STAT).

- b. Parent-completed questionnaires: Infant and Toddler Checklist, Communication and Symbolic Behavior Scales Development Profile and the Infant and Toddler Checklist.
- B. Comprehensive Diagnostic Evaluation is recommended for children who have been identified as at risk for ASD or who are presenting with key symptoms of ASD to identify diagnoses and recommendations more accurately for treatment including any other ancillary services. Best practice recommends updating testing every three years.
  1. Evaluations should be performed by a child developmental-behavioral or neurodevelopmental neurologist, child psychologist, or general neurologist.
- C. A standardized psychological assessment should include:
  1. Interviews with the child, parent/guardian, and teachers/daycare workers to obtain a detailed history of the individual including but not limited to past and current:
    - a. Educational information
    - b. Behavioral interventions
    - c. Family history
    - d. Relevant psychosocial concerns
  2. Observation of core symptoms of ASD including social interaction and repetitive, restrictive behaviors.
  3. Recommended diagnostic assessment tools:
    - a. Autism Diagnostic Observation Schedule, Second Edition (ADOS-2)
    - b. Childhood Autism Rating Scale, Second Edition (CARS-2)
    - c. Autism Diagnostic Inventory-Revised (ADI-R)
    - d. Gilliam Autism Rating Scale (GARS-3)
  4. Recommended assessments and standardized test that provide a more in-depth probe into developmental challenges and assist in identifying strengths and weaknesses for the purpose of guiding treatment planning:
    - a. Cognitive ability/IQ (SB-5 Stanford-Binet, WISC-V Wechsler Intelligence Scale for Children-5th edition, and Wechsler Preschool & Primary Scale of Intelligence 4th edition).
    - b. Adaptive skills (Vineland Adaptive Behavior Scales and the Adaptive Behavior Assessment System).
    - c. Language/Communication to identify receptive and expressive abilities (Peabody Picture Vocabulary Test 4th edition and Expressive Vocabulary Test 2nd edition).
    - d. Sensory Processing (Short Sensory Profile).
- D. Differential Diagnosis: The comprehensive evaluation should help differentiate ASD from other conditions.
- E. All resulting diagnoses should be included in the diagnostic formulation and addressed as part of treatment recommendations.
- F. When a diagnosis of ASD is made, the diagnosis should include:
  1. severity rating,
  2. course specifiers,
  3. intellectual impairment,
  4. language impairment,
  5. catatonia,
  6. medical conditions,

7. and known genetic or environmental etiological factors.

**Coding Implications**

This clinical policy references Current Procedural Terminology (CPT<sup>®</sup>). CPT<sup>®</sup> is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2019, 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 the submission of claims for reimbursement of covered services.

CPT <sup>®*</sup> Codes	Description
97151	Behavior identification assessment, administered by a physician or other qualified health care professional, each 15 minutes of the physician's or other qualified health care professional's time face-to-face with patient and/or guardian(s)/caregiver(s) administering assessments and discussing findings and recommendations, and non-face-to-face analyzing past data, scoring/ interpreting the assessment, and preparing the report/treatment plan
97152	Behavior identification-supporting assessment, administered by one technician under the direction of a physician or other qualified health care professional, face-to-face with the patient, each 15 minutes
97153	Adaptive behavior treatment by protocol, administered by technician under the direction of a physician or other qualified health care professional, face-to-face with one patient, each 15 minutes
97154	Group adaptive behavior treatment by protocol, administered by technician under the direction of a physician or other qualified health care professional, face-to-face with two or more patients, each 15 minutes
97155	Adaptive behavior treatment with protocol modification, administered by physician or other qualified health care professional, which may include simultaneous direction of technician, face-to-face with one patient, each 15 minutes
97156	Family adaptive behavior treatment guidance, administered by physician or other qualified health care professional (with or without the patient present), face-to-face with guardian(s)/caregiver(s), each 15 minutes
97157	Multiple-family group adaptive behavior treatment guidance, administered by physician or other qualified health care professional (without the patient present), face-to-face with multiple sets of guardians/caregivers, each 15 minutes
97158	Group adaptive behavior treatment with protocol modification, administered by physician or other qualified health care professional, face-to-face with multiple patients, each 15 minutes

CPT <sup>®*</sup> Codes	Description
0362T	Behavior identification supporting assessment, each 15 minutes of technicians' time face-to-face with a patient, requiring the following components: administration by the physician or other qualified health care professional who is on site; with the assistance of two or more technicians; for a patient who exhibits destructive behavior; completion in an environment that is customized to the patient's behavior
0373T	Adaptive behavior treatment with protocol modification, each 15 minutes of technicians' time face-to-face with a patient, requiring the following components: administration by the physician or other qualified health care professional who is on site; with the assistance of two or more technicians; for a patient who exhibits destructive behavior; completion in an environment that is customized to the patient's behavior

HCPCS Codes	Description
H2020	Therapeutic Behavioral Services, per diem

**ICD-10-CM Diagnosis Codes that Support Coverage Criteria**

ICD-10-CM Code	Description
F84.0	Autistic 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	Revision Date	Approval Date
Policy adopted. Previously WA.UM.35	08/19	11/19
Annual Review. Renumbered policy, was WA.CP.MP.104. Moved to standard corporate policy, with state-specific requirements for Center of Excellence, DSM Checklist and use of HCPCS H2020.	08/20	09/20
Annual review. Reference list reviewed and updated. Changed "Review Date" in the header to "Date of Last Revision". Changed "members" to "members/enrollees." Corrected typo.	08/21	09/21

Reviews, Revisions, and Approvals	Revision Date	Approval Date
<p>Addition of treatment range for focused ABA and literature review in introduction. Addition of medical necessity criteria for behavioral assessment. Addition of intensity of services for ABA. Addition of “or appropriate diagnosis as otherwise specified according to state defined ABA criteria” and removal of “clinical professional counselor, marriage and family therapist, addiction counselor”, addition of “strengths-specific, family-focused, community-based, multi-system, culturally-competent, and least intrusive. And where specific target behaviors are clearly defined; frequency, rate, symptom intensity or duration” in criteria.</p> <p>Section III.D. updated definition. Addition of H, K, L, M in initiation of services criteria. Addition of K, L, M, N in continuation of ABA services criteria. Addition of transition planning section. Updated introduction and research studies including citations to section entitled “Background.” Addition of section Screening Recommendations for ASD.</p> <p>Edit of verbiage for caregiver training goals changed “Caregiver Training is performance based. Identifies measurable outcomes for every goal and objective including parent training” to “Caregiver training is performance based and parent driven. Identifies measurable outcomes for every goal and objective”.</p>	09/22	09/22

**References**

1. Autism Treatments: Description and Research Summaries. Association for Science in Autism Treatment. <https://www.asatonline.org/for-parents/learn-more-about-specific-treatments/>.
2. 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*. May 2009; 38(3): 439-50. doi: 10.1080/15374410902851739
3. Hayes Medical Technology Directory: Applied Behavior Analysis-Based Interventions for Autism Spectrum Disorder. Published December 9, 2014. Annual Review November 12, 2018. June 19, 2020.
4. Makrygianni MK, Reed P. A meta-analytic review of the effectiveness of behavioural early intervention programs for children with Autistic Spectrum Disorders. *Res Autism Spectr Disord*. 2010; 4: 577-593. doi: 10.1016/j.rasd.2010.01.014
5. Myers SM, Johnson CP and the Council on Children with Disabilities (2009). Management of children with autism spectrum disorders. *Pediatrics*. 2007; 120:1162-1182. Reaffirmed 2014.
6. Ospina, MB et al. Behavioral and developmental interventions for autism spectrum disorder: a clinical systematic review. PLoSONE. 2008; 3(11): e3755. Accessed at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0003755>
7. Reichow B, Wolery M. Comprehensive synthesis of early intensive behavioral interventions for young children with autism based on the UCLA Young Autism Project model. *Journal of*

- Autism and Developmental Disorders*. 2009; 39(1): 23–41.
8. Reichow B, Barton EE, Boyd BA, Hume K. Early Intensive Behavioral Intervention (EIBI) for Young Children with Autism Spectrum Disorders (ASD): A Systematic Review. *Campbell Systematic Reviews*. 2014; 9. doi: 10.4073/csr.2014.9
  9. Sallows GO, Graupner TD. Intensive behavioral treatment for children with autism: four- year outcome and predictors. *American Journal of Mental Retardation*. Nov. 2005; 110(6):417-438. <http://www.asatonline.org/pdf/Sallows-Graupner2005.pdf>
  10. Spreckley, MS, and R Boyd. Efficacy of Applied Behavior Intervention in Preschool Children with Autism for Improving Cognitive, Language, and Adaptive Behavior: A Systematic Review and Meta-analysis. *Pediatrics*. 2009; 154:338-44.
  11. 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*. Jun 2010; 30(4): 387-99. doi: 10.1016/j.cpr.2010.01.008
  12. Volkmar F, Paul R, Klin A, Cohen D, (Eds) Handbook of autism and pervasive developmental disorders. Volumes 1 and 2, Third Edition. Cambridge University Press. 2007.
  13. Volkmar F, Siegel M, et al. Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. *Journal of the American Academy of child & Adolescent Psychiatry*. Feb 2014; 53(2): 237-257.
  14. Warren Z, McPheeters ML, Sathe N, et al. A systematic review of early intensive intervention for autism spectrum disorders. *Pediatrics*. May 2011; 127(5): e1303-11. doi: 10.1542/peds.2011-0426.
  15. Behavior Analysis Certification Board. Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers. 2014. Accessed June 22, 2020. Accessed at: [https://www.bacb.com/wp-content/uploads/2017/09/ABA\\_Guidelines\\_for\\_ASD.pdf](https://www.bacb.com/wp-content/uploads/2017/09/ABA_Guidelines_for_ASD.pdf)
  16. Augustyn M, Hahn LE, Autism spectrum disorder: Evaluation and diagnosis. In: UpToDate, Patterson MC, Bridgemohan (Eds) UpToDate. Waltham, MA. Accessed June 18, 2020.
  17. Bridgemohan C. Autism spectrum disorder: Screening tools. In: UpToDate, Augustyn M (Eds). UpToDate, Waltham, MA. Accessed June 18, 2020.
  18. Weissman L, Bridgemohan C. Autism spectrum disorder in children and adolescents: Behavioral and educational interventions. In: UpToDate, Waltham, MA. Accessed June 18, 2020.
  19. Zwaigenbaum L, Bauman ML, Fein D, et al. Early Screening of Autism Spectrum Disorder: Recommendations for Practice and Research. *Pediatrics*. 2015 Oct;136 Suppl 1: S41-59. doi: 10.1542/peds.2014-3667D
  20. Eldevik, S., Hastings, R.P., Hughes, J.C., Jahr, E., Eikeseth, S., & Cross, S. (2010). *American Journal on Intellectual and Developmental Disabilities*, 115, 381-405.
  21. Dixon, M.R., Paliliunas, D., Barron, B.F. et al. Randomized Controlled Trial Evaluation of ABA Content on IQ Gains in Children with Autism. *J Behav*

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22. Washington State Health Care Authority. Applied Behavioral Analysis (ABA) Program Billing Guide. <https://www.hca.wa.gov/assets/billers-and-providers/ABA-services-20220801.pdf> Revision effective 8/1/22.

**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 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.

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