



GUIDELINES

Health Plan Coverage of Applied Behavior Analysis Treatment for Autism Spectrum Disorder



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PART I: Overview

SECTION 1: EXECUTIVE SUMMARY

The purpose of this document is to inform decision-making regarding the use of Applied Behavior Analysis (ABA) to treat medically necessary conditions so as to develop, maintain, or restore, to the maximum extent practicable, the functioning of individuals with Autism Spectrum Disorder (ASD) in ways that are both efficacious and cost effective.¹

The document is based on the best available scientific evidence and expert clinical opinion regarding the use of ABA as a behavioral health treatment for individuals diagnosed with ASD. The guidelines are intended to be a brief and user-friendly introduction to the application of behavior analysis for ASD when funded by health care plans. Although the guidelines are written primarily for insurers and health plans, they will also be useful for consumers and providers.

This document provides clinical guidelines and other information about ABA as a treatment for ASD. ABA has a number of clinical and delivery components that make it unique among evidence-based behavioral health treatments. Thus, it is important that those charged with building a provider network understand the components and delivery of ABA, including:

- training and credentialing of Behavior Analysts
- ABA as a treatment for ASD
 - treatment components
 - assessment, formulation of treatment goals, and measurement of client progress
 - clinical procedures
 - treatment dosage and duration
 - supervision model
 - tiered service delivery
 - involvement of caregivers and other professionals
 - discharge, transition planning, and continuity of care
- service authorization and benefit management

This is the first edition of this resource manual and it will be updated periodically to reflect changes in clinical practice and research findings. Additional references and information can be found in the appendices.



SECTION 2: **AUTISM SPECTRUM DISORDER AND APPLIED BEHAVIOR ANALYSIS**

1 What is ASD?

ASD is characterized by varying degrees of difficulty in social interaction and verbal and nonverbal communication, and the presence of repetitive behavior and restricted interests.² This means that no two individuals with an ASD diagnosis are the same with respect to how the disorder manifests. However, the severity of the disorder is a reality for all individuals with this diagnosis and their families. Because of the nature of the disability, people with ASD will often not achieve the ability to function independently without appropriate medically necessary treatment.

2 What is ABA?

ABA is the design, implementation, and evaluation of environmental modifications to produce socially significant improvement in human behavior. ABA includes the use of direct observation, measurement, and functional analysis of the relations between environment and behavior. ABA uses changes in environmental events, including antecedent stimuli and consequences, to produce practical and significant changes in behavior. These relevant environmental events are usually identified through a variety of specialized assessment methods. ABA is based on the fact that an individual's behavior is determined by past and current environmental events in conjunction with organic variables such as their genetic endowment and ongoing physiological variables. ABA focuses on treating behavioral difficulties by changing the individual's environment rather than focusing on variables that are, at least presently, beyond our direct access.

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.



SECTION 3: CONSIDERATIONS

- This document contains guidelines and recommendations that reflect established research findings and best clinical practices. However, individualized treatment is a defining feature and integral component of ABA, which is one reason why it has been so successful in treating this heterogeneous disorder.
- Some individuals diagnosed with ASD have co-occurring conditions including, but not limited to intellectual disabilities, seizure disorders, psychiatric disorders, chromosomal abnormalities, feeding disorders, and a variety of other conditions that require additional medical treatment. **These guidelines apply to individuals diagnosed with ASD with these co-occurring conditions, as research has established ABA as effective for these client populations as well.**
- The guidelines provided in this document are pertinent to developing, maintaining, or restoring, to the maximum extent practicable, the functioning of an individual with ASD and thus, may not necessarily represent the optimal guidelines for producing an “appropriate education” in school settings.
- These guidelines should not be used to diminish the availability, quality, or frequency of currently available ABA treatment services.
- Coverage of ABA treatment for ASD by a health plan does not supplant responsibilities of educational or governmental entities.
- Specification of ABA in an Individualized Educational Plan or government program does not supplant ABA coverage by a health plan.
- ABA treatment must **not** be restricted *a priori* to specific settings but instead should be delivered in those settings that maximize treatment outcomes for the individual client.
- This document provides guidance regarding ABA treatment only; other behavioral health treatments are not addressed.
- In addition to ASD, ABA as a behavioral health treatment has a profound impact on the treatment of individuals with a range of clinical needs such as smoking cessation, severe problem behavior (e.g., self injury), weight loss, attention deficit disorder, pediatric feeding/eating disorders, and rehabilitation of acute medical conditions. Elements of this report may be applicable to the treatment of these other conditions as well, but this document is specifically directed towards the use of ABA in the treatment of ASD.



PART II:

Unique Features of Applied Behavior Analysis

SECTION 1: TRAINING AND CREDENTIALING OF BEHAVIOR ANALYSTS

ABA is a specialized behavioral health treatment and most graduate or postgraduate training programs in psychology, counseling, social work, or other areas of clinical practice do not provide in-depth training in this discipline. Thus, an understanding of the credentialing process of Behavior Analysts by the Behavior Analyst Certification Board® (BACB®) can assist health plans and their subscribers in identifying those providers who meet the basic competencies to practice ABA.

The formal training of professionals certified by the BACB is similar to that of other medical and behavioral health professionals. That is, they are initially trained within academia and then begin working in a supervised clinical setting with clients. As they gradually demonstrate the competencies necessary to manage complex clinical problems across a variety of clients and medical environments, they become independent practitioners. In summary, Behavior Analysts undergo a rigorous course of training and education and have an “internship” period in which they begin by working under the direct supervision of an experienced Behavior Analyst.

It should be noted that other licensed professionals may have ABA within their particular scope of training and competence. In addition, a small subset of clinicians may be licensed by another profession and also hold a credential from the BACB, thereby providing evidence of the nature and depth of their training in ABA.

While health plan coverage of behavioral health treatments supervised by Behavior Analysts is relatively recent, Behavior Analysts, like other medical and behavioral health providers, rely upon strategies and procedures documented in peer-reviewed literature, established treatment protocols, and decision trees. They continually evaluate the current state of the client and customize treatment options based on the results of direct observation and data from a range of other assessments. They also solicit and integrate information from the client and family members and coordinate care with other professionals.

The Behavior Analyst Certification Board

The BACB is a nonprofit 501(c)(3) corporation established to meet professional credentialing needs identified by Behavior Analysts, governments, and consumers of behavior analysis services. The mission of the BACB is to develop, promote, and implement an international certification program for Behavior Analyst practitioners. The BACB has established uniform content, standards, and criteria for the credentialing process that are designed to meet:

- The legal standards established through state, federal, and case law;
- The accepted standards for national certification programs; and
- The “best practice” and ethical standards of the behavior analysis profession.

The BCBA and BCaBA certification programs are currently accredited by the National Commission for Certifying Agencies (NCCA), the accreditation arm of the Institute for Credentialing Excellence. NCCA reviews and oversees all aspects related to ensuring the development and application of appropriate credentialing processes.

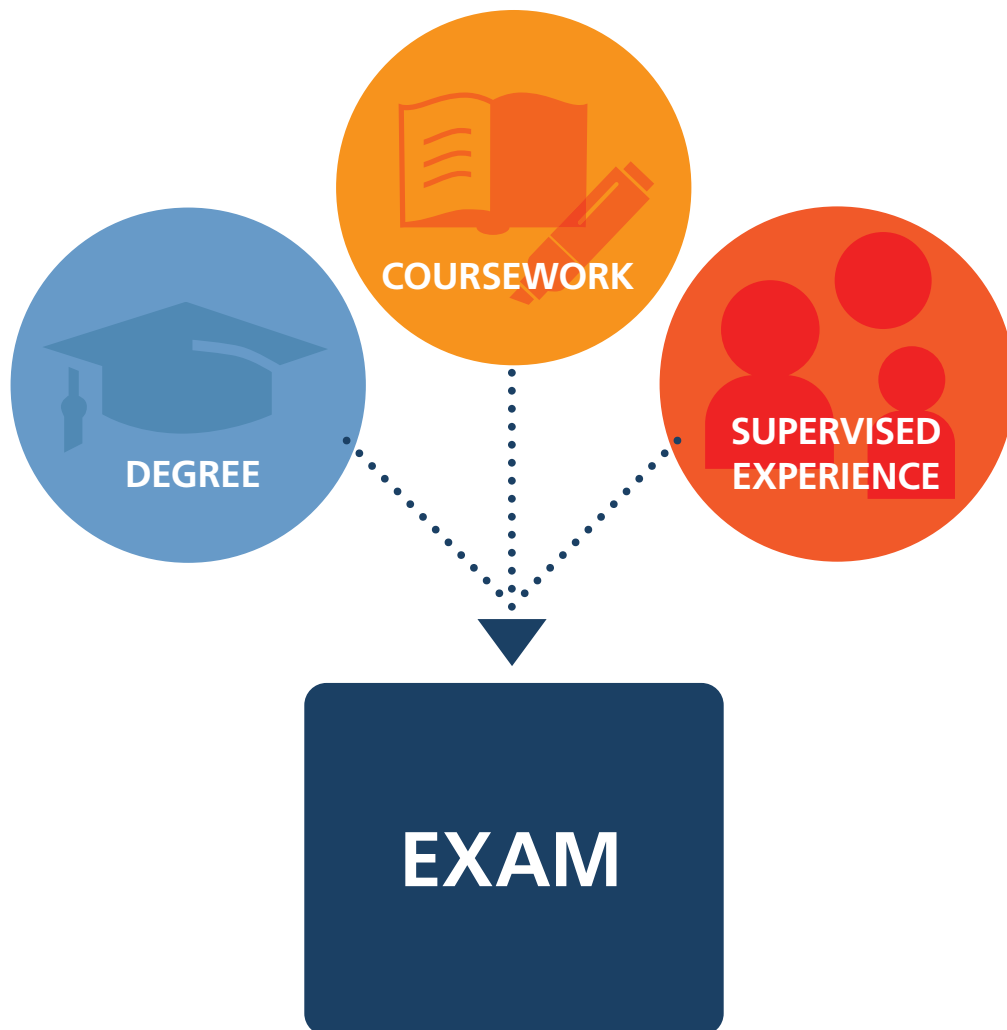
The BACB credentials and recognizes practitioners at three levels:



Professionals credentialed at the BCBA-D and BCBA levels are defined as Behavior Analysts. The BACB requires that BCaBAs work under the supervision of a BCBA-D or BCBA.

Eligibility Requirements

Applicants who meet the degree, coursework, and supervised experience eligibility requirements described in the next section are permitted to sit for either the BCBA or BCaBA examination (see figure below). Each examination is professionally developed to meet accepted examination standards and is based on the results of a formal job analysis and survey. In addition, all BACB examinations are offered under secure testing conditions and are professionally administered and scored by independent professional entities that meet industry standards.



Primary requirements for certification by the BACB.

Continuing Education and Maintaining Certification

BACB certificants are required to attest to their compliance with the organization’s ethical and disciplinary rules (see below) on an annual basis and obtain 24 (BCaBA) or 36 (BCBA, BCBA-D) hours of continuing education credits every three years, three hours of which must relate to ethics or professionalism. Agencies that employ Behavior Analysts need to support and provide this training as needed.



*continuing ed. credits every 3 years

Disciplinary Procedures

All certificants must annually attest that they will follow the Guidelines for Responsible Conduct for Behavior Analysts and they are subject to disciplinary action by the BACB if they violate one or more of the nine Professional Disciplinary and Ethical Standards (www.BACB.com).

The BACB uses an online complaint system by which the organization is alerted to potential disciplinary violations. Each complaint is evaluated by the BACB legal department and if there appears to be merit to the complaint it is forwarded to a disciplinary Review Committee. The committee members are senior BCBA or BCBA-Ds selected for their knowledge and independence (including a member from the certificant’s state). Disciplinary actions for certificants include, but are not limited to, mandated continuing education, suspension of certification, or revocation of certification. Resulting disciplinary actions are publicly reported online.

Licensure of Behavior Analysts

BACB credentials are currently the basis for licensure in those states where Behavior Analysts are licensed. Basing licensure on BACB credentials is cost effective and ensures that critical competencies with regards to practice and research are periodically reviewed and updated by practitioners and researchers. Whether it is used as the basis for licensure or as a “free standing” credential, BACB credentials are recognized in those states where insurance reform laws have been enacted.



SECTION 2: **APPLIED BEHAVIOR ANALYSIS IN THE TREATMENT OF ASD**

The field of Behavior Analysis evolved from the scientific study of the principles of learning and behavior. Applied Behavior Analysis is a well-developed discipline among the helping professions, with a mature body of scientific knowledge, established standards for evidence-based practice, distinct methods of service, recognized experience and educational requirements for practice, and identified sources of requisite education in universities. Professionals in ABA engage in the specific and comprehensive use of principles of learning, including operant and respondent learning, in order to address behavioral needs of widely varying individuals in diverse settings.

1 Identifying ABA Treatment

Health plans and insurers must be able to recognize bona fide ABA treatment and those qualified to provide it. ABA treatment has some important characteristics that should be apparent throughout treatment:

- 1.** An objective analysis of the client's condition by observing how the environment affects the client's behavior, as evidenced through appropriate data collection
- 2.** Importance given to understanding the context of the behavior and the behavior's value to the individual and the community
- 3.** Utilization of the principles and procedures of behavior analysis such that the client's health, independence, and quality of life are improved

2 Essential Practice Elements of ABA

These characteristics should be apparent throughout all phases of assessment and treatment:

1. **Description of specific levels of behavior at baseline** when establishing treatment goals
2. A practical focus on **establishing small units of behavior** which build towards larger, more significant changes in functioning related to improved health and levels of independence
3. Collection, quantification, and analysis, of **direct observational data** on behavioral targets during treatment and follow-up to maximize and maintain progress towards treatment goals
4. An emphasis on **understanding the current function** and future value (or importance) of behavior(s) targeted for treatment
5. Efforts to design, establish, and **manage the treatment environment(s)** in order to minimize problem behavior(s) and maximize rate of improvement
6. Use of a **carefully constructed, individualized and detailed behavior analytic treatment plan** which utilizes reinforcement and other behavior analytic principles as opposed to the use of methods or techniques which lack consensus about their effectiveness based on evidence in peer-reviewed publications
7. An emphasis on **ongoing and frequent direct assessment, analysis, and adjustments to the treatment plan** (by the Behavior Analyst) based on client progress as determined by observations and objective data analysis
8. Use of **treatment protocols that are implemented repeatedly, frequently, and consistently** across environments until the client can function independently in multiple situations
9. **Direct support and training of family members and other involved professionals** to promote optimal functioning and promote generalization and maintenance of behavioral improvements
10. **Supervision and management by a Behavior Analyst** with expertise and formal training in ABA for the treatment of ASD



3 Treatment Models

ABA treatment programs for ASD incorporate findings from hundreds of applied studies focused on understanding and treating ASD published in peer-reviewed journals over a 50-year span. Treatment may vary in terms of intensity and duration, the complexity and range of treatment goals, and the extent of direct treatment provided. Many variables, including the number of behavioral targets, specific aspects of those behaviors, and the client's own response to treatment help determine which model is most appropriate. Although existing on a continuum, these differences can be generally categorized as one of two treatment models: Focused ABA or Comprehensive ABA.³

Focused ABA

Service Description

Focused ABA involves direct service delivery to the client. It is not restricted by age, cognitive level, or co-occurring conditions. Focused ABA refers to treatment provided directly to the client for a limited number of behavioral targets.

Although the presence of problem behaviors may more frequently trigger a referral for Focused ABA treatment, the absence of appropriate behaviors should be prioritized, as this is often the precursor to serious behavior problems. Therefore, individuals who need to acquire skills (e.g., communication, tolerating change in environments and activities, self-help, social skills) are also appropriate for Focused ABA. In addition, all treatment plans which target reduction of dangerous or undesired behavior must concurrently introduce and strengthen more appropriate and functional behavior.

Examples of behavior-change targets in a focused ABA treatment plan for children who lack key functional skills include establishing compliance with medical and dental procedures, sleep hygiene, self-care skills, safe and independent leisure skills (e.g., appropriate participation in family and community activities).

Focused ABA involves direct service delivery to the client. It is not restricted by age, cognitive level, or co-occurring conditions.



Examples of treatment targets where the primary goal is to reduce behavior problems might include, but are not limited to, physical or verbal aggression towards self or others, dysfunctional speech, stereotypic motor behavior, property destruction, noncompliance and disruptive behavior, or dysfunctional social behavior.

When prioritizing the order in which to address multiple treatment targets, the following should be considered:

- **behaviors that may threaten the health or safety of themselves or others** (e.g., aggression, self-injury or self-mutilation, property destruction);
- **behavior disorders that may be a barrier to their ability to remain in the least restrictive setting, and/or limit their ability to participate in family and community life** (e.g., aggression, self-injury, noncompliance);
- **absence of developmentally appropriate adaptive, social, or functional skills** (e.g., toileting, dressing, feeding, compliance with medical procedures) that are fundamental to maintain health, social inclusion, and increased independence.

When the focus of treatment involves the reduction of a problem behavior, the Behavior Analyst will determine which situations are most likely to precipitate problem behavior and begin to isolate its function or purpose. This may require conducting a functional analysis to empirically demonstrate the “purpose” (i.e., function) of the problem behavior. The results enable the Behavior Analyst to develop the most effective treatment protocol. When the function of the problem behavior is identified, the Behavior Analyst may design a treatment plan that alters the environment to reduce the motivation for problem behavior and/or establish a new and more appropriate behavior that serves the same function and therefore “replaces” the problem behavior.

Social skills deficits, a core deficit of individuals diagnosed with ASD, are often addressed in focused treatment programs. Treatment may be delivered in either an individual or small-group format. When conducted in a small group, typically developing peers, or others with similar diagnoses, participate in the session. Clients practice behavioral targets while simultaneously mediating delivery of the treatment to the other members of the group. As is the case for all treatments, programming for generalization of skills outside the session is critical.

Focused treatments generally range from 10-25 hours per week of direct therapy (plus direct and indirect supervision hours) and are sometimes part of a step down or discharge plan from a Comprehensive ABA Treatment program.

Comprehensive ABA Treatment

Service Description

Comprehensive ABA refers to treatment where there are multiple targets across all developmental domains that are affected by the individual's ASD. These programs tend to range from 26-40 hours of direct treatment plus supervision per week. Initially, this typically involves 1:1 staffing and may gradually include small group formats as is appropriate.

Although there are different examples of comprehensive treatment, one example is intensive early treatment where the overarching goal is to close the gap between the client's level of functioning and that of typically developing peers. Targets are drawn from multiple domains of functioning including cognitive, communicative, social, and emotional. Targets also include reducing the symptoms of co-occurring behavior disorders such as aggression, self-injury and stereotypy. However, comprehensive behavioral treatment may also be appropriate for older individuals diagnosed with ASD, particularly if they engage in severe or dangerous behaviors across environments. In some cases, residential placement or inpatient hospitalization may be required for a period of time.

Treatment hours are increased or decreased as a function of the client's response to treatment as well as the intensity needed to reach treatment goals. In some cases, direct treatment hours increase gradually, are maintained at maximum intensity for a period of time, and are then systematically decreased in preparation for discharge. In other cases, treatment may begin at maximum levels.

Treatment is intensive and initially provided in structured therapy sessions. More naturalistic treatment approaches are utilized as soon as the client demonstrates the ability to benefit from these treatments. As the client progresses and meets established criteria for participation in larger or different settings, treatment in those settings and in the larger community should be provided. Training and participation by caregivers are also seen as an important component.



Treatment Models > Comprehensive ABA Treatment, cont.

Program Components

Treatment components should generally be drawn from the following domains:

- cognitive functioning
- pre-academic skills
- safety skills
- social skills
- play and leisure skills
- community integration
- vocational skills
- coping and tolerance skills
- adaptive and self-help skills
- language and communication
- attending and social referencing
- reduction of interfering or inappropriate behaviors

Intensity of Comprehensive ABA Treatment

When the goal is to change developmental trajectories to match that of typically developing peers, research, including several meta-analyses, show that 30–40 hours per week (6–7 hours daily, 5–6 days/week) of intensive ABA treatment is needed. Hours generally decrease as the client progresses in independence and generalizes behavioral changes to other critical settings.

Children who are under 3 years of age with an ASD diagnosis have better outcomes when they receive 25-30 hours/week, and it is not uncommon for children in this age group to receive 30 hours of treatment or more as they approach 3 years of age. Children who present characteristics of ASD at age 36 months will continue to require ongoing treatment.

Recommended hours and session lengths are based on the individual’s characteristics, goals and availability for therapy (e.g., endurance, attention span, need for naps). Although the recommended number of hours of therapy may seem arduous to some parents of young children, it should be noted that time spent away from therapy may move children even farther away from desired normal developmental trajectories. Such delays will likely result in increased costs and greater dependence on more intensive services across their life span.

4 Variations Within These Models

Treatment programs within any of these models vary along several programmatic dimensions, including the degree to which they are primarily provider- or client-directed (sometimes described as “structured vs. naturalistic”). Other variations include the extent to which peers or parents serve as behavior change agents. Finally, some differ in terms of the degree to which they are “branded” and available commercially.

Decisions about how these various dimensions are implemented within individual treatment plans must reflect many variables, including the research base, the age of the client, specific aspects of the target behaviors, the client’s own rate of progress, demonstration of prerequisite skills, and resources required to support implementation of the treatment plan across settings.

Despite such differences, if a given treatment meets the Essential Practice Elements of ABA described in this section (p.11), a treatment program should be considered an ABA treatment.

5 ABA Procedures Employed In These Models
















A large number of ABA procedures are routinely employed within the models previously described. They differ from one another in their complexity, specificity, and the extent to which they were designed primarily for use with individuals diagnosed with ASD. All are based on the principles of ABA and are employed with flexibility determined by the individual’s specific treatment plan and response to treatment. If one ABA procedure or combination of ABA procedures is not producing the desired response, a different one may be systematically implemented and evaluated for its effectiveness.

These procedures include different types of reinforcement and schedules of reinforcement, differential reinforcement of other behavior, differential reinforcement of alternative behavior, shaping, chaining, behavioral momentum, prompting and fading, behavioral skills training, functional communication training, discrete trial teaching, incidental teaching, self-management, preference assessments, activity schedules, generalization and maintenance procedures, among many others. The field of behavior analysis is constantly developing and evaluating applied behavior change procedures.

6 Locations Where Treatment is Delivered

The standard of care provides for treatment to be delivered in multiple settings in accordance with clinical judgment to promote generalization and maintenance of therapeutic benefits. No ABA model is specific to a particular location and all may be delivered in a variety of settings, including residential treatment facilities, clinics, homes, schools, and places in the community. Treatment provided in multiple settings, with multiple adults and/or siblings under the proper circumstances, will support generalization and maintenance of treatment gains. In some cases, the consistent application of ABA across all settings of the person's life may be the most cost-effective means of treatment.

Where possible, most children under 3 years of age should receive at least some treatment in their home. However, treatment should not be withheld, nor should family members be expected to forego employment, etc., in order to receive such treatment. Under certain circumstances, clinic-based services are most appropriate.

		LOCATION				
		HOME	SCHOOL & COMMUNITY	CLINIC/ OUTPATIENT	RESIDENTIAL	HOSPITAL/ INPATIENT
TREATMENT MODEL	FOCUSED					
	COMPREHENSIVE					
						

7 Client Age

Services should be provided as soon as possible after diagnosis, and in some cases services are warranted prior to diagnosis. Evidence suggests that the earlier treatment begins, the greater the likelihood of positive long-term outcomes. Comprehensive ABA treatment can result in reduced need for services as the child grows older. However, research also demonstrates that ABA is effective across the life span. Older individuals may also need intensive and comprehensive treatment, especially if they present with dangerous behaviors. Research has not established an age limit beyond which ABA is not effective.

Evidence suggests that the earlier treatment begins, the greater the likelihood of positive long-term outcomes.

8 Combining ABA With Other Forms Of Treatment

Findings from several studies show that an eclectic model, where ABA is combined with other forms of treatment, is less effective than ABA alone. Therefore, treatment plans which involve a mixture of methods, especially those which lack proven effectiveness, should be considered with caution and, if approved, should be monitored carefully. If there are treatment protocols that are not aligned with the ABA treatment approach, these differences must be resolved in order to deliver anticipated benefits to the client.





SECTION 3: **ASSESSMENT, FORMULATION OF TREATMENT GOALS, AND MEASUREMENT OF CLIENT PROGRESS**

1 The Assessment Process

A developmentally appropriate ABA assessment plan must identify strengths and weaknesses across domains. The data from such a plan should be the basis for developing the individualized treatment plan. An ABA assessment typically utilizes data obtained from multiple methods and multiple informants, such as:

Direct observation and measurement of behavior

Direct observation, measurement, and recording of behavior is a defining characteristic of ABA. These data serve as the primary basis for identifying pre-treatment levels, discharge goals, and evaluation of response to an ABA treatment program. They also assist the Behavior Analyst in developing and adapting treatment protocols on an ongoing basis. Direct observation of behavior should happen during naturally occurring opportunities, as well as, structured interactions.

File review and administration of a variety of behavior scales or other assessments as appropriate

The types of assessments should reflect the goal of treatment and should be responsive to ongoing data as they are collected and analyzed.

Interviews with the client, caregivers, and other professionals

Caregivers and other stakeholders are included when selecting treatment goals, protocols, and evaluating progress as appropriate. Caregiver interviews, rating scales, and social validity measures should be used to assess the caregiver's perceptions of their child's skill deficits and behavioral excesses, and the extent to which these deficits and excesses impede the life of the individual and the family. The client should also participate in these processes as appropriate.

2 Selection and Measurement of Goals

- Selection of a target-behavior definition, method and frequency of measurement approach, and data presentation must be individualized to each situation, behavior, and available resources.
- Behavioral targets should be prioritized based on their risk to client safety, independence, and implications for the client's health and well-being.
- Both baseline performance and treatment goals should be developed for each critical domain and specified in terms that are observable and measurable so that there is agreement regarding the presence, absence, or degree of behavior change relative to treatment goals and discharge criteria.
- Treatment plans should specify objective and measurable treatment protocols. It should include the service setting(s), and level of service for the client.
- Data collection and analysis should occur frequently enough so as to permit changes to the treatment plan at a rate which maximizes progress. Data should be represented in numerical or graphical form.

3 Data From Standardized Assessments

These data may help inform issues related to selection and prioritization of treatment goals and determining the response to treatment.

- Standardized tests that assess performance in cognitive, communicative, social, adaptive, behavioral domains may be appropriate to establish pre-treatment levels of performance and inform decision-making during treatment planning. Scores on such assessments, however, should not be used to exclude individuals from receiving ABA treatment. For example, cognitive functioning is not an accurate or appropriate determiner of an individual's response to ABA treatment.

Data From Standardized Assessments, cont.

- Assessment batteries must be individualized so that they are appropriate for each client. For example, nonverbal assessments may provide a more accurate profile for a client with limited verbal abilities.
- Formal standardized assessments may also be appropriate in some cases for use on an annual basis as part of assessing progress in a Comprehensive ABA treatment program where the goal is to close performance gaps with typically developing peers. However, scores on such assessments should not be used as the sole basis to terminate ABA treatment for individual clients.

4 Problem Behavior Assessment

Problem behavior assessment may also be required when co-occurring behavior disorders (e.g., aggression, self-injury, property destruction, stereotypy) are present, to identify the likely reason(s) problem behavior(s) occur and the skills and strategies necessary to ameliorate them. This necessitates a functional assessment, which may or may not involve a functional analysis (i.e., manipulation of environmental events and record of changes in strength of target behavior) to determine the function of the behavior problem.

5 Complexity of Assessment

In most cases, the ABA assessment can be completed in 15-20 hours (including report writing). However, up to 40 hours may be required if the Behavior Analyst needs to conduct a functional analysis to determine the function of the problem behavior.



SECTION 4: SERVICE AUTHORIZATION AND DOSAGE

1 Services Authorized

Authorization periods should not be for less than 6 months and may involve some or all of the following services. If there is a question as to the appropriateness or effectiveness of ABA for a particular client, a review of treatment data may be conducted more frequently (e.g., after 3 months of treatment).

1. Assessment
2. Treatment Plan Development
3. Direct Treatment
4. Supervision (direct and indirect)
5. Parent and Community Caregiver Training
6. Consultation to Ensure Continuity of Care
7. Discharge Planning

2 Treatment Dosage

Treatment dosage, which is often referenced in the treatment literature as “intensity,” will vary with each client and should reflect the goals of treatment, specific client needs, and response to treatment. Treatment dosage should be considered in two distinct categories: intensity and duration.

Intensity

Intensity is typically measured in terms of number of hours per week of direct treatment. Intensity often reflects whether the treatment is comprehensive (across multiple domains) or focused (limited number of behavioral targets).

If the goal of treatment is to bring the client’s functioning to levels typical for that chronological age or maximize independence in multiple areas (e.g., cognitive, social, adaptive)...

- Comprehensive ABA requires intensive treatment, defined as 26-40 hours per week of direct treatment with adjustments based on individual client needs and response to treatment.
 - Treatment hours are most commonly in the range of 26-30 hours per week for children under 3 years of age and 30-40 hours per week for children over 3 years of age.
 - Treatment hours do not include time spent with other professionals or family members specifically trained to extend and amplify the benefits of treatment.

When the goal is to address a limited number of areas such as decreasing dangerous behavior or improving social skills (i.e., Focused ABA)...

- Direct treatment hours will be related to the client’s individual needs and learning history, the need to train direct-care staff, assessment time, and data analysis.

In addition to intensity being measured in terms of treatment hours per week, intensity may be further defined in terms of the number of client behaviors or responses per hour as arranged by the treatment protocol. These are sometimes referred to as trials. Higher rates of trials, programmed with consistent implementation, are often important to obtaining adequate progress. Thus, intensity of treatment must reflect other aspects in addition to the number of treatment hours per day, week, or month.

Duration

Treatment duration is effectively managed by evaluating the client’s response to treatment. This evaluation can be conducted prior to the conclusion of an authorization period. Some individuals will continue to demonstrate medical necessity and require treatment for a substantial duration (e.g., over a period of years). For example, the benefits of Comprehensive ABA require treatment to be delivered over multiple years.



SECTION 5: TIERED SERVICE DELIVERY MODELS AND BEHAVIORAL TECHNICIANS

Most ABA treatment programs involve a tiered service delivery model where the Behavior Analyst designs and supervises a treatment program delivered by Behavioral Technicians.

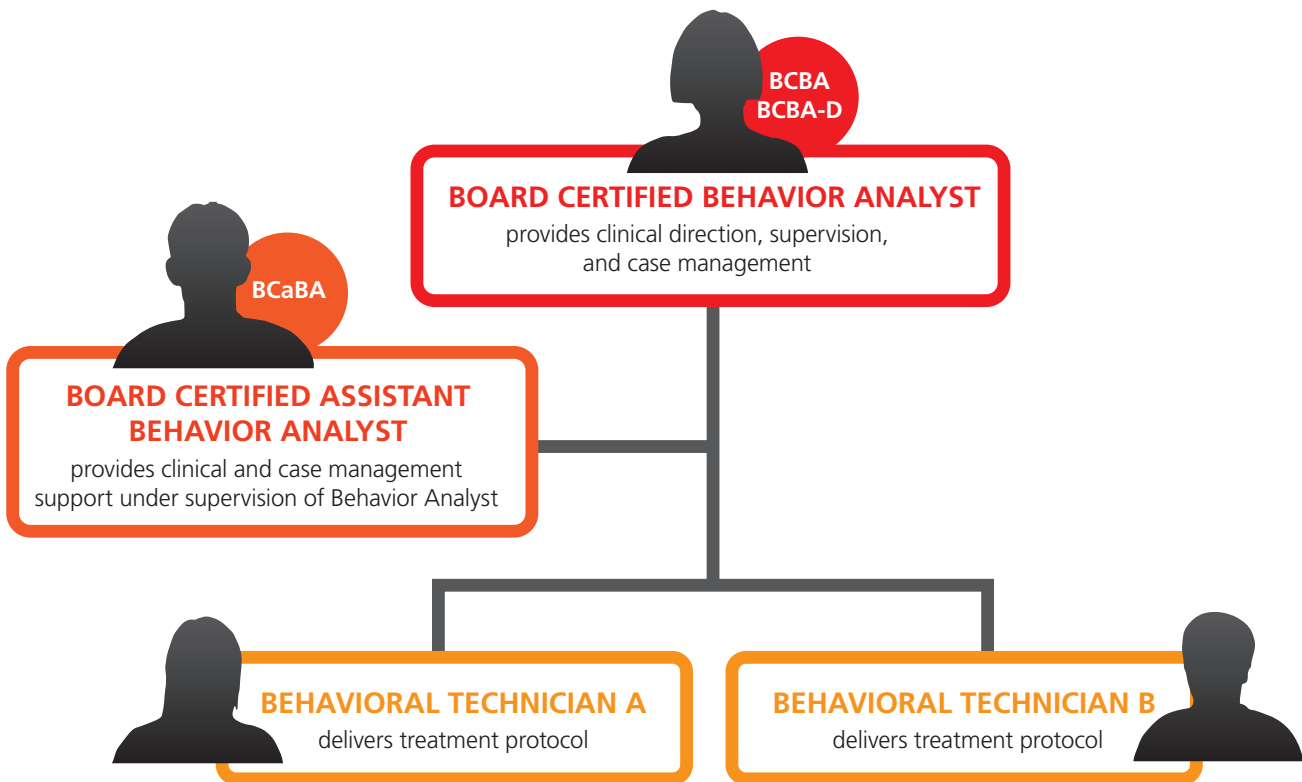
1 Rationales for a Tiered Service Delivery Model

- Tiered service delivery models which rely upon the use of Behavioral Technicians have been the primary mechanism for achieving many of the significant improvements in cognitive, language, social, behavioral, and adaptive domains that have been documented in the peer-reviewed literature.⁴
- The use of carefully trained and well-supervised Behavioral Technicians is a common practice in ABA treatment.^{5,6}
- The use of Behavioral Technicians enables health plans and insurers ensure that they maintain adequate provider networks and deliver medically necessary treatment in a way that manages costs.
- The use of Behavioral Technicians produces more cost-effective levels of service for the duration of treatment because it allows the Behavior Analyst to manage more cases/hours of direct treatment.
- The use of the tiered service delivery model permits sufficient expertise to be delivered to each case at the level needed to reach treatment goals. This is critical as the level of supervision required may need to shift rapidly in response to rapid client progress or demonstrated need.
- Tiered service delivery models can help ensure that treatment is delivered to families in hard to access rural and urban areas as well as families who have complex needs.

Rationales for a Tiered Service Delivery Model, cont.

The BCBA and BCBA-D's clinical, supervisory, and case management activities are often supported by other staff such as BCaBAs working within the scope of their training, practice, and competence.

Below is one example of this specific tiered service delivery model, an approach considered cost-effective at delivering desired treatment outcomes.



Such models assume the following:

1. The BCBA or BCBA-D is responsible for all aspects of clinical direction, supervision, and case management, including activities of the support staff (e.g., a BCaBA) and Behavioral Technicians.
2. The BCBA or BCBA-D must have knowledge of each person's ability to effectively carry out activities before assigning them.
3. The BCBA and BCBA-D provides case supervision, which must include direct, face-to-face supervision on a consistent basis, regardless of whether or not there is clinical support provided by a BCaBA.

2 Selection, Training, and Supervision of Behavioral Technicians

- Behavioral Technicians should meet specific criteria before providing treatment (refer to Sample Background Requirements on p. 27).
- Case assignment should match the needs of the client with the skill-level and experience of the Behavioral Technician. Before working with a client, the Behavioral Technician must be sufficiently prepared to deliver the treatment protocols. This includes a review by the Behavior Analyst of the client’s history, current treatment programs, behavior reduction protocols, data collection procedures, etc.
- Caseloads for the Behavioral Technician are determined by the:
 - complexity of the cases
 - experience and skills of the Behavioral Technician
 - number of hours per week employed
 - intensity of hours of therapy the client is receiving
- Quality of implementation (treatment integrity checks) should be monitored on an ongoing basis. This should be more frequent for new staff, when a new client is assigned, or when a client has challenging behaviors or complex treatment protocols are involved.
- Behavioral Technicians should receive direction on the introduction and revision of treatment protocols on a weekly to monthly basis. This activity may be in client briefings with other members of the treatment team each month, including the supervising Behavior Analyst or individually, and with or without the client present. The frequency and format should be dictated by an analysis of the treatment needs of the client to make optimal progress.
- While hiring qualifications and initial training are important, there must be ongoing observation, training, and supervision to maintain and improve the Behavioral Technician’s skills while implementing ABA-based treatment.

Sample Training and Job Requirements for Behavioral Technicians:

Background Requirements⁷

- High school graduate (minimum)
- AA degree (preferred)
- Pass criminal background check
- Pass TB test

Initial Training⁸

- CPR
- HIPAA
- mandated reporting, problem solving and conflict management related to employment
- confidentiality and ethics
- ASD
- developmental milestones
- data collection
- basic ABA procedures such as reinforcement, shaping, prompting, etc.

Initial Competency Demonstration

- correctly respond to written and oral scenarios
- demonstrate ability to correctly respond to treatment protocols as evidenced by direct observation and written evaluation

Sample Duties

- implement treatment protocols
- collect and summarize data
- implement feedback delivered during live supervision and from written evaluations
- satisfactorily pass treatment integrity checks and ongoing evaluations
- attend client staffings and trainings

Supervision

- frequent direct observation and feedback during initial employment period, when being assigned a new client, and when working with severe problem behavior
- ongoing supervision and training

SAMPLE



SECTION 6: **CLINICAL MANAGEMENT AND CASE SUPERVISION**

ABA treatments are often described in terms of the number of direct service hours per week. Sometimes absent from such discussions is reference to the required levels of clinical management and case supervision by the Behavior Analyst. Supervision begins with assessment and continues through discharge. ABA treatment requires comparatively high levels of supervision because of the individualized nature of treatment, its reliance on frequent collection and analyses of client data, and need for frequent adjustments to the treatment plan.

This section will describe the Clinical Management and Case Supervision activities that are individualized for the client and medically necessary to achieve treatment goals. Routine agency activities that would not be directly billable are not included here.

1 Clinical Supervision and Case Management Activities

Clinical management and case supervision activities can be described as those that involve contact with the client or caregivers (direct) and those that do not (indirect). Some activities are primarily clinical in nature, while others are more related to case management. On average, direct supervision activities comprise 50% or more of supervision; both direct and indirect supervision activities are critical to producing good treatment outcomes.

Clinical Supervision and Case Management Activities, cont.

The list below, while not exhaustive, identifies some of the most common supervision activities:

ASSESS

- Conduct assessments
- Develop treatment goals, protocols, and data collection systems
- Summarize and analyze data⁹
- Directly observe treatment

DEVELOP

- Meet and evaluate performance of Behavioral Technician staff
- Evaluate client progress towards treatment goals
- Supervise implementation of treatment

EVALUATE

- Adjust treatment protocols based on data
- Monitor treatment integrity
- Train and consult with caregivers and other professionals

IMPLEMENT

- Evaluate risk management and crisis management
- Ensure satisfactory implementation of treatment protocols
- Report progress towards treatment goals

OVERSEE

- Respond to changes in client health or situation
- Develop and oversee transition/discharge plan

1 Modality

Some clinical management and case supervision activities occur face to face; others can occur remotely (e.g., through telemedicine). However, whenever possible, telemedicine should be combined with some “face to face” supervision. In addition, depending on the situation, some training of caregivers and treatment updates may occur in small groups rather than in an individual format. Finally, some indirect case management activities are more effectively carried out in venues other than those used during the actual treatment session.

2 Dosage

Although the amount of supervision for each case must be responsive to individual client needs, 1-2 hours for every 10 hours of direct treatment is the general standard of care. When direct treatment is 10 hours per week or less, a minimum of 2 hours per week of clinical management and case supervision is generally required. Clinical management and case supervision may need to be temporarily increased to meet the needs of individual clients at specific time periods in treatment (e.g., intake, assessment, significant change in response to treatment).⁹

This ratio of clinical management and case supervision hours to direct treatment hours reflects the complexity of ASD and the responsive, individualized, data-based decision-making which characterizes ABA treatment. A number of factors increase or decrease clinical management and case supervision needs on a shorter- or longer-term basis. These include:

- treatment dosage/intensity
- client behavior problems (especially if dangerous or destructive)
- the sophistication or complexity of treatment protocols
- the ecology of the family or community environment
- lack of progress or increased rate of progress
- changes in treatment protocols
- transitions with implications for continuity of care



3 Caseload Size

Caseload size for the Behavior Analyst is typically determined by these same factors and reflects:

- complexity of the case and needs of the client
- training, experience level, and skills of the Behavior Analyst
- number of hours of treatment each client is receiving
- location and modality of supervision
- expertise and availability of support for the Behavior Analyst (e.g., a BCaBA)

The average caseload for one (1) Behavior Analyst supervising comprehensive treatment *without support by a BCaBA* is 6 - 12.

The average caseload for one (1) Behavior Analyst supervising comprehensive treatment *with support by one (1) BCaBA* is 12 - 16. Additional BCaBAs permit modest increases in caseloads.

The average caseload for one (1) Behavior Analyst supervising focused treatment *without support of a BCaBA* is 10 - 15.

The average caseload for one (1) Behavior Analyst supervising focused treatment *with support of one (1) BCaBA* is 16 - 24.

As stated earlier, even if there is a BCaBA assigned to a case, the Behavior Analyst is ultimately responsible for all aspects of case management and clinical direction. In addition, it is expected that the Behavior Analyst will provide direct supervision 2-4 times per month.

Supervisory Staff Qualifications:

BEHAVIOR ANALYST

Qualifications

- BCBA-D/BCBA or License in related field
- Competence in supervising and developing ABA treatment programs for clients with ASD¹¹

Responsibilities

- Summarize and analyze data
- Evaluate client progress towards treatment goals
- Supervise implementation of treatment
- Adjust treatment protocols based on data
- Monitor treatment integrity
- Train and consult with caregivers and other professionals
- Evaluate risk management and crisis management
- Ensure satisfactory implementation of treatment protocols
- Report progress towards treatment goals
- Develop and oversee transition/discharge plan

ASSISTANT BEHAVIOR ANALYST

Qualifications

- BCaBA (preferred)

Responsibilities

- Assists Behavior Analyst in various roles and responsibilities as determined appropriate by Behavior Analyst and delegated to BCaBA



SECTION 7: WORKING WITH CAREGIVERS AND OTHER PROFESSIONALS

1 Family Members/Others as Important Contributors to Outcomes

Family members, including non-caregiver siblings, and other community caregivers should be included in various capacities and at different points during both Focused and Comprehensive ABA treatment programs. In addition to providing important historical and contextual information, caregivers must receive training and consultation throughout treatment, discharge, and follow-up.

Treatment targets, protocols, and determination of outcomes should reflect the individual client as well specific aspects of family life. The significant deficit and excess behaviors that usually accompany a diagnosis of ASD impact the family's functioning and the health of all of its members. In addition, the client's progress may be altered by the extent to which caregivers support treatment goals outside treatment hours. Their ability to do this will be partially determined by how well matched the treatment protocols are to the family's own values, needs, priorities, and resources.

The need for family involvement, training and support reflects the following:

- Caregivers frequently have specialized information about the client's functioning, preferences, and behavioral history.
- Caregivers may be responsible for provision of care, supervision, and dealing with challenging behaviors during all waking hours outside of school or a day treatment program. Some percentage of individuals with ASD present with atypical sleeping patterns. Therefore, some caregivers may be responsible for ensuring the safety of their children and/or implementing procedures at night and may, themselves, be at risk for problems associated with sleep deprivation.
- Caring for an individual with ASD presents many challenges to caregivers and families. Studies have documented the fact that parents of children and adults with ASD experience higher levels of stress than those of parents with typically developing children or even parents of children with other kinds of special needs.

- The behavioral excesses commonly encountered with persons diagnosed with ASD (e.g., repetitive, nonfunctional behavior such as vocal or motor stereotypy) and behavioral challenges (e.g., tantrums or aggression) secondary to the social and language deficits associated with ASD, often present particular challenges for caregivers as they attempt to manage their behavior problems. Typical parenting strategies are often insufficient to enable caregivers to improve or manage their child’s behavior, which can impede the child’s progress towards improved levels of functioning and independence.
- Note that while family training is supportive of the overall treatment plan, it is not a replacement for professionally directed and implemented treatment.

2 Parent and Community Caregiver Training

Training is part of both Focused and Comprehensive ABA treatment models. Although parent and caregiver training is sometimes delivered as a “standalone” treatment, there are relatively few clients for whom this would be recommended as the sole or primary form of treatment. This is due to the severity and complexity of behavioral excesses and deficits that can accompany a diagnosis within the autism spectrum.

Training of parents and other caregivers usually involves a standard, but individualized, curriculum regarding the basics of ABA. Training emphasizes skills development and support so that caregivers become competent in implementing treatment protocols across critical environments. Training usually involves an individualized behavioral assessment, a case formulation, and then customized didactic presentations, modeling and demonstrations of the skill, and practice with in vivo support for each specific skill. Ongoing activities involve supervision and coaching during implementation, problem-solving as issues arise, and support for implementation of strategies in new environments to ensure optimal gains and promote generalization and maintenance of therapeutic changes. Please note that such training is not accomplished by simply having the caregiver or guardian present during treatment.

Training of parents and other caregivers usually involves a standard, but individualized, curriculum regarding the basics of ABA.

3 Sample Behavioral Targets

The following are common behavioral targets for which caregivers often seek assistance. Note that caregiver training for these targets is typically in conjunction with a Focused or Comprehensive ABA treatment program for these same behavioral targets.

- Generalization of skills acquired in treatment settings into home and community settings
- Treatment of co-occurring behavior disorders that risk the health and safety of the child or others in the home or community settings, including reduction of self-injurious or aggressive behaviors against siblings, caregivers, or others; establishment of replacement behaviors which are more effective, adaptive, and appropriate
- Adaptive skills training such as functional communication, participation in routines which help maintain good health (e.g., participation in dental and medical exams, feeding, sleep) including target settings where it is critical that they occur
- Contingency management to reduce stereotypic, ritualistic, or perseverative behaviors and functional replacement behaviors as previously described

4 Program Components

This should be a multifaceted approach that includes didactic instruction for caregivers and family members, including when necessary extended family members, modeling of procedures by Behavioral Technician staff and supervisors, and hands-on training with caregivers (including verbal explanation, modeling, role play, in-vivo practice, and feedback). Supervision should include in-vivo observation and/or review of videotaped sessions and feedback.



5 Coordination with Other Professionals

Consultation with other professionals helps ensure client progress through efforts to coordinate care and ensure consistency including during transition periods and discharge.

Treatment goals are most likely to be achieved when there is a shared understanding and coordination among all healthcare providers and professionals. Examples include collaboration between the prescribing physician and the Behavior Analyst to determine the effects of medication on treatment targets. Another example involves a consistent approach across professionals from different disciplines in how behaviors are managed across environments and settings. Professional collaboration that leads to consistency will produce the best outcomes for the client and their families.

Differences in theoretical orientations or professional styles may sometimes make this difficult. In addition, reviews of research on purported treatments for ASDs have demonstrated that there are a number of unproven, ineffective and sometimes dangerous treatments for ASDs. Occasionally such treatments are prescribed by some professionals in combination with ABA. Some research suggests such practices may result in less effective outcomes than might otherwise be achieved. Consultation to resolve significant differences that undermine the benefits of ABA treatment or any evidence-based treatment should be prioritized.

Treatment goals are most likely to be achieved when there is a shared understanding and coordination among all healthcare providers and professionals.

The *BACB Guidelines for Responsible Conduct for Behavior Analysts* (www.BACB.com) require the Behavior Analyst to recommend the **most** effective scientifically supported treatment for each client. The Behavior Analyst must also review and evaluate the likely effects of alternative treatments, including those provided by other disciplines as well as no treatment.

In addition, Behavior Analysts refer out to professionals from other disciplines when there are client conditions that are beyond the training and competence of the Behavior Analyst, or where coordination of care with such professionals is appropriate. Examples would include, but are not limited to, a suspected medical condition or psychological concerns related to an anxiety or mood disorder.



SECTION 8: **DISCHARGE, TRANSITION PLANNING, AND CONTINUITY OF CARE**

Transition and discharge planning from a treatment program should include a written plan that specifies details of monitoring and follow-up as is appropriate for the individual and the family. Parents, community caregivers, and other involved professionals should be consulted in the planning process 3-6 months prior to the first change in service.

A description of roles and responsibilities of all providers, effective dates for behavioral targets that must be achieved prior to the next phase, should be specified and coordinated with all providers, the client, and family members.

Discharge and transition planning from all treatment programs should generally involve a gradual step down in services. Discharge from a comprehensive ABA treatment program often requires 6 months or longer.

Discharge

Services should be reviewed and evaluated and discharge planning begun when:

- The client has achieved treatment goals
- The client no longer meets the diagnostic criteria for ASD (as measured by appropriate standardized protocols)
- The client does not demonstrate progress towards goals for successive authorization periods.

When there are questions about the appropriateness or efficacy of services, the procedures should be reviewed by an expert panel of Behavior Analysts and other professionals. When there are issues about the appropriateness or efficacy of services in an individual case, including pursuant to any internal or external appeal relating to insurance benefits, the reviewing body should include appropriately qualified Board Certified Behavior Analysts.



PART III: Appendices

APPENDIX A: ELIGIBILITY REQUIREMENTS FOR BACB CERTIFICATION

BCBA Eligibility Requirements

A. Degree Requirement

Possession of a minimum of a bachelor’s and a master’s degree that was conferred in behavior analysis or other natural science, education, human services, engineering, medicine or a field related to behavior analysis and approved by the BACB from an accredited institution of higher education.

B. Training and Experience Requirements

Option 1: Coursework

1. Coursework: The applicant must complete 225 classroom hours of graduate level instruction (see Acceptable Coursework below) in the following content areas and for the number of hours specified:

- a. Ethical considerations - 15 hours
- b. Definition & characteristics and Principles, processes & concepts - 45 hours
- c. Behavioral assessment and Selecting intervention outcomes & strategies - 35 hours
- d. Experimental evaluation of interventions - 20 hours
- e. Measurement of behavior and Displaying & interpreting behavioral data - 20 hours
- f. Behavioral change procedures and Systems support - 45 hours
- g. Discretionary - 45 hours

2. Experience:

1500 hours Supervised Independent Fieldwork (non-university based); 1. biweekly supervision required	OR	1000 hours Practicum (university based); 1. weekly supervision required	OR	750 hours Intensive Practicum (university based); 1. twice-weekly supervision required
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Option 2: College Teaching

- 1. College Teaching:** The applicant must complete a one academic-year, full-time faculty appointment at a college or university (as described in Section A above) during which the applicant:
 - Teaches classes on basic principles of behavior, single-subject research methods, applications of basic principles of behavior in applied settings, and ethical issues; and
 - conducts and publishes research in behavior analysis.
- 2. Experience:** same as the Coursework option (1)

Option 3: Doctorate/BCBA Review

- 1. Doctorate Degree:** The applicant must have a doctoral degree, conferred at least ten (10) years prior to applying. The field of study must be behavior analysis, psychology, education or another related field (doctoral degrees in related fields are subject to BACB approval).
- 2. BCBA Review:** The applicant must have 10 years post-doctoral experience in behavior analysis. Experience must be verified independently by three Board Certified Behavior Analysts (BCBAs) and supported by information provided on the applicant’s curriculum vitae.

BCBA-D Eligibility Requirements

The BCBA-D is a designation that recognizes doctoral-level BCBAs who:

- 1.** Are individuals who are actively certified as a BCBA; AND
- 2.** Are individuals who have earned a doctorate degree in applied behavior analysis, other human services, education, science, medicine or other field approved by the BACB and strongly related to applied behavior analysis, that was conferred by an accredited university; AND
- 3.** Are individuals who:
 - a. Used graduate-level university coursework (taken for graduate academic credit) to qualify initially for the BCBA; or
 - b. Have taught courses in behavior analysis in a university program with a BACB approved course sequence full-time for at least two years; or
 - c. Could currently qualify under one of the existing BCBA eligibility options

BCaBA Eligibility Requirements

A. Degree Requirement

Possession of a minimum of a bachelor's degree that was conferred in behavior analysis or other natural science, education, human services, engineering, medicine or a field related to behavior analysis and approved by the BACB from an accredited institution of higher education.

B. Coursework and Experience Requirements

1. Coursework: The applicant must complete 135 classroom hours of instruction (see Definition of Terms below) in the following content areas and for the number of hours specified:

- a. Ethical considerations - 10 hours
- b. Definition & characteristics and Principles, processes & concepts - 40 hours
- c. Behavioral assessment and Selecting intervention outcomes & strategies - 25 hours
- d. Experimental evaluation of interventions, & Measurement of behavior and Displaying & interpreting behavioral data - 20 hours
- e. Behavioral change procedures and Systems support - 40 hours

2. Experience:

1000 hours Supervised Independent Fieldwork (non-university based); 1. biweekly supervision required	OR	670 hours Practicum (university based); 1. weekly supervision required	OR	500 hours Intensive Practicum (university based); 1. twice-weekly supervision required
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APPENDIX B: SELECTED BIBLIOGRAPHY

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APPENDIX C: FOOTNOTES

¹ Throughout this document the term Autism Spectrum Disorder (ASD) is used to refer to a group of complex neurological disorders that are sometimes referred to as Autistic Disorder, Pervasive Developmental Disorder Not Otherwise Specified, Asperger’s Syndrome, High Functioning Autism, among others.

² The Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association is undergoing revision, with the DSM-V scheduled for publication in 2013. According to the public materials made available by the American Psychiatric Association, the term “Autism Spectrum Disorder” will be used to describe the impairments listed here. The present guidelines are intended for individuals who meet DSM-V criteria for ASD or who have similar behavioral health needs.

³ Focused and Comprehensive ABA exist on a continuum which reflects the number of target behaviors and hours of direct treatment and supervision.

⁴ These staff are competent to administer treatment protocols and are often referred to by a variety of terms including ABA therapist, senior therapist, paraprofessional tutor, or direct line staff.

⁵ The training and responsibilities of Behavioral Technicians who implement treatment protocols are distinctly different from those of workers who perform caretaking functions.

⁶ When possible, several Behavioral Technicians are often assigned to each case in order to promote generalized and sustained treatment benefits for the client. This also helps prevent a lapse in treatment hours due to staff illness, scheduling availability, and turnover, etc. Intensive, comprehensive treatment programs may have 4-5 Behavioral Technicians assigned to a single case. Each Behavioral Technician may also work with several clients across the week.

⁷ Depending on the needs of the individual client, Behavioral Technicians may also require training in commercially available risk management programs for aggression and assaultive behavior (e.g., CPI®). Occasionally, Behavioral Technicians may need to be BCaBAs for the purpose of stabilizing behavior and refining treatment protocols.

⁸ Other trainings may relate to informing employees of policies and procedures at the agency, state, and federal levels.

⁹ Given the intensity of the program, frequent review of the data and the treatment plan are needed. The Behavior Analyst should generally review direct-observation data at least weekly.

¹⁰ Note that direct treatment and clinical supervision are frequently delivered on the same day of service and are both billable services for that day.

¹¹ See also recommended guidelines for Behavior Analysts from the Autism Special Interest Group of The Association for Behavior Analysis International. http://www.abainternational.org/special_interests/autism_guidelines.asp

Development of the Guidelines

The BACB Board of Directors authorized the development of practice guidelines for ABA treatment of ASD covered by health plans. A coordinator was appointed who then created a five-person oversight committee that designed the overall development process and content outline. The oversight committee then solicited additional content-area leaders and writers from a national pool of experts that included researchers and practitioners to produce a first draft of the guidelines. The coordinator, oversight committee, and BACB staff then generated a second draft that was reviewed by dozens of additional reviewers, which in addition to being comprised of experts in ABA, also included consumers and experts in public policy. This second draft was also sent to all BACB directors for additional input. The project coordinator and BACB staff then used this feedback to produce the final document, which was approved by the BACB Board of Directors. The professionals who served as coordinator, oversight committee members, content-area leaders, content writers, and reviewers were all subject matter experts in ABA as evidenced by publication records, substantial experience providing ABA services, and leadership positions within the discipline.



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