



Applied Behavior Analysis (ABA)

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Introduction & Instructions for Use

Introduction

Supplemental Clinical Criteria are a set of objective and evidence-based behavioral health criteria used by medical necessity plans to standardize coverage determinations, promote evidence-based practices, and support members’ recovery, resiliency, and wellbeing for behavioral health benefit plans that are managed by Optum® .

Instructions for Use

This guideline is used to make coverage determinations as well as to inform discussions about evidence-based practices and discharge planning for behavioral health benefit plans managed by Optum. When deciding coverage, the member’s specific benefits must be referenced.

All reviewers must first identify member eligibility, the member-specific benefit plan coverage, and any federal or state regulatory requirements that supersede the member’s benefits prior to using this guideline. In the event that the requested service or procedure is limited or excluded from the benefit, is defined differently or there is otherwise a conflict between this guideline and the member’s specific benefit, the member’s specific benefit supersedes this guideline. Other clinical criteria may apply. Optum reserves the right, in its sole discretion, to modify its clinical criteria as necessary using the process described in Clinical Criteria.

This guideline is provided for informational purposes. It does not constitute medical advice.

Optum may also use tools developed by third parties that are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice. Optum may develop clinical criteria or adopt externally-developed clinical criteria that supersede this guideline when required to do so by contract or regulation.

Benefit Considerations

Before using this policy, please check the member-specific benefit plan document and any federal or state mandates, if applicable.

State Mandates

For *California Commercial* members:

A health care service plan shall not limit benefits or coverage for medically necessary services on the basis that those services should be or could be covered by a public entitlement program, including, but not limited to, special education or an individualized education program, Medicaid, Medicare, Supplemental Security Income, or Social Security Disability Insurance. It shall not include or enforce a contract that that otherwise covered benefits on the basis that those services should be or could be covered by a public entitlement program.

Behavioral health treatment provided pursuant to a treatment plan for pervasive developmental disorder or autism is administered by a qualified autism service professional to include a psychological associate, an associate marriage and family therapist, an associate clinical social worker, or an associate professional clinical counselor. This service professional must also meet the criteria for a Behavioral Health Professional set forth in the regulations that will be adopted by the California State Department of Developmental Services.

For *Connecticut* members refer to the following:

Behavioral therapy is "supervised by" such licensed behavior analyst, licensed physician or licensed psychologist when such supervision entails at least one hour of face-to-face supervision of the autism spectrum disorder services provider by such licensed behavior analyst, licensed physician or licensed psychologist for each ten hours of behavioral therapy provided by the supervised provider.

For *Florida* members, mid and large group fully insured (does not include individual and small) refer to the following:

Applied Behavior Analysis (ABA) is covered for the treatment of Down Syndrome. Speech therapy, physical therapy, occupational therapy, and ABA must be covered to the same extent as the existing Florida autism mandate.

For *Indiana* members refer to the following:

Services are intensive and may be provided daily. All determinations must be based on the individualized objectives of the treatment plan and unique needs of the member. No quantitative benefit coverage limitations are implied by reference to these guidelines. The intensity of service should consider the member's ability to participate, benefit, and tolerate the full spectrum of Services received concurrently including non-behavioral services such as school, speech and occupational therapies. Treatment intensity should be increased or decreased based on the member's response and current needs.

For fully insured policies in *Maryland*:

Use the following criteria as specified in the Code of Maryland Regulations (MD COMAR 31.10.39.03. April 3, 2014):

- A. Applied Behavioral Analysis (ABA) services include behavioral health treatment, psychological care, and therapeutic care of members diagnosed autism spectrum disorder.
- B. The following are required for the initiation and continuation of ABA services:
 1. A comprehensive evaluation of a child by the child's primary care provider or specialty physician identifying the need for treatment of autism spectrum disorder.

2. A prescription from a child's primary care provider or specialty physician that includes specific treatment goals.
3. Annual review by the prescribing primary care provider or specialty physician, in consultation with the ABA provider, that includes:
 - i. Documentation of benefit to the child;
 - ii. Identification of new or continuing treatment goals; and
 - iii. Development of a new or continuing treatment plan.
- C. Applied Behavioral Analysis (ABA) Services that meet the above criteria will not be denied solely on the number of hours of habilitative services prescribed for:
 1. Up to 25 hours per week for members between the ages of 18 months and 5 years old.
 2. Up to 10 hours per week for members between the ages of 6 and 18 years old
 3. Additional hours of ABA services will be authorized if determined to be medically necessary and appropriate. After exhausting benefits to the extent mandated by Maryland regulations, Optum will review requests for additional treatment using the medical necessity guidelines in its standard policy.
 4. Services are only delivered by providers who are licensed, certified, or otherwise authorized under the Health Occupations Article or similar licensing, certification, and authorization requirements of another state or U.S. territory where ABA services are provided.
- D. Location of Services
 1. ABA services are not denied if the treatment plan identifies the child's school as the location of services.
 2. Services are not authorized under an Individualized Education Program (IEP), or any obligation imposed on a public school by the Individuals with Disabilities Education Act.
- E. ABA will not be denied on the basis that it is experimental or investigational.

For *Massachusetts Medicaid Early Intervention (EI)* members (Effective 10/01/2021):

- ABA services should not exceed 30 hours per week.
- It is required that supervision by a Board-Certified Behavior Analyst (BCBA) to a paraprofessional will be provided at the 1:10 ratio (one hour of supervision to ten hours of direct service). The supervision of paraprofessionals providing direct ABA services to a child may require that both the direct service provider and the supervisor be present at the same time during the home visit.

For *New Jersey Medicaid* members:

The need for ABA services must be determined by a qualified healthcare professional (QHP) capable of making a diagnosis of autism, such as a physician or psychologist. A comprehensive diagnostic evaluation is not required to access ABA services. ABA services are available to any child diagnosed with autism spectrum disorder as defined by ICD-10 diagnoses F84.0 through F84.9. ABA services shall be made available to children 18 months to 21 years of age based on medical necessity. Once a child has a diagnosis of autism (by a physician or psychologist), then a QHP such as a Board-Certified Behavior Analyst (BCBA) will assess the child to determine the need for ABA therapy and to develop a treatment plan. It is not uncommon for one QHP to make the diagnosis (such as a physician) and a separate QHP (such as a BCBA) to develop and supervise the treatment plan.

- Acceptable QHPs for the diagnosis and treatment planning for adaptive behavior services include:
 - Physicians (diagnosis and treatment planning)
 - Psychologists trained and certified in behavior analysis, and (diagnosis and treatment planning)
 - Board Certified Behavior Analysts (treatment planning)

For *New York Medicaid* members (Effective 01/01/2023):

- Enrollees may be eligible for ABA if they are under age 21 and have received a diagnosis of autism spectrum disorder and/or Rett Syndrome as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).
- The NYS Medicaid member must be referred for ABA services by a NYS-licensed and NYS Medicaid-enrolled physician, psychologist, psychiatric nurse practitioner, pediatric nurse practitioner, or physician assistant.
- ABA services are provided by Licensed Behavior Analyst (LBA), Certified Behavior Analyst Assistant (CBAA) working under the supervision of LBAs, or other individuals specified under Article 167 of NYS education law.

- LBAs may form a group practice. CBAs may work in a group practice but cannot own a group practice.
- LBAs and CBAs may work in any setting that may legally provide ABA services. Examples of such settings may include: private practice, settings where patients/clients reside full-time or part-time, clinics, hospitals, residences, and community settings.

For *Ohio Medicaid* members:

- ABA is available through telehealth under the current guidelines effective June, 2018. If the provider is not enrolled with Medicaid, a single case agreement would be needed, see Ohio Administrative Code for list of eligible practitioners and prior authorization requirements, if applicable.

For *Pennsylvania Commercial* members:

- Health insurance coverage is required for the diagnosis and treatment of ASD for individuals less than 21 years old. The State of Pennsylvania Professional Licensing allows for supervision of ABA by a Board-Certified Behavior Analyst (BCBA) or a licensed behavior consultant, which is not required to be a traditionally licensed clinician.

For *Virginia Commercial* fully-insured HMO and insurance plans (Effective 07/01/2022):

- "Autism spectrum disorder" means any pervasive developmental disorder, as defined in the most recent edition or the most recent edition at the time of diagnosis of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.
- "Medically necessary" means in accordance with the generally accepted standards of mental disorder or condition care and clinically appropriate in terms of type, frequency, site, and duration, based upon evidence and reasonably expected to do any of the following: (i) prevent the onset of an illness, condition, injury, or disability; (ii) reduce or ameliorate the physical, mental, or developmental effects of an illness, condition, injury, or disability; or (iii) assist to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the individual and the functional capacities that are appropriate for individuals of the same age.

For *Washington Medicaid* members:

- Qualifying diagnosis - A diagnosis of an ASD, as defined by the DSM, or other developmental disability for which there is evidence ABA is effective.
- There is no age requirement to be eligible for ABA services.
- ABA services may be provided in an inpatient setting (emergency department, inpatient hospital, etc.) when the following criteria is met, in addition to all other criteria for ABA services in WAC 182-531A:
 - The services are ordered by an ABA Center of Excellence (COE) provider (developmental pediatrician, neurologist, pediatric neurologist, psychiatrist, pediatric psychiatrist, licensed psychologist or other qualified medical provider designated by HCA as a COE). Services may be medically necessary if:
 - Less costly and less intrusive interventions have been tried and were not successful or there is no equally effective and substantially less costly alternative treatment available
 - The evaluating and prescribing provider believes that there is a reasonable expectation that the requested ABA services will result in measurable improvement in the client's behavior or skills
 - The client's severe harmful behavior is preventing discharge to a less restrictive setting
 - The hospitalization or continued hospitalization has occurred as a result of the client's severe harmful behavior.
 - ABA provided in an inpatient setting must be a short-term, focused treatment to stabilize the client's harmful behavior to a level/intensity that promotes discharge to a less restrictive setting.
 - Care coordination and discharge planning must occur with the appropriate frequency to meet the client's individualized needs and should include providers that will be receiving the client upon discharge.
 - Continuation of ongoing ABA services that were provided in another setting prior to hospitalization does not meet criteria for expedited prior authorization (EPA).

Description of Service

Applied Behavior Analysis (ABA)

The Council of Autism Service Providers [CASP], (2024) provides the following description of ABA:

ABA is a well-developed scientific discipline that focuses on analyzing, designing, implementing, and evaluating social and other environmental modifications to produce meaningful changes in human behavior. This treatment approach has proven effective across the lifespan and for a variety of disorders and conditions. ABA's success remediating deficits associated with a diagnosis of ASD, as well as developing, restoring, and maintaining skills, has been documented in hundreds of peer-reviewed studies over the past 50 years. ABA is the leading evidence-based, validated treatment for ASD. The success of this treatment approach has made ABA the standard of care for treating ASD. It is widely recognized by several authorities, including the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the National Institute of Mental Health. (p.3)

Coverage Rationale

Applied Behavior Analysis (ABA) is proven for the treatment of autism spectrum disorder in individuals when the following conditions are met:

- The intervention is a systematic approach, based on the principles of comprehensive applied behavior analysis;
- The intervention targets the core deficits of an autism spectrum disorder, as outlined by the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition, Text Revision (DSM-5-TR™), American Psychiatric Association (APA), 2022;
- ABA treatment should not be restricted to specific settings but instead should be delivered in the settings that maximize treatment outcomes for the individual patient;
- The intervention is rendered directly by a Board-certified Behavior Analyst (BCBA), a licensed mental health clinician with additional documented training in applied behavior analysis, or a behavior technician under the direct supervision of such professionals;
- The intervention is individualized and delivered with an appropriate level of intensity (e.g., per Behavior Analyst Certification Board® practice guidelines) and includes ongoing measurement of efficacy: the use of measurement tools and analysis of progress should be continuous, and treatment decisions based on objective analysis of assessment results;
- ABA is provided at the least restrictive and most clinically appropriate level to safely, effectively, and efficiently meet the needs of the individual. ABA is needed for reasons other than the convenience of the individual, family, physician, or other provider. ABA is not more costly than an alternative service, of which, are at least as likely to produce equivalent therapeutic results for the individual.

Many states have mandated coverage for treatment of autism spectrum disorder:

<http://www.asha.org/Advocacy/state/States-specific-Autism-Mandates/>

ABA is unproven for any of the following:

- Programs or interventions that do not meet all of the above proven conditions
- Programs that are not delivered by or under the supervision of an ABA-trained professional
- Programs that target mental disorders other than autism spectrum disorders as defined in the DSM-5-TR™
- Services that are otherwise covered under the Individuals with Disabilities Education Act (IDEA) are not covered (e.g., a 1:1 aid in the school setting). School ABA services do allow for coordination of services and would cover services such as, teacher training, meetings with school personnel, and observations in the school setting.
- According to a number of recent systematic reviews and meta-analyses, early intervention based on applied behavior analysis is associated with positive outcomes for individuals diagnosed with autism spectrum disorder. Currently, there is insufficient evidence to determine which individuals are most likely to benefit (or not benefit) from specific interventions. Recent progress has been made in systematizing intervention approaches and measuring treatment fidelity.

- ABA treatment is well supported for individuals up to the age of 21 for autism spectrum disorder. Interventions for young adult populations and diagnosis other than autism spectrum disorder remains limited. Treatment requests for adults will be clinically reviewed per the guidelines.

For Telehealth information, see: [Practice Parameters for Telehealth-Implementation of Applied Behavior Analysis, Second Edition](#).

Utilization Management Criteria

Prior authorization is required for applied behavior analysis (ABA).

Diagnostic Evaluation

The diagnosis of autism spectrum disorder (ASD) must be validated by a documented comprehensive assessment demonstrating the presence of the following diagnostic criteria based on the DSM-5-TR™ (5th ed.; DSM-5-TR; APA, 2022):

- Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following examples, currently or by history:
 - Deficits in social-emotional reciprocity, ranging from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
 - Deficits in nonverbal communicative behaviors used for social interaction, ranging from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and non-verbal communication.
 - Deficits in developing, maintaining, and understanding relationships, ranging from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.
 - Symptoms that impair function are required to in order to be diagnosed with ASD.

Specify current severity. See [TABLE A](#).

- Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following examples, currently or by history:
 - Stereotyped or repetitive motor movements, use of objects or speech (e.g., simple motor stereotypes, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
 - Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).
 - Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
 - Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

Specify current severity. See [TABLE A](#).

- Symptoms must be present in the early developmental period (but may not become fully manifested until social demands exceed limited capacities or may be masked by learned strategies in later life).
- Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.
- Intellectual disability without autism may be difficult to differentiate from autism in very young age-groups. Individuals with intellectual disability who have not developed language or symbolic skills also present a challenge for differential diagnosis, since repetitive behavior often occurs in such individuals as well. A diagnosis of autism in an individual with intellectual disability is appropriate when social communication and interaction are significantly impaired relative to the developmental

level of the individual's nonverbal skills (e.g., fine motor skills, nonverbal problem solving). In contrast, intellectual disability is the appropriate diagnosis when there is no apparent discrepancy between the level of social communicative skills and other intellectual skills.

- The diagnosis of ASD, or other applicable diagnosis by state mandate, must be validated by a documented comprehensive assessment, completed by a licensed physician, psychologist, or other licensed clinician qualified to diagnose Autism by state licensure. The assessment must demonstrate the presence of the following diagnostic criteria based on the DSM-5-TR.
- Screening for ASD is recommended at 18- and 24-month well-child visits.
- There is noteworthy evidence that screening as early as ages of 16-40 months in settings such as general pediatric practices yield positive predictive benefits, such as early initiation of services.
- As clinically indicated, the autism evaluation should include:
 - The use of a standard parent- or clinician-rated screening instrument for autism, examples include, but not limited to:
 - Autism Behavior Checklist [ABC]
 - Childhood Autism Rating Scale [CARS]
 - Checklist for Autism in Toddlers [CHAT; M-CHAT]
 - Communication and Symbolic Behavior Scales Developmental Profile Infant-Toddler Checklist [CSBS-DP-IT-Checklist]
 - Autism Screening Questionnaire [ASQ]
 - Autism Quotient [AQ]
 - Childhood Autism Screening Test [CAST]
 - According to research, assessment instruments such as the ADOS-2 should not be the definitive diagnostic tool for ASD. It is recommended that diagnoses are considered from an experienced multidisciplinary team with historical data, current observations, and qualitative information.
 - False-positive and false-negative results are of great concern when using a single diagnostic tool.
 - The use of a standard psychiatric assessment for autism, examples include:
 - Autism Diagnostic Interview-Revised [ADI]
 - Autism Diagnostic Observation Schedule [ADOS]
 - Diagnostic Interview for Social and Communication Disorders [DISCO].
- Observation tools used to confirm the ASD diagnosis include the Autism Diagnostic Observation Schedule, Second Edition (ADOS-2) and the Childhood Autism Rating Scale, Second Edition (CARS-2).
- Interviews with the individual and family, and assessment of the parent/caregivers' knowledge of autism spectrum disorder, coping skills, and available resources and supports.
- Review of past records (e.g., past and current behavioral interventions) and historical information (e.g., family history and relevant psychosocial issues).
- A thorough history includes a long-term experience with the individual that demonstrates the effects of symptoms on the individual's ability to function various settings such as family, peer, and school.
 - Questionnaires that establish a history of ASD symptoms and may be used as part of the complete evaluation are the Social Communication Questionnaire (SCQ) or the Social Responsiveness Scale (SRS).
- As clinically appropriate, systematic attention to the areas relevant to differential diagnosis with specific attention to as to whether social communication skills fall below the individual's developmental level, including:
 - Rett syndrome
 - Selective mutism
 - Language disorders and social (pragmatic) communication disorder
 - Intellectual disability (intellectual developmental disorder) without autism spectrum disorder
 - Stereotypic movement disorder
 - Attention-deficit/hyperactivity disorder
 - Schizophrenia
- Assessment of co-occurring developmental conditions should include:
 - Cognitive Testing
 - Adaptive Function Testing
 - Sensory Assessments: Hearing, Vision, Sensory Processing
- As clinically appropriate, attention to possible comorbid diagnoses;

- Observation of broad areas of social interaction that include restricted and repetitive patterns of behavior that cause substantial impairment in numerous functional aspects;
- When clinically appropriate, a medical assessment, including physical examination, hearing screen, and examination for signs of other genetic abnormalities;
- Identifying the genetic aspect of ASD via genetic testing provides clinicians with additional data for families about prognosis and recurrence risk;
- Given the requirement of autism symptoms not better explained by an intellectual disability, psychological assessment may be clinically appropriate, using tools such as:
 - Measurements of cognitive ability and adaptive skills
 - Use of standard tests of intelligence
- When clinically appropriate communication assessment, such as measurement of receptive and expressive vocabulary and language use or a summary of the individual's use of language in everyday situations.
- When individuals of multiple disciplines engage in assessment (e.g., occupational therapy, physical therapy), coordination among the various professionals is required.

Treatment Planning

Once an ASD diagnosis has been established, an ABA assessment should occur, that includes the following when appropriate:

- A standardized functional assessment is used to maximize the effectiveness and efficiency of behavioral support interventions.
 - The assessment may incorporate information such as interviews with caregivers, structured rating scales, direct observation data, and attention to coexisting medical conditions.
 - The assessment should determine baseline skills and inform subsequent establishment of treatment.
 - Record review of the individual's history, response to prior interventions, current treatments, cultural and familial considerations, language spoken, and any prior assessments also helps inform the treatment goals.
 - Norm referenced instruments should be considered to assess individuals functioning levels in comparison to age-matched neurotypical peers, to assist in goal development, and to assess developmental gains as functions of intervention. ABA providers may need to collaborate with other qualified health professionals on assessments if there are comorbid conditions that increase an individual's risk of harming themselves or others.
 - Skills-based assessments can assist in developing treatment goals.
- When an individual displays maladaptive behavior it is recommended the credentialed provider complete a functional behavior assessment to better inform treatment planning.
- Information from the functional assessment is incorporated into the behavior treatment plan. A functional analysis may be necessary if the likely reasons for a problem behavior were not identified via a functional assessment. This may also be needed when there is a behavior compromising an individual's health and safety.
 - A risk assessment may also be needed when there are behaviors such as self-injury, physical acting out, and other dangerous behaviors. This assessment should inform an individualized treatment approach for the individual.
- The use of ABA methods to treat symptoms of ASD suggests that behaviors exhibited can be altered by programmatically reinforcing skills related to communication and other skill acquisition. Thus, ABA treatments may target development of new skills (eg, social engagement) and/or minimize behaviors (eg, aggression) that may interfere with progress.
- A credentialed provider with ABA expertise is identified to provide treatment:
 - A Master- or Doctoral-level provider that is a Board-Certified Behavior Analyst (BCBA)
 - A licensed behavioral health clinician who has attested to having sufficient expertise and has been credentialed to provide ABA services
 - Behavior Analysts can carry caseloads that allow them to provide appropriate case supervision across cases. Caseload size may be influenced by the complexity of clients, treatment hours clients are receiving, and availability of support staff
 - A Board-Certified Assistant Behavior Analyst (BCaBA) or non-licensed individual under the direct supervision of a BCBA or licensed behavioral health clinician who takes responsibility for the individual's care that does either of the following:
 - Technicians must be under applicable supervision of a BCBA or licensed behavioral health clinician. Technicians should be a registered behavior technician (RBT) or another appropriately certified behavior as allowable by state

mandate. It is not recommended that parents serve in an RBT role due to numerous ethical and conflicting relationships issues. In addition, BCBAs® acting in a supervisory role for a parent serving as an RBT® for their own child would also be in violation of their ethics code and would have a duty to self-report and to report the RBT.

- Assist in the initial or concurrent assessment of the individual's deficits or adaptive behaviors.
- Implement a treatment plan that has been developed by a BCBA or licensed behavioral health clinician.
- Supervision is responsive to individual client needs, up to two hours for every ten hours of direct treatment is the general standard of care. Other factors may increase or decrease case supervision, such as barriers to progress, issues of client health and safety, and transitions with implications for continuity of care. The BCBA or other supervisor may also engage in adaptive behavior treatment with protocol modification where the individual is being observed for changes in the behavior and/or troubleshoot treatment protocols. This would include adjustments to specific protocols or determinations if protocols are functional for the individual. Adjustments to treatment should occur throughout care, and especially when the individual is not making adequate progress, CASP (2024) indicates if inadequate progress occurs over 3 sessions there must be a review to determine causes. Unanticipated utilization shortfalls of services require attention by the supervisor to determine if there are barriers that can be addressed or are likely to persist.
- Supervision can involve direct and indirect activities. Case supervision typically involves monitoring the delivery of services, monitoring and reporting on progress, adapting plans and modifying protocols, and supporting/training staff. Please refer to the definitions of ABA CPT codes in the [Optum Autism/Applied Behavior Analysis \(ABA\) Reimbursement Policy](#) to determine which specific activities are billable. The supervisor also monitors the reliability of the collected data by evaluating interobserver agreement and procedural fidelity.
- Case supervision needs should be individualized to each individual and case support team, the same percentage of clinical supervision should likely not be used for all individuals.
- Individuals with autism can benefit from other less intensive services, such as individual, group and family therapies, occupational therapy, speech therapy, medication management, etc. ABA services do not duplicate the services provided to or available to the individual by other medical or behavioral services.
- Outcome-oriented interventions targeting specific baseline behaviors are identified in a treatment plan describing the frequency, intensity, duration and progress that will be continuously updated:
 - Treatment planning is considered a necessary part of ongoing ABA treatment and should be completed as clinical indicated.
 - The treatment plan must address how the parents/caregivers will be trained in management skills that can be generalized to the home.
 - As clinically indicated, parent/caregiver training is an expectation. In the rare circumstance that parent/caregiver is unable to participate, the documentation must reflect the reason and identify an alternate plan to provide management skills in the home.
 - The treatment goals and objectives must be comprehensive and clearly stated.
 - Direct support and training of family individuals and other professionals promotes optimal functioning, favorable outcomes, and generalization and maintenance of behavioral improvements.
 - The treatment plan is coordinated with other professionals to ensure appropriate client progress this may include coordination with the school and applicable Individualized Family Service Plan (IFSP)/ Individualized Education Program (IEP), outpatient behavioral clinicians, medical doctors, speech/occupational therapists and others.
- Overall, the available clinical evidence reveals that the younger the age at treatment induction is associated with superior outcomes.
- All components of the individual's care are tracked and updated throughout the duration of services and regular updates occur throughout authorization periods.

Treatment

- Effective ABA services should focus on socially significant behaviors, meaning skills and behavior that lead to more opportunity for the individual and their family, including leading to great autonomy, and reduced levels of treatment.
- ABA intervention must include the following elements:
 - Mitigate the core features of ASD
 - ABA is an intensive treatment, if an individual needs a less intensive treatment, other services may be more appropriate, such as individual or family therapy, speech therapy, occupational therapy, etc.

- Target specific deficits related to appropriate social imitation, attending and social referencing, observational learning, play skills, social relationships, and reducing challenging behaviors.
- The specific behaviors that are to be incrementally taught and positively reinforced tie to objective and quantifiable treatment goals that have baseline data, measurable progress, and projected timeframes for completion. Include the individual's caregiver's in parent/caregiver training and the acquisition of skills in behavior modification to promote management and generalization of skills within the home.
- ABA treatments will differ in scope, intensity, staffing, and duration of treatment. Treatment should be aligned with the breadth and depth of behaviors targeted for the individual.
 - Caregiver/parent-mediated ABA produces greater outcomes in the socialization domain of the Vineland and increased caregiver/parent self-efficacy, supporting the inclusion of caregiver/parent-led ABA treatment. It is not recommended that parents/caregivers serve in an RBT role due to numerous ethical and conflicting relationships issues.
- Treatment plans are usually reviewed/updated twice annually, as appropriate per state mandate and/or clinical presentation of individual. This allows for ongoing re-assessment and documentation of treatment progress. Data should be analyzed ongoing and treatment plans updated as needed throughout care.
- Treatment goals are prioritized in to address behaviors that threaten the safety of the client or others or create a barrier to quality of life. Goals are also prioritized to increase skills fundamental to maintaining health and social inclusion.
- Descriptions of any needed replacement behaviors and skill acquisition goals based on the reported behaviors and assessments.
- Treatment goals identified are best addressed by intensive 1:1 intervention or group intervention versus being learned by incidental teaching.
- Train family individuals and other caregivers to manage problem behavior and interact with the individual in a therapeutic manner.
- As indicated, include referrals to psychotherapy (e.g., cognitive behavioral therapy), outpatient or family therapy for higher functioning individuals to treat conditions such as anxiety, anger management, attention, and depression.
- Have an appropriate level of intensity and duration driven by factors such as:
 - Changes in the targeted behavior(s)/response to treatment
 - The demonstration and maintenance of management skills by the parents/caregivers
 - Whether specific issues are being treated in a less intensive group format (e.g., social skills groups or group ABA format)
 - The individual's ability to participate in ABA, given participation in other therapies and engagements, should be considered
 - The impact of co-occurring behavioral or medical conditions on skill attainment
 - The individual's overall symptom severity
 - The scope of treatment
 - The individual's progress in treatment related to treatment duration; and
 - The individuals response to treatment, including: ability to benefit and show substantive growth and show developmentally/functionally appropriate response to goals. This can be measured by benchmarking the clients progress to standardized functional and developmentally appropriate assessments.
 - Treatment plan should indicate the treatment setting, instructional methods to be used, hours requested, schedule, and clinical justification of those hours.
- When group ABA services are included, the treatment plan must include clearly defined, measurable goals for the group therapy that are specific to the individual's needs. Treatment review takes into consideration when group services are appropriate for the individual to gain or practice skills in a small group. Social behaviors are often best delivered in small group settings.
- According to current research there is a lack of high-quality clinical evidence to suggest that a higher number of hours results in improved outcomes, including outcomes regarding substantial difficulties.
 - Researchers have acknowledged there is minimal support for comprehensive high hour ABA in producing overall positive outcomes. In addition, there is no predictive relationship between number of treatments hours and positive outcomes. According to current research no difference was noted in outcomes between 15 hours versus 25 hours per week.

- According to recent research, there is limited evidence to show those individuals receiving very low intensity services make as much progress as those receiving a higher volume of hours. Treatment should evaluate if focused or comprehensive treatment is more appropriate based on the severity of symptoms presented by the individual.
- Treatment takes into consideration the developmental level of each individual, and treatment schedule considers the needs of the individual including rest and nutrition breaks and interactions with peers.
- Behavior analysts identify their services accurately and include all required information on reports, bills, invoices, requests for reimbursement, and receipts. They do not implement or bill nonbehavioral services under an authorization or contract for behavioral services. Examples include, but not limited to:
 - Naps, extended recreational reinforcement, meals without active goals and treatment, extended breaks in active intervention.
- Treatment methodologies utilized as part of intensive behavior therapies should be considered established by the National Autism Centers Standards Projects.
- Parent/Caregiver involvement in treatment is strongly recommended/encouraged to achieve optimal clinical outcomes for the individual. Parent/caregiver support is encouraged as a component of the ABA program, as they will need to provide additional hours of behavioral interventions. Parents or caregivers involvement and engagement is strongly recommended/encouraged in training and follow through on treatment recommendations beyond that provided by licensed or certified practitioners. Caregivers are engaged to assist with maintenance and generalization of skills and to focus on activities of daily living. Parent support groups are considered not medically necessary.
- Parent and caregiver training include a systematic, individualized curriculum on ABA fundamental concepts. The goal of this training is skills development and support so that parents and caregivers are proficient in implementing treatment strategies in a variety of settings and critical environments. Such training is not accomplished by simply having the caregiver or guardian present during treatment implemented by a technician. Some models of ABA may focus solely on parent/caregiver coaching. A caregiver would not be expected to act as a technician for their child.
- Detailed description of interventions with the parent(s) or caregiver(s), including:
 - Parental or caregiver education, training, coaching and support
 - Overall parent or caregiver goals including a brief summary of progress. As part of the summary of progress the information should also include percentage of planned sessions attended
 - Plan for transitioning ABA interventions identified for the child to the parents or caregivers
 - How parents will be supported in assisting with increases in skills, such as communication or routines that help maintain good health.
- ABA programs typically fall into either focused or comprehensive ABA treatment. The type of treatment may lend itself to different intensity of services. Total intensity of services includes both direct and indirect services (e.g., caregiver training and supervision). Hours may be increased or decreased based on the client's response to treatment and current needs. Comprehensive services are typically rendered when the individual is early in his or her development. Comprehensive services commonly focus on most areas of functioning and are intended to improve multiple skills. Focused intervention is intended to reduce dangerous or maladaptive behavior and strengthen more appropriate functional behavior.
- When individuals display significant challenging behaviors a higher staff to patient ratio and on-site direction by the supervisor may be needed.
- Relying on a single treatment methodology, procedure, or setting is unlikely to achieve the desired generalization and maintenance of behavior change.
- When adolescents and young adults are receiving ABA services, it is important to include a focus on transition to adulthood. Including ensuring goals focus on steps to independence, are patient centered, and include caregivers (when appropriate) in creating a plan Interventions to support independence may include things such as:
 - Self-management and/or token economy systems
 - Working with caregivers to modify current environment and create supports within the environment
 - Creating visual schedules to support individuals ability to navigate the day independently
 - Teaching self-reinforcement
 - Parent/Caregiver guided interventions
- According to current research, supporting individuals with ASD across the lifespan includes ethical considerations. Behavior analysts should consider prioritizing skills with meaningful current and future outcomes for individuals transitioning into adulthood.

- Examples of other behavioral interventions as a treatment for ASD include, but not limited to:
 - Joint attention interventions (eg, pointing to objects, showing, etc.)
 - Modeling (both real-life and video-based modeling)
 - Peer training package (including, but not limited to, peer networks, peer initiation training, and peer-mediated social interventions)
 - Story-based intervention package (including the Socials Stories approach)
 - The social skills package (eg, social and pragmatic groups)
- These steps can increase the number of adolescents with ASD who receive recommended transition to adulthood planning:
 - Healthcare providers consider recommendations for healthcare transitioning and use them when providing care for adolescents, beginning at age 12 years, and modifying to meet the unique needs of each adolescent.
 - Parents/caregivers can address transition planning with pediatric healthcare providers.
 - Healthcare professionals can utilize strategies for moderating gaps in health service utilization by:
 - Providing interdisciplinary training to professionals that endorses the programs with positive outcomes and increases provider confidence in treating adolescents with ASD and other developmental disorders;
 - Improving multidisciplinary care delivery services to be timely, coordinated, and family-centered; and
 - Promoting programs with successful healthcare transitions for adolescents, including those with ASD and other developmental disorders.

Coordination of Care

If applicable, documentation of communication and coordination with other service providers and agencies, (i.e., day care, preschool, school, early intervention services providers) and/or other allied health care providers (i.e., occupational therapy, speech therapy, physical therapy and any other applicable providers) to reduce the likelihood of unnecessary duplication of services. Coordination of care is meant to support generalization, maintenance of skills, and consistency across environments. According to CASP (2024) and the Behavioral Health Center of Excellence (2020) collaborating between all professionals engaged with a child will ensure consistency, as better consistency leads to better outcomes. Documentation should include the following:

- Types of therapy provided
- Number of therapies per week
- Behaviors/deficits targeted
- Progress related to the treatment/services being provided
- Measurable criteria for completing treatment with projected plan for continued care after discharge from ABA therapy
- Total number of days per week and hours per day of direct services to individual and parents/caregivers to include duration and location of requested ABA therapy
- Dates of service requested
- Licensure, certification and credentials of the professionals providing ABA services
- Documentation that parents/caregivers have been trained and consulted about the treatment plan, following all appropriate treatment recommendations.
 - Documentation should indicate those actively participating and their relationship to the individual receiving ABA services.

Continued Treatment

With each medical necessity review for continued ABA treatment, an updated treatment plan and progress reports will be required for review, including all of the following documentation:

- There is a reasonable expectation that the individual's behavior and skill deficits will continue to improve to a clinically meaningful and standardized extent. The expectation is that skills generalize and maintain outside of the treatment environment into the natural settings, examples include, home and community.
- Therapy is not making the symptoms or behaviors persistently worse and treatment protocol modification has been effective at improving progress.

- Progress is assessed and documented for each targeted symptom and behavior, including progress toward defined goals, and including the same modes of measurement that were utilized for baseline measurements of specific symptoms and behaviors.
 - Progress should include rate and percentage of mastered programs, rates of mastered targets, change scores for any outcome measures, updated standardized adaptive measures, and change scores for skills-based assessments.
- The treatment plan and progress report should reflect movement from baseline in skill deficits and problematic behavior using validated and norm referenced assessments of functioning.
- Parent/Caregivers are involved and making progress in their own implementation of behavioral interventions.
- “Transition” is a coordinated set of individualized and results-oriented activities designed to move the patient through treatment toward discharge. Transition and discharge planning is not a single event that occurs at the end of the treatment period. The treatment plan should reflect a plan to transition services in intensity over time. Transition planning from treatment should involve a step down in services. The plan should include how care will be coordinated with other supports and how to transition to least restrictive services as the client progress. Transitioning may include moving from a 1:1 model to a group model, moving from a comprehensive plan to a focused plan, or shifting from a center model to a community-based program.
 - The transition plan should also specify monitoring and evaluation details. Monitoring may entail:
 - assessing generalization across environments and people
 - assessing maintenance of treatment gains
 - monitoring the effectiveness of interventions for challenging behavior
 - measuring skill maintenance
- When continuous direct care is appropriately reduced or terminated, it is important to evaluate the need for increased caregiver consultation and treatment booster sessions (i.e., direct treatment by the treating behavior analyst or behavior technician scheduled as needed after direct care has begun to fade or is terminated).
- When there has been inadequate progress with targeted symptoms or behaviors, or no demonstrable progress within a 6-month period, or specific goals have not been achieved within the estimated timeframes, there should be an assessment of the reasons for inadequate progress or not meeting the goals, and treatment interventions should be modified or changed in order to attempt to achieve adequate progress. As a general guideline, utilization of prior authorization period hours below 80% requires attention and the concurrent review should address the specific challenges with utilizing hours. Per CASP (2024), utilization below 80% over a 2-week period requires attention. There should be evidence in the plan that speaks to barriers to services and how these are addressed going forward.
- Documentation of such an assessment and subsequent treatment plan change(s) must include:
 - Increased time when applicable and/or frequency working on targets
 - Change in treatment techniques
 - Increased parent/caregiver training
 - Identification of barriers to full participation in treatment and corresponding solutions.
 - Any newly identified co-existing disorder (e.g., anxiety, psychotic disorder, mood disorder)
 - How generalization and maintenance are being targeted across the individual’s environments
 - Goals reconsidered (e.g., modified or removed)
 - Progress should be documented in standardized assessment of norm referenced, adaptive functioning. Lack of progress needs to be addressed via changes in treatment, behavior plans, and/or caregiver engagement.
- According to recent research, predicting outcomes for young children is difficult because children receiving early treatment can change dramatically over time. Future outcomes are better predicted when measuring continued treatment progress after a few years, rather than when receiving the initial diagnosis.
- ABA should be rendered in multiple settings to support transition and generalization. If ABA is not occurring in multiple locations the plan should indicate why and how that is being addressed via other services.
- When goals have been achieved, either new goals should be identified that are based on targeted symptoms and behaviors that are preventing the individual from adequately participating in age-appropriate home, school or community activities, or that are presenting a safety risk to self, others, or property; or the treatment plan should be revised to include a transition to less intensive interventions.
- Treatment methodologies utilized as part of intensive behavior therapies should be considered established by the National Autism Centers Standards Projects.

Discharge

- Discharge: The criteria for moving through a transition plan and discharging patients should be documented at the initiation of services and refined and modified throughout the treatment process based on ongoing evaluations of skills and needs.
- Discharge and transition criteria should be measurable, realistic, and individualized. Envisioning outcomes that lead to a successful discharge from service should occur at the outset of treatment and should be modified with details added regularly throughout the course of treatment. The criteria for moving through a transition plan and discharging patients should be documented at the initiation of services and refined and modified throughout the treatment process based on ongoing evaluations of skills and needs.
- Documentation that the individual demonstrates improvement from baseline in targeted skill deficits and behaviors to the extent that goals are achieved, or maximum benefit has been reached:
 - Individual progress has reached a plateau or progress is incrementally smaller despite changes of treatment. This could include, but is not limited to, declining or no progress on standardized adaptive measures of functioning such as the Vineland.
- Documentation that the individual is no longer benefiting from services as demonstrated by lack of substantive progress towards goals for successive authorization periods in one or more of the following measures:
 - Communication Skills
 - Social Skills
 - Behavior Challenges
- The treatment is making the skill deficits and/or behaviors persistently worse and protocol modification did not make notable improvements.
- The individual is unlikely to continue to benefit or maintain long term gains from continued ABA therapy.
- Caregivers and provider are unable to reconcile important issues in treatment planning and delivery.
- Caregivers refuse treatment recommendations or are not following through on treatment recommendation to an extent that compromises the effectiveness of care or is a barrier to progress.
- The individuals physical and psychological well-being, independence and relationships with others has improved to the extent possible.
 - If an individual no longer displays significant symptoms on standardized assessments compared to their cognitive functioning, they may no longer need the intensity of ABA services.

Documentation Requirements

ABA providers are required to have a separate record for each individual that contains the following documentation:

- Comprehensive assessment establishing the autism diagnosis, or other diagnosis appropriate by that state's mandates
- All necessary demographic information
- Complete developmental history and educational assessment
- Functional behavioral assessment including assessment of targeted risk behaviors
- Behavioral/medical health treatment history including but not limited to:
 - known conditions
 - dates and providers of previous treatment
 - current treating clinicians
 - current therapeutic interventions and responses
- Individualized treatment plan and all revisions to the treatment plan, including objective and measurable goals, as well as parent/caregiver training, barriers to progress, response to interventions
- Daily progress notes including:
 - place of service
 - start and stop time
 - who rendered the service
 - the specific service (e.g., parent/caregiver training, supervision, direct service)
 - who attended the session

- interventions that occurred during the session
- licensure or credentials of those in the session
- All documentation must be legible
- All documentation related to coordination of care; including with school related services rendered via an IEP. Attempts to coordinate care is acceptable if other providers will not collaborate
- All documentation related to supervision of behavior technicians
- If applicable and available, a copy of the individual's Individualized Education Plan (IEP)
- If applicable and available, progress notes related to Early Intervention Plan or Pre-school/Special Education Program or allied health services
- Certification and credentials of the professionals providing and supervising the ABA therapy.

Ethical Considerations

- ABA services should be rendered in accordance with the most recent ethical guidelines published by the Behavior Analyst Certification Board (BACB), examples include, but not limited to:
 - Practicing within scope of competence
 - Accuracy in service billing and reporting
 - Communicating about services
 - Accepting clients
 - Facilitating continuity of services
- Multiple Relationships: Because multiple relationships may result in a conflict of interest that might harm one or more parties, behavior analysts avoid entering into or creating multiple relationships, including professional, personal, and familial relationships with clients and colleagues.

Table A

Severity Levels for Autism Spectrum Disorder

<i>Severity Level</i>	<i>Social Communication</i>	<i>Restricted, Repetitive Behaviors</i>
<i>Level 3 –Requiring very substantial support</i>	<i>Severe deficits in verbal and nonverbal social communication skills causes severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches.</i>	<i>Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interferes with functioning in all spheres. Great distress/difficulty in changing focus or action.</i>
<i>Level 2 –Requiring substantial support</i>	<i>Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special</i>	<i>Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.</i>

	<i>interests, and who has markedly odd nonverbal communication.</i>	
<i>Level 1 –Requiring support</i>	<i>Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to-and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful.</i>	<i>Inflexibility of behavior causes significant interference with functioning in or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence.</i>

Source: American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders, (5th ed.), Text Revision*. Table 2. American Psychiatric Publishing.

Diagnosis Codes

The following list(s) of diagnosis code(s) is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member-specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other clinical criteria may apply. For additional billing and coding information, please see the [Optum Autism/Applied Behavior Analysis \(ABA\) Reimbursement Policy](#).

Diagnosis Codes	Description
F84.0	Autistic Disorder

References

Adamou, M., Jones, S. L., & Wetherhill, S. (2021). Predicting diagnostic outcome in adult autism spectrum disorder using the autism diagnostic observation schedule. *BMC Psychiatry*, 21(1), 1-8.

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders, (5th ed.), Text Revision*. American Psychiatric Publishing.

Bahry, S., Gerhardt, P.F., Weiss, M.J., Leaf, J.B., Putnam, R.F., & Bondy, A. (2022). The ethics of actually helping people: Targeting skill acquisition goals that promote meaningful outcomes for individuals with autism spectrum disorder. *Behavior Analysis in Practice*, 1-24.

Behavior Analyst Certification Board (BACB). (2020, updated 2024). Ethics code for behavior analysts. BACB website: <https://bacb.com/wp-content/ethics-code-for-behavior-analysts/>.

Behavioral Health Center of Excellence (BHCOE). (2020). Standard for the documentation of clinical records for applied behavior analysis services. American National Standards Institute Publishing. BHCOE website: <https://www.bhcoe.org/>.

The Council of Autism Service Providers (CASP). (2024). Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers. Third edition. Copyright © by The Council of Autism Service Providers (CASP), all rights reserved.

Daniolou, S., Pandis, N., & Znoj, H. (2022). The efficacy of early interventions for children with autism spectrum disorders: A systematic review and meta-analysis. *Journal of Clinical Medicine*, 11(17), 5100.

Eckes, T., Buhlmann, U., Holling, H. D., & Möllmann, A. (2023). Comprehensive ABA-based interventions in the treatment of children with autism spectrum disorder—a meta-analysis. *BMC Psychiatry*, 23(1), 133.

Hyman, S.L., Levy, S.E., & Myers, S.M. and the American Academy of Pediatrics Council on Children with Disabilities, Section on Developmental and Behavioral Pediatrics. (2020). Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*, 145(1), 1-71.

Kurtz, P.F., Leoni, M., & Hagopian, L.P. (2020). Behavioral approaches to assessment and early intervention for severe problem behavior in intellectual and developmental disabilities. *Pediatric Clinics of North America*, 67(2020), 499-511, <https://doi.org/10.1016/j.pcl.2020.02.005>.

Levy, S.E., Wolfe, A., Coury, D., Duby, J., Farmer, J., Schor, E., Van Cleave, J., & Warren, Z. (2020). Screening tools for autism spectrum disorder in primary care: A systematic evidence review. *Pediatrics*, 145(s1), 1-13.

Lotfizadeh, A.D., Kazemi, E., Pompa-Craven, P., & Eldevik, S. (2020). Moderate effects of low-intensity behavioral intervention. *Behavior Modification*, 44(1), 92-113.

MacDuffie, K.E., Estes, A.M., Harrington, L.T., Peay, H.L., Piven, J., Pruett, J.R., Wolff, J.J., & Wilfond, B.S. (2021). Presymptomatic detection and intervention for autism spectrum disorder. *Pediatrics*, 147(5), 1-8.

Myers, S.M. & Johnson, C.P. and the American Academy of Pediatrics Council on Children with Disabilities. (2007, reaffirmed 2014). Management of children with autism spectrum disorders. *Pediatrics*, 120(5), 1162-1182.

National Autism Center. (2020). National Standards Project, Phase 1: 2009 and Phase 2: 2015. National Autism Center website: <https://www.nationalautismcenter.org/national-standards-project/>.

National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention. (2022, April 7). Transitioning from pediatric to adult health care is often difficult for adolescents with ASD. CDC website: <https://www.cdc.gov/ncbddd/autism/features/transitioning-pediatric-adult-health-care.html>.

Ostrovsky, A., Willa, M., Cho, T., Strandberg, M., Howard, S., & Davitian, C. (2023). Data-driven, client-centric applied behavior analysis treatment-dose optimization improves functional outcomes. *World Journal of Pediatrics*, 19(8), 753-760.

Pinals, D.A., Hovermale, L., Mauch, D., & Anacker, L. (2022). Persons with intellectual and developmental disabilities in the mental health system: Part 1. Clinical considerations. *Psychiatric Services*, 73(3), 313-320.

Powell, P.S., Pazol, K., Wiggins, L.D., . . . & Cogswell, M.E. (2021). Health Status and Health Care Use Among Adolescents Identified With and Without Autism in Early Childhood — Four U.S. Sites, 2018–2020. *Morbidity and Mortality Weekly Report*, 70 (17), 605–611. DOI: <http://dx.doi.org/10.15585/mmwr.mm7017a1>.

Randall, M., Egberts, K.J., Samtani, A., Scholten, R.J.P.M., Hooft, L., Livingstone, N., Sterling-Levis, K., Woolfenden, S., & Williams, K. (2018). Diagnostic tests for autism spectrum disorder (ASD) in preschool children. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/2F14651858.CD009044.pub2>.

Rogers, S.J., Yoder, P., Estes, A., Warren, Z., McEachin, J., Munson, J., Rocha, M., Greenson, J., Wallace, L., Gardner, E., Dawson, G., Sugar, C.A., Helleman, G., & Whelan, F. (2021). A multisite randomized controlled trial comparing the effects of intervention intensity and intervention style on outcomes for young children with autism. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(6), 710-722.

Sneed, L., Little, S. G., & Akin-Little, A. (2023). Evaluating the effectiveness of two models of applied behavior analysis in a community-based setting for children with autism spectrum disorder. *Behavior Analysis: Research and Practice*, 23(4), 238.

Sneed, L., & Samelson, D. (2022). Effectiveness of parent-led applied behavior analysis at improving outcomes for parents of autistic children. *Journal of Social, Behavioral, and Health Sciences*, 16(1), 160-176.

Tachibana, Y., Miyazaki, C., Mikami, M., Ota, E., Mori, R., Hwang, Y., Terasaka, A., Kobayashi, E., & Kamio, Y. (2018). Meta-analyses of individual versus group interventions for pre-school children with autism spectrum disorder (ASD). *Plos one*, 13(5), e0196272.

Volkmar, F., Siegel, M., Woodbury-Smith, M., King, B., McCracken, J., State, M. and the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). (2014). Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 53(2), 237-257.

White, P.H., Cooley, W.C., Boudreau, A.D.A., Cyr, M., Davis, B.E., Dreyfus, D.E., . . . & American Academy of Family Physicians. (2018). Supporting the health care transition from adolescence to adulthood in the medical home. *Pediatrics*, 142(5).

Wolff, J.J. & Piven, J. (2021). Predicting autism in infancy. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(8), 958-967.

Revision History

Date	Summary of Changes
03/16/2020	Version 1; Supplemental Clinical Criteria
03/15/2021	Annual Review
04/19/2021	Interim Update: Added New Jersey state mandates information
06/21/2021	Interim Update: Removed AZ state mandate information
09/21/2021	Interim Update: Added Massachusetts, New York, Washington information to the State Mandates section
04/19/2022	Annual Review: Added Pennsylvania information, sources updated.
06/21/2022	Interim Update: Added Virginia information to the State Mandates section
08/23/2022	Interim Update: Added California and revised Maryland in State Mandates section
10/18/2022	Interim Update: Update to NY guidance in State Mandates section
12/22/2022	Interim Update: Update to State Mandates section
01/17/2023	Interim Update: Update to State Mandates section
04/18/2023	Annual Review
08/22/2023	Interim Review: Update to State Mandates section
09/19/2023	Interim Review: Removal of Applicable Codes section
10/17/2023	Interim Review: Update to State Mandates section
12/12/2023	Interim Review: Update to State Mandates section

Date	Summary of Changes
05/21/2024	Annual Review: Updates to align with CASP (2024) guidelines and the Behavior Analyst Certification Board Ethics Code for Behavior Analysts (2022).

Appendix

Additional resources considered in support of this document:

Hayes, Inc. (2019). Comparative Effectiveness Review of Intensive Behavioral Intervention for Treatment of Autism Spectrum Disorder. Lansdale, PA. Updated March 2019.