



Applied Behavior Analysis

Performance Standards

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Applied Behavior Analysis for Autism Spectrum Disorder: Performance Standards

I. PURPOSE

Applied Behavior Analysis (ABA) Performance Standards describe a treatment service that supports meaningful changes in the behavior of individuals who are diagnosed with an autism spectrum disorder (ASD). The purpose of the Performance Standards is to ensure that these individuals and their families can achieve success and build capacity in their living, working, and learning communities.

The dramatic increase in the prevalence of individuals diagnosed with ASD has propelled ASD to the forefront of public health issues nationally. In 2011, over 55,000 individuals received services for ASD in Pennsylvania. Of those, 4,617 were residing in Philadelphia, a significant increase of 116% from 2005, when 2,142 Philadelphians were receiving services for ASD¹. Furthermore, this is likely an undercount of those living with ASD in Pennsylvania as individuals who are not diagnosed, misdiagnosed, or not receiving services were not included in the PA Autism Census report. This significant increase combined with the high number of Community Behavioral Health (CBH) members diagnosed with ASD (3,718 individuals who received CBH services in 2015), warrants a network response grounded in best practices.

The ABA Performance Standards provide a “blueprint” for the delivery of ABA within Behavioral Health Rehabilitative Services (BHRS) in Philadelphia County. The Performance Standards reflect the core values of the City of Philadelphia’s Department of Behavioral Health and Intellectual disability Services (DBHIDS) Practice Guidelines, in alignment with PA state regulations and goals and recommendations of *The Mayor’s Blue Ribbon Commission on Children’s Behavioral Health (2007)*. The Performance Standards serve as a tool to promote continuous quality improvement and best practices in ABA, increase the consistency of service delivery, and improve outcomes for individuals living with ASD and their families.

II. APPLIED BEHAVIOR ANALYSIS (ABA)

ABA is a well-developed, evidence-based discipline that applies the principles of learning theory to produce practical, socially significant changes in behavior. ABA includes the use of direct observation, measurement, and functional assessment of the interaction between environment and behavior. ABA manipulates environmental events, including setting events, antecedent stimuli, and consequences, to change behavior. A data-driven approach, ABA measures the effectiveness of intervention throughout implementation by evaluating changes in behavior over time.

The PA Department of Human Services Office of Mental Health and Substance Abuse

¹ Shea, L. (2014). *Pennsylvania Autism Census Update*. Study funded by the Bureau of Autism Services, Pennsylvania Department of Public Welfare. Retrieved from www.paautism.org/census.

Services Bulletin (OMHSAS-16-09), *Medical Necessity Guidelines for Applied Behavior(al) Analysis*, describes ABA as a treatment for children with ASD to develop needed skills (behavioral, social, communicative, and adaptive functioning) through the use of reinforcement, prompting, fading, task analysis, or other interventions to help a child or adolescent master each step necessary to achieve a targeted behavior.

The Behavior Analyst Certification Board (BACB) indicates that “the successful remediation of core deficits of ASD and the development or restoration of abilities, documented in hundreds of peer-reviewed studies published over the past 50 years, has made ABA the standard of care for the treatment of ASD.”² ABA for ASD has been endorsed by multiple institutions, including the American Academy of Pediatrics and the United States Surgeon General.

III. SCOPE OF SERVICES

A. Behavioral Health Rehabilitative Services (BHRS)

These Performance Standards address ABA provided within Behavioral Health Rehabilitation Services (BHRS) due to the prevalence of youth receiving BHRS who have an ASD diagnosis. In addition, BHRS allows for treatment in the home, school, and community, making it an optimal service delivery mechanism for ABA, which is most effective when provided across settings. The goal of ABA through BHRS is to maximize capacity to address environmental stimuli (setting events, antecedents, and consequences), involve caregivers and other family members, and coordinate with other professionals.

B. Objectives of ABA

The OMHSAS *Medical Necessity Guidelines for Applied Behavior(al) Analysis* highlights that ABA may be implemented to reduce or ameliorate maladaptive behavior, impairments in communication, or impairments in social interaction or relationships. ABA may also be implemented to assist a child or adolescent in achieving or maintaining the skills needed for maximum functional capacity in performing activities of daily living. As such, the following are major objectives of ABA:

- To use direct observation, measurement, and functional assessment of the relationship between environment and behavior
- To use changes in environmental events, including setting events, antecedent stimuli and consequences, to produce practical and socially significant changes in behavior
- To intervene from the perspective that an individual’s behavior is determined by past and current environmental events (learning history) in conjunction with organic variables such as their genetic endowment and physiological variables
- To provide the least restrictive, most effective function-based intervention
- To decrease challenging behavior while also increasing adaptive replacement skills

² Behavior Analyst Certification Board. (2014). *Applied Behavior Analysis Treatment of Autism Spectrum Disorder*. Retrieved from http://bacb.com/wp-content/uploads/2016/08/ABA_Guidelines_for_ASD.pdf

- To ensure treatment integrity via proper implementation of intervention and systematic data collection of implementation
- To improve behavior while demonstrating a reliable, functional relationship between procedure and behavior change
- To increase communication and skills of daily living
- To ensure behavioral changes are clinically and socially significant and make a meaningful difference in the individual's life
- To promote generalization by training parents and others who work with the child

C. Target Population

These Performance Standards address ABA delivered through BHRS for individuals age 2-21 who have ASD and whose diagnosis:

- Results in substantial functional limitations in at least three of the following core deficits:
 - Self-care
 - Behavioral challenges
 - Expressive communication
 - Receptive communication
 - Cognitive functioning
 - Safety
 - Sensory processing

And/ or:

- Includes behaviors that persist in frequency, intensity, and duration across environments and either:
 - present a health or safety risk to self or others, or
 - cause clinically significant impairment in social or functional participation such that typical family/community activities are regularly disrupted or unmanageable.

It is important to note that although these Standards address ABA through BHRS for children with ASD, ABA can also benefit individuals with other diagnoses. Although no exclusionary criteria exist for ABA treatment, the setting where it is safe to provide ABA should be determined based on the needs of the individual. A child who is unable to be safely treated in the community due to severe self harm or aggression may need to begin ABA treatment in a more restrictive setting.

IV. ABA PLANNING AND DELIVERY

A. Assessment

Comprehensive Biopsychosocial Evaluation (CBE)

When ABA through BHRS is sought, the child will require a Comprehensive Biopsychosocial Evaluation (CBE) to provide a diagnosis and recommendations. At least one structured tool selected by the provider that is appropriate to screen for ASD must be administered to assist in determining the ASD diagnosis. The diagnosis of ASD must clearly describe the persistent deficits in social communication and social interaction across multiple contexts, the restricted, repetitive patterns of behavior, interests, or activities, age of onset of symptoms, and consideration of intellectual functioning. Given the high rate of medical co-morbidity with ASD, and the impact of medical conditions on behaviors of children with ASD, providers are expected to collaborate with medical health care providers to coordinate comprehensive care. Collaboration and information sharing with the child's school is also a part of a comprehensive evaluation.

B. Authorization

BHRS authorizations for individuals with ASD will be considered for up to one year (per OMHSAS Bulletin 08-05-04). To request authorization for ABA through BHRS, a provider should submit to CBH the Comprehensive Biopsychosocial Evaluation/ Re-evaluation (CBE/R) which provides the diagnosis of ASD and recommendations for ABA through BSC-ASD and TSS as appropriate, with hours designated, Plan of Care, Treatment Plan, and Interagency Service Planning Team Meeting summary and sign-in sheets. If the child meets medical necessity for ABA through BHRS (as defined by HealthChoices Appendix T), the child will be referred to an ABA provider.

C. Interagency Service Planning Team (ISPT) Meeting

PA state regulations require an ISPT (Interagency Service Planning Team) meeting to authorize BHRS services. Meetings should be held after the initial CBE, yearly for re-authorization, and any time a member of the treatment team requests a meeting. The ISPT is a mechanism for child-driven, family-focused treatment and an opportunity to engage collaborating professionals in treatment planning, including CBH Care Managers. Providers should orient families to the purpose of ISPT meetings and encourage them to invite stakeholders and natural supports to participate. The purpose of ISPT meetings is to discuss presenting issues, current needs of the child and family, the child's functioning in all domains, barriers to success, and service recommendations, which should include a review of the continuum of care and treatment interventions available. The following participants should be involved in ISPT meetings:

- Child
- Legal Guardian
- Family Members

- School Team
- Provider(s)
- Clinical Care Manager (CBH)
- Other (i.e. Department of Human Services/ Community Umbrella Agencies)

Signatures of participants must be obtained via sign-in sheets for authorization and record keeping purposes.

D. Treatment

ABA Therapy

Therapy should be based on the principles of ABA, should take place as much as possible in natural settings, and be based in activities that are naturally reinforcing to the child. Evidence-based, naturalistic, behavioral developmental interventions should be the first-line interventions, with reliance on more didactic strategies only when these strategies are not successful. Therapy should emphasize skill acquisition and replacing unwanted behaviors with desired, functionally equivalent behaviors. Therapy should include a plan for generalization that involves training families/caregivers and others who work with the child, and a plan for maintenance once therapy directed toward that particular goal concludes.

Interventions based on the principles of behavior analysis share an underlying guiding framework that is based in behavioral learning theory and guides programmatic decision making and intervention delivery. ABA programs may range from highly structured didactic approaches (Verbal Behavior or discrete trial therapy) to more child-led naturalistic approaches, such as pivotal response training. ABA programs may also include instruction in daily routines and language acquisition training. ABA programs generally share a set of common elements, including but not limited to:

- Individualized treatment goals, which are objective and measurable (including baseline data)
- Behaviors identified for increase and decrease that are objectively defined and functionally equivalent
- Reliance on an antecedent-behavior-consequence framework
- Use of reinforcement to shape skill acquisition
- Use of preference assessments to determine effective reinforcers
- Child-initiated teaching episodes
- Environmental manipulation to motivate the child to initiate interactions
- Systematic and frequent data collection and progress monitoring to inform treatment decisions
- Use of systematic prompting and prompt fading
- Broadening the attentional focus of the child by varying the stimuli used during treatment sessions
- Incorporation of turn-taking, modeling, and imitation
- Intervention targets across several developmental domains that are precursors of developmental achievements

- Intervention targets that are socially significant and functionally relevant
- Embedding intervention in meaningful social interactions and in everyday activities
- Behavior intervention plans that are based on the results of a functional behavior assessment and directly related to the identified behavioral function of the target behavior
- A manual with clear instructions and criteria for fidelity and progress measurement
- Systematic training of the intervention goals and strategies for parents and caregivers

Although not all ABA programs identify as using one of the following approaches, many ABA programs may provide treatment using one or more of the following approaches (this list is not exhaustive):

- Discrete trial training
- Pivotal response training
- Verbal Behavior Therapy
- Natural Environment Teaching
- Incidental teaching
- Precision teaching
- Functional communication training

Family/Caregiver Engagement

ABA programs have the responsibility to include families as *active* participants in the child's care. The provider's role includes engaging families to assist in their understanding of ASD, the scope of ABA services, and to promote the caregiver/family's collaboration with the provider. This collaboration is essential in order to gather needed information to inform the evaluation, re-evaluation, and treatment planning process as well as to facilitate communication with other behavioral health treatment providers, medical providers, and the schools. ABA providers must make accommodations to engage families and include them in all aspects of the child's treatment.

Providers are expected to develop family goals for the treatment plan by following the lead from families regarding priorities, thus integrating family voice with the team's formulation of the relationships and dynamics. ABA therapy focuses on behavior problems or skill acquisition and the family's participation in treatment is essential for these changes to occur. The team providing ABA should work with the family system to establish healthy relationship patterns, including appropriate hierarchy, boundaries, communication, and emotional expression so that the child will be better prepared and supported to meet the demands across settings. ABA therapy can occur with the child and entire family, or with other members of the family without the child present, as long as these modalities are specified in the treatment plan and relate to the treatment goals of the child.

Providers should inform CBH when treatment teams encounter barriers to family engagement to allow for assistance engaging family members and/or determining appropriate next steps.

Coordination

A plan should be developed for sharing data with other service providers, including related

therapies such as speech, occupational, and physical therapies, pediatricians and medical specialists, physicians prescribing psychotropic medications, teachers, and therapeutic support staff. Data should include progress towards goals, strategies for managing behavior, and reinforcers.

E. Data Collection

Baseline data should be collected during the initial evaluation (CBE and/or Functional Behavior Assessment) prior to starting treatment. Data should be collected with each therapeutic encounter. Parents should collect behavioral data systematically between therapy sessions. Data should be collected using a standardized form specified in the treatment plan, and the therapist will graph behavior and progress towards goals. Summary data on all goals should be shared with CBH and all treatment team members. Data should demonstrate that the treatment plan, planning process, and therapy adhere to the requirements above, and include information about direct training of family members and other involved caregivers. Data should be used as the rationale for continued treatment or modifications to interventions to promote mastery.

The provider is responsible for aggregating the data collected on each child to demonstrate the child's progress or challenges; data should be aggregated when reviewing treatment plan goals and when clinically indicated. The provider is also required to aggregate their data across members within their program and provide it to CBH. The provider should be able to speak to what the data says about the effectiveness of their program or the challenges they are encountering, including how they are responding to these challenges.

F. Treatment Plan

BHRS treatment plans for individuals diagnosed with ASD should be completed every 180 days and should be submitted to CBH with requests for service re-authorization at a minimum every 12 months. Treatment plans will vary by agency, as there is no template. All treatment plans must follow all state, CBH, and agency guidelines. Treatment plans for children with ASD must include the following components (items can be attached as appropriate):

- Results of any skill assessments are attached and/or summarized for skill acquisition/ maintenance plans
- Behaviors targeted for decrease objectively defined
- Replacement behaviors identified and objectively defined
- Method for collecting data for all behaviors is identified
- Baseline data
- Graphs of behavior
- Interventions for behaviors targeted for reduction are function based and refer to the results of the FBA
- Methods of instruction/reinforcement are clearly described for skill acquisition programs and referring to the results of the skill assessment (Verbal Behavior Milestones Assessment and Placement Program, for example)
- Goals of the treatment plan identified and measurable

- Selected reinforcers and the reinforcement schedule
- Preference assessment summary, indicating how reinforcers were selected, as appropriate
- Consequences for the occurrence of target behavior
- Criteria for determining when a goal should be revised are specified clearly and schedule for evaluating the criteria is identified

State regulations require that a parent/ guardian sign the BHRS treatment plan for children under 14. Children 14 and over must sign their own treatment plans. It is best practice for treatment plans to be signed by all parties who participated in the development or updating of the plan.

Functional Behavior Assessment (FBA) within Treatment Planning

When a treatment plan includes a goal to decrease a challenging behavior a Functional Behavior Assessment (FBA) will be completed to determine the function of the behavior as early in the treatment planning process as possible. A Behavioral Specialist Consultant with FBA certification must complete the FBA.

An FBA should include at least:

- Indirect assessment of the behavior via a structured interview with a parent or caregiver
- An interview with the teacher if the challenging behavior is occurring in the school
- Records review
- Rating scales such as Motivational Assessment Scale (MAS), Questions about Behavioral Function (QABF), or Functional Analysis Screening Tool (FAST), with data summarized in graph or chart (average scores and number/percentage of respondents with their identified potential source of reinforcement)
- Direct observation of the behavior while collecting data regarding the observed setting events, antecedents, and consequences that may be maintaining the behavior
- Direct observation in the location and setting in which the behavior has been reported as likely to occur based on the results of the parent/caregiver interview
- Direct observation across multiple settings
- Graph of behavior (frequency, duration, etc.)
- Summary of all assessment data, in table or graph form, including but not limited to data identifying the percentage of time the behavior occurred during particular activities, percentage of times the behavior occurred after each antecedent, and percentage of time the behavior occurred followed by each identified consequence
- Hypothesis statements based on the results of the assessments and conditions under which the target behavior is more likely to occur

Use of a standardized form and interview to guide the FBA is required. The therapist should identify a plan for addressing problem behaviors and skill acquisition in conjunction with the parent or caregiver and other professionals working with the child. Target behaviors must be clearly operationally defined in a way that two people could agree that the behavior occurred. Operational definitions must be clear, objective, and complete. The FBA itself will be attached to the treatment plan and signed by the developing staff, at a minimum.

G. Progress notes

BHRS ABA providers shall complete a progress note for each billed service, adhering to CBH documentation guidelines for legibility, with each note including the type of service, date, start and end clock times, description of reimbursable behavioral health interventions, and original signature of the staff providing service. Progress notes for ABA should summarize the data collected at each contact.

H. Aftercare Planning

The aftercare planning process begins during initial stages of treatment. The aftercare planning process will include but not be limited to:

- The development of an aftercare plan that is concise, complete, and comprehensive to ensure a smooth transition into the next level of care and/or supportive services
- Authorizations of service that are current and referrals that are being coordinated
- Inclusion of coordination with the following supports and agencies:
 - Family members and / or identified community support system
 - Clinical Management
 - Member Services
 - Case manager, when applicable
 - Any involved county agencies, including the Department of Human Services, Community Umbrella Agencies, Juvenile Justice System, Probation and Parole Officers
 - Treatment program's social worker, Utilization Review staff, or case manager
 - Medical HMO, in cases where the member's physical health is compromised
 - Department of Drug and Alcohol Programs, including Behavioral Health Special Initiative and Office of Mental Health

The Aftercare Plan

The Aftercare Plan must be a concise and comprehensive document driven by the child/ adolescent/ young adult and the family. It must specifically identify the following when applicable (aging out youth may need all these areas addressed while children in a stable placement may not):

- Name of next level of care provider, date and time of appointment
- Supports needed, identified by type, provider, date that supports will be provided and name of contact person for each supportive service identified. Though not an exhaustive list, these may include:
 - Housing (such as Community Residential Rehabilitation Host Home, Recovery House), location, date of placement, contact person and phone number
 - Name of case manager, or if referral made, when it was made, status, and contact person to verify application was completed
 - Vocational/ educational services
 - Specialized services such as interpreter service, home care, mental health, etc.

- along with dates, location, and primary contacts
- Medical supports including the name of the primary care physician, phone number, and appointment date/location, if applicable
- Medications – dosages, and date/time of next medication appointment with physician and/or psychiatrist
- Family/significant others who will be providing support, with addresses and phone numbers to allow for discharge follow-up from CBH Member Services and respective case management units, if applicable
- The individual’s post-discharge goals with timeframes
- A description of the services that can be provided by the provider(s) after discharge including the specific services, provider of such services, contact person(s), and phone numbers where applicable
- The method and frequency of continuing contact to provide the child/ family with support
- Meaningful daily activities

V. STAFF REQUIREMENTS

A. Credentialing

Behavior Specialist Consultant for ASD (BSC-ASD), providing ABA services

BSL: Licensed Behavior Specialist Consultant with at least one year, full time equivalent, post-master’s degree experience implementing ABA programs for individuals with ASD less than 21 years of age.

Other licensed professionals: The following licensed professionals: psychologists, social workers, clinical social workers, marriage and family therapists, and professional counselors will not require dual licensure and may therefore perform these services.

All BSC-ASDs must complete the state FBA training.
(Board Certified Behavior Analyst) BCBA credential is preferred, in conjunction with the licenses listed above.

Therapeutic Support Staff (TSS), providing ABA services

- Bachelor’s degree in psychology, social work, counseling, sociology, education criminal justice or similar human services field
- OR a bachelor’s degree in any other field with at least one year of full time equivalent experience in a job that involved direct contact with children or adolescents
- AND completed a 40 hour RBT (Registered Behavior Technician) certification training curriculum within six months of employment *RBT certification is not required
- AND completed the RBT Competency Assessment, under the supervision of a qualified BCBA or Board Certified Assistant Behavior Analyst (BCaBA) within 12 months of employment

- The RBT training curriculum can satisfy some of the training outlined in OMHSAS Bulletin 01-01-05; however, the TSS must complete all training as described in OMHSAS Bulletin 01-01-05 and in the CBH Manual for Review of Provider Personnel Files.

B. Supervision

BSC-ASD, providing ABA services

The BSC-ASD providing ABA services will abide by the BACB's supervision structure as if they were in the process of obtaining BCBA certification. They will obtain supervision by a BCBA or BCBA-D (Board Certified Behavior Analyst- Doctoral level), with supervision credentialing by the BACB, for 5% of their direct clinical hours worked per supervision period (two-weeks). 50% of these hours must be in-person, individual supervision. 50% may be in small groups of no more than 10 people. The BSC-ASD must review each case that they are working on at least once monthly during supervision sessions.

BSC-ASDs will be responsible to provide clinical case consultation to each TSS who is working on a mutual case at minimum of once monthly. The BSC-ASD must track and document each supervision encounter, including the content of the encounters, ensuring that all cases are discussed monthly.

All supervision will be documented on the BACB Experience Supervision Form and a copy will be kept in the staff's personnel file (the most current version can be found at bacb.com/documents).

Example: A BSC-ASD working 20 direct clinical hours per week, 80 hours per month, would require four hours of supervision per month, two hours per supervision period (two weeks). Two hours can be in small groups and two hours must be individual supervision. Only direct clinical hours count toward the percentage of hours which must be supervised.

TSS, providing ABA services

TSS workers providing ABA services must receive supervision by a qualified TSS Supervisor (as defined in OMHSAS Bulletin 01-01-05), as well as on-site, in-situ, clinical case consultation by the BSC-ASD overseeing the case at the following rates:

- TSS workers employed 20 hours per week or more must receive at least one hour of supervision per week plus one hour of on-site clinical case consultation by the BSC-ASD managing the case.
- TSS workers employed less than 20 hours per week must receive at least 30 minutes of supervision per week plus 30 minutes of on-site clinical case consultation by the BSC-ASD managing the case.

These are the minimum rates of supervision that are required. BSC-ASDs must ensure that each TSS working on cases that they oversee receive case consultation at least once per month per case.

All supervision encounters will be tracked in a format in compliance with the requirements in OMHSAS Bulletin 01-01-05 and a copy will be kept in the personnel file.

C. Ongoing Training/Continuing Education

All providers must ensure that they and their staff complete all agency specific and CBH mandatory trainings.

BSC-ASD, providing ABA services

BSL

BSLs will follow the BACB guidelines regarding CEUs, as if they were certified as a BCBA, as well as follow their agency's policies and procedures regarding additional trainings as required. This will meet CBH's requirement for eight CEU hours annually regarding Behavior Modification training.

Professionals licensed by another licensing entity will follow their respective CEU requirements to maintain a license in good standing. They will ensure that they follow all CBH, state, and agency specific policies on training and CEUs. All professionals providing BSC-ASD services are encouraged to obtain as many CEUs as possible through the BACB and/or CEUs related to ABA while maintaining their specific credential in order to remain current in best practice and the current literature in ABA.

TSS

TSSs will obtain 10 hours of BACB approved CEUs annually and follow their agency and CBH's policies and procedures regarding other trainings as required. OMHSAS Bulletin 01-01-05 requires 20 hours of training annually; these 10 hours may count towards that requirement.

- AND complete the RBT Competency Assessment, under the supervision of a BCBA or BCaBA annually.