



DEPARTMENT OF VERMONT HEALTH ACCESS
APPLIED BEHAVIOR ANALYSIS
Clinical Practice Guidelines

May 2, 2016

CONTENTS

Introduction

- Purpose
- Considerations
- Autism Spectrum Disorders (ASD)
- Applied Behavior Analysis (ABA)

Overview

- Legislation

Standards for Service Delivery

- ABA provider requirements
 - Board Certified Behavior Analyst (BCBA)
 - Board Certified Behavior Analyst-Doctorate (BCBA-D)
 - Board Certified assistant Behavior Analyst (BCaBA)
 - Behavior Technicians (BT)
- Case load recommendations
- Eligibility for services
- Prior authorization
- Re-authorization
- Denials
- Treatment plan requirements
 - ABA Treatment delivery setting
 - Treatment duration
 - Examples of behavioral targets
 - Use of restraint and seclusion
 - Parents, caregivers and family members
 - Supervision
 - Coordination with other health/mental health providers
 - Transition/discharge
 - Exclusions

INTRODUCTION

Purpose

The *Vermont Applied Behavior Analysis Guidelines* were created to provide Vermont practitioners with a consolidated set of recommendations and best practices suggestions for the treatment of Applied Behavior Analysis (ABA) for individuals diagnosed with Autism Spectrum Disorder (ASD). The content of these *Guidelines* is based on scientific evidence, best practice guidelines from nationally recognized organizations, professional standards of care, and expert clinical opinions. This document is intended to supply ABA providers with a user friendly guide to the application of ABA as an effective behavior health treatment procedure for individuals diagnosed with ASD.

Considerations

This document is meant exclusively as guidance for providers of ABA services and is intended to provide recommendations and best practice suggestions. A customized treatment plan is a defining feature of ABA as well as an integral component of successful treatment for those diagnosed with ASD. Additional behavioral health treatment techniques often used in conjunction with ABA for the treatment of ASD are not addressed within this manual.

Autism Spectrum Disorders (ASD)

As defined in the Diagnostic and Statistical Manual (DSM-5) of the American Psychiatric Association, ASD is a neurodevelopmental disorder characterized by persistent impairment in reciprocal social communication and social interaction, and restricted, repetitive patterns of behavior, interests, or activities. These symptoms are present from early childhood and limit or impair everyday functioning. Manifestations of the disorder vary greatly depending on the severity of the autistic condition, developmental level, and chronological age; hence, the term spectrum. Recent reported frequencies for ASD in the United States have approached 1% of the population. Symptoms of ASD are typically recognized during the second year of life (12-24 months of age) but may be seen earlier than 12 months if developmental delays are severe, or noted later than 24 months if symptoms are more subtle. Improved reliability of diagnosis can be influenced by the availability of standardized behavioral diagnostic instruments with good psychometric properties, including caregiver interviews, questionnaires and child observation measures (American Psychiatric Association, Diagnostic and Statistical Manual of Mental Health, 5th Edition).

Applied Behavior Analysis (ABA)

Applied behavior analysis (ABA) is a scientific approach for discovering environmental variables that reliably influence socially significant behavior and for developing a technology of behavior change that takes practice advantage of those discoveries (Applied Behavior Analysis; Cooper, Heron, Heward 2014). The ABA treatment process begins by evaluating an individual's past and current environment in relation to genetics and ongoing physiological variables. An individualized ABA treatment plan is created using observation, measurement, and functional analysis by identifying changes in environmental events through specialized assessment methods. ABA focuses on treating behavioral difficulties by changing the individual's environment rather than focusing on variables that are unlikely to change. Therefore, ABA evaluates antecedents, behaviors and consequences in order to change an individual's environment.

OVERVIEW

Legislation

Act 158 (8 V.S.A. § 4088i.) requires private and Medicaid insurance plans to cover evidence-based diagnosis and treatment of autism spectrum disorders, including applied behavioral analysis supervised by nationally board-certified behavior analysts, for children birth until the age of 21 years.

As defined in Act 158, "applied behavior analysis" means the design, implementation and evaluation of environmental modifications using behavioral stimuli and consequences to produce socially significant improvement in human behavior. The term includes direct observation, measurement, and functional analysis of the relationship between environment and behavior. ABA includes a wide variety of evidence-based strategies to impact behavior.

The act further indicates that "behavioral health treatment" means evidence-based counseling and treatment programs, including applied behavior analysis, that are necessary to develop skills and abilities for the maximum reduction of physical or mental disability and for restoration of an individual to his or her best functional level, or to ensure that an individual under the age of 21 achieves proper growth and development.

Please refer to: <http://www.leg.state.vt.us/docs/2012/Acts/ACT158.pdf>

STANDARDS FOR SERVICE DELIVERY

ABA Provider Requirements

Within ABA treatment there are four levels of treatment providers who are implementing ABA: **Board Certified Behavior Analyst (BCBA)**; **Board Certified Behavior Analyst-Doctorate (BCBA-D)**; **Board Certified assistant Behavior Analyst (BCaBA)**; and **Behavior Technician (BT)**.

A **BCBA** is required to have a minimum of a master's degree in behavior analysis, or a related field such as; education, psychology, special education, counseling or social work. A BCBA is certified through the national Behavior Analyst Certification Board (BACB) and must be free from sanctions and disciplinary actions on their certification and/or license, as well as no Medicare/Medicaid sanctions or federal exclusions. This individual must be covered by professional liability insurance. A BCBA conducts descriptive and systematic behavioral assessments, including functional analyses, and provides behavior analytic interpretations of the results. The BCBA designs and supervises behavior interventions and effectively develops and implements appropriate assessments and intervention methods for the use in varied situations and for a range of cases. The BCBA teaches others to carry out ethical and effective behavior analytic interventions based on published research and designs and delivers instruction in behavior analysis. BCBA's also supervise the work of others providing interventions of behavior analysis. (From: <http://bacb.com/credentials/>)

A **BCBA-D** is required to have the credentials of a BCBA along with a degree from a doctoral program accredited by the Association for Behavior Analysis International (at the time the degree was earned), or has earned a doctoral degree from an accredited university in which he or she conducted a behavior-analytic dissertation; and passed at least two behavior analytic courses as part of the doctoral program of study; and met all the BCBA coursework requirements prior to receiving the doctoral degree. A BCBA-D is certified through the BACB, and must be free from sanctions or disciplinary actions on their certification and/or license, as well as no Medicare/Medicaid sanctions or federal exclusions. This individual must be

covered by professional liability insurance. A BCBA-D has the same responsibilities as a BCBA. (From: <http://bacb.com/credentials/>)

A **BCaBA** is required to have a minimum of a bachelor's degree in behavior analysis, or a related field such as; education, psychology, special education, counseling or social work. BCaBAs are certified through the BACB and are required to be supervised directly by a BCBA. BCaBAs can conduct descriptive behavioral assessments, interpret the results, and design ethical and effective behavior analytic interventions for beneficiaries. The BCaBA may teach others to carry out interventions and supervise behavioral technicians once the BCaBA has demonstrated competency with the procedures involved under the direct supervision of a BCBA. (From: <http://bacb.com/credentials/>)

A **BT** is a paraprofessional that holds a bachelor's degree or is pursuing a bachelor's degree preferably in a human services field (relevant experience may be exchanged for a degree). A BT must be supervised by a licensed BCBA and must have the following training in order to work directly with beneficiaries: at least 40 hours of training in the implementation of ABA to include a minimum of 3 hours of ASD specific training and a minimum of 3 hours of ethics and professional conduct specific training; current first aid certification (renewed every three years); universal precautions; current CPR certification (renewed annually); confidentiality, abuse and neglect reporting training; approved background check. BTs are paraprofessionals practicing under the close, ongoing supervision of a BCBA supervisor. The BTs primary responsibility is for the direct implementation of skill-acquisition and behavior-reduction plans developed by the supervisor. BTs do not design intervention or assessment plans but may collect data. The supervisor of the BT is responsible for determining which tasks the BT may perform based on his/her training, experience, and competence. The BTs supervisor is ultimately responsible for the work performed by the BT. (From: <http://bacb.com/credentials/>)

Caseload recommendations

BCBAs should carry a caseload that allows them to provide appropriate case supervision and to facilitate effective treatment delivery safely. Caseload size for the BCBA is typically determined by the following factors: complexity and needs of the clients in the caseload; total treatment hours delivered to the clients in the caseload; total case supervision and clinical direction required by caseload (i.e. 2 hours of supervision/monitoring of direct service of the BT with the beneficiary by the BCBA for every 10 hours of direct service provided by the BT); location and modality of supervision and treatment (for example, treatment facility verses home); and availability of support staff for the BCBA's (for example, a BCaBA).

Eligibility

All of the following criteria must be met in order for a beneficiary to meet eligibility for ABA services. The beneficiary must:

- Be under the age of 21;
- Have a DSM diagnosis of ASD;
- Have a prescription for ABA treatment written by a qualified provider;
- Meet the definition of medical necessity (section 7 of Green Mountain Care Provider Manual);
- Be medically stable; and
- Not require 24-hour medical/nursing monitoring or procedures provided in a hospital level of care.

Prior Authorizations

Prior authorization (PA) is a process used to ensure the appropriate use of health care services. The goal of PA is to ensure that the proposed health service, item, or procedure meets the medical necessity criteria; that all appropriate, less-expensive alternatives have been considered; and that the suggested service conforms to generally accepted practice parameters recognized by health care providers in the same or similar general specialty who typically treat or manage the diagnosis or condition (please refer to section 7 of Green Mountain Care Provider Manual for more information); http://vtmedicaid.com/Downloads/manuals/New%20Consolidated%20Manual/ProvManual_Consolidated_9-01-15.pdf.

All PA requests for ABA must include the following documentation:

- State of Vermont Uniform Medical Prior Authorization Form; and
- Applied Behavior Analysis (ABA) services supplemental authorization form; and
- Prescription for ABA; and
- A current diagnostic assessment (the DVHA may request a reassessment be provided if medically necessary and additional services are being requested). The diagnostic assessment should utilize autism diagnostic tool(s) and must be conducted by a qualified professional including; a board certified or board eligible psychiatrist, doctorate-level licensed psychologist, a board certified or board eligible neurologist, a developmental-behavioral or neurodevelopmental disabilities pediatrician, or a masters-level licensed clinician who is experienced in the diagnosis and treatment of autism. Additionally, it is recommended that a diagnostic evaluation is best conducted by an interdisciplinary team of child specialists with expertise in ASD; and
- An assessment by a board certified behavioral analyst (BCBA) recommending ABA specific treatment. Assessment should include: direct observation of the beneficiary; interview with the beneficiary, parent(s)/guardian(s), caregiver(s) teacher(s) and other professionals involved in the beneficiary's care such as speech and language pathologist, therapist, occupational therapist etc., *to the extent possible*; file review; administration of behavior scales or other assessment tools; and integration of existing information to establish current functioning across domains including language/communication, motor, cognitive, social/emotional and adaptive behavior; and
- Documentation of treatment goals and, if applicable, progress of goals; and
- Completion of the ABA Provider Services Report Form; and
- ABA treatment plan specific to beneficiary; and a list of all staff members, including the BCBA, BCABAs (Board Certified assistant Behavior Analyst) and BTs (Behavior Technicians) who will be working directly with the beneficiary. This list should include provider names and qualifications. If additional team members are being added to the team of providers, the BCBA should notify the DVHA as soon as possible.

Once a PA request is received by the DVHA, utilization review staff will review the information and make a determination using the McKesson InterQual level of criteria. The InterQual criteria is evidence based framework that assists in defining the appropriate intensity of services to meet an individual's health needs.

Utilization review staff will notify the provider of the determination within three business days of receiving a PA request, followed by a written notice of decision. Possible decisions include: "approved", "approved with modifications", "denied" or "awaiting further information".

If further information is required, utilization review staff will contact the provider and request the missing information. The provider has 14 calendar days to submit the missing information. If the information is not received within 14 days of the request, the PA will be denied due to incomplete or insufficient information.

If a PA is denied or authorized at a lower level than requested (lesser number of treatment hours than requested), the provider may request a secondary review. (Please refer to Secondary Review section of DVHA standard operating procedures manual for Vermont Medicaid inpatient psychiatric and detoxification authorizations at: <http://dvha.vermont.gov/for-providers/psychiatric-inpatient-authorization-manual-3-12-13-revision.pdf>)

Re-Authorizations

Requests for re-authorizations will happen at least every six months as determined by the DVHA. At the time of re-authorization, providers will be required to submit a service report form and an updated treatment plan (including a brief summary of how the beneficiary has responded to ABA services since the last review date). DVHA will ensure that the treatment plan has been reviewed and signed off on by an ABA consultant quarterly and every time there is a significant change to the plan. The DVHA has the right to request clinical files from designated agencies and providers to monitor compliance with adopted guidelines. If the beneficiary's symptoms are not improving or appear to be worsening, discontinuation of services should be considered. After reviewing the re-authorization request, utilization review staff will make a determination on whether or not the beneficiary continues to meet continued care criteria for ABA services.

Denials

If a PA request is denied or authorized at a lower level than requested (e.g. fewer approved treatment hours), the provider may submit an appeal to the DVHA and request a secondary review. A secondary review allows the provider to supply additional information for consideration. It is strictly a review of the decision; it is not a process to authorize payment for the particular beneficiary for the specified service. Requests for a secondary review must be made no later than 14 days after the utilization reviewer first gives notice. Please refer to Secondary Review section of DVHA standard operating procedures manual for Vermont Medicaid inpatient psychiatric and detoxification authorizations: <http://dvha.vermont.gov/for-providers/psychiatric-inpatient-authorization-manual-3-12-13-revision.pdf>

ABA Treatment Plan Requirements

ABA treatment plans are developed by BCBAs. Plans should be based on completed assessments. The beneficiary's strengths and challenges across all domains should be considered within the development of the plan. The BCBA uses direct observation of the beneficiary as well as interviews with the beneficiary, caregiver, teacher, and other professionals. The BCBA should conduct a file review and administer behavior scales and other appropriate assessments. The BCBA is responsible summarizing and analyzing data, evaluating client progress towards treatment goals, adjusting treatment protocols based on data, monitoring treatment integrity, training and consulting with caregivers and other professionals, evaluating risk management and crisis management, ensuring satisfactory implementation of treatment protocols, reporting progress towards treatment goals and developing and oversee transition/discharge plan. Best practice states that this is done through *direct* and *indirect* supervision. *Direct supervision* activities include observing treatment implementation for potential program revisions, monitoring treatment integrity to ensure satisfactory implementation of prescribed protocols and directing staff and/or caregivers in the implementation of new or revised treatment protocols with client present (coaching). *Indirect supervision* activities include developing individualized treatment goals, protocols, and data collection systems, summarizing and analyzing data, evaluating client's progress towards goals and adjusting interventions based on data. Indirect supervision activities also include coordination of care with other professionals and reporting progress towards

treatment goals and interventions in place. Other indirect supervision activities include reviewing client progress with staff without the client present to refine treatment protocols and also meeting with staff and caregivers to discuss how to implement new or revised treatment protocols without the client present.

Treatment delivery setting:

ABA strives to promote generalization of therapeutic benefits in a variety of settings. Treatment can happen in schools, homes, institutions, group homes, hospitals and business offices. When possible, beneficiaries under the age of three should receive some treatment in their home environments. ABA treatment plans should specify where delivery of service will happen. Treatment plans should incorporate service delivery into the beneficiaries' home in addition to natural environments (i.e. the community) where the skills are intended to be utilized.

Treatment duration:

Treatment duration is based on an evaluation of the beneficiaries' response to treatment. This evaluation process should happen toward the end of an authorization period and prior to the request of an additional authorization. Some beneficiaries may require continued treatment across multiple authorization periods and will continue to demonstrate medical necessity.

Examples of behavioral targets:

The ABA treatment plan should specify the behavioral targets that are to be addressed. Behavioral targets should be individualized and measurable with clear goals, objectives, and anticipated outcomes. The following are behavioral targets that are often identified as needing assistance.

- Generalizing skills acquired in treatment settings into the natural environments (home and community).
- Reducing or replacing self-injurious or aggressive behaviors.
- Training in functional communication.
- Participating in routines that reinforce physical and emotional health.
- Developing daily living skills.
- Reducing ritualistic or preservative behaviors.

Use of restraint and seclusion:

According to The Association for Behavior Analysis International (ABAI) website (<https://www.abainternational.org/about-us/policies-and-positions/restraint-and-seclusion,-2010.aspx>) ABAI and its members "strongly oppose the inappropriate or unnecessary use of seclusion, restraint, or other intrusive interventions. Although many persons with severe behavior problems can be effectively treated without the use of any restrictive interventions, restraint may be necessary on some rare occasions with meticulous clinical oversight and controls. In addition, a carefully planned and monitored use of time-out from reinforcement can be acceptable under restricted circumstances. Seclusion is sometimes necessary or needed, but behavior analysts would support only the most highly monitored and ethical practices associated with such use." It further states, "This Position Statement on Restraint and Seclusion summarizes critical guiding principles. With a strong adherence to professional judgment and best practice,

it also describes the conditions under which seclusion and restraint may be necessary and outlines proper strategy to implement these procedures appropriately and safely. This statement is consistent with ABAI's 1989 Position Statement on the Right to Effective Behavioral Treatment, which asserts numerous rights, including access to the most effective treatments available, while emphasizing extensive procedural safeguards.”

The Association of Professional Behavior Analysts (APBA), “Position Statement on the Use of Restraint and Seclusion as Interventions for Dangerous and Destructive Behaviors: Supporting Research and Practice Guidelines”, discusses the use of restraint and seclusion as a means of intervention for individuals who display self-injurious behavior (SIB). Research has demonstrated that individuals with the most severe behavior problems can be helped with interventions developed by the discipline of applied behavior analysis (ABA). The APBA “The Use of Restraint and Seclusion as Intervention for Dangerous and Destructive Behaviors” position statement reads “Some individuals diagnosed with developmental disabilities and mental health disorders exhibit severe and dangerous problem behaviors that can pose significant risks to their own safety and health and the safety and health of people around them. Examples include self-injurious behavior and physical aggression towards others, which can result in severe injuries, even death. Research and practice in applied behavior analysis (ABA) over the past five decades have produced safe, humane, positive, and effective methods for preventing or decreasing the occurrence of such behaviors. When those methods are implemented correctly as part of a professionally designed and comprehensive intervention plan, they have been shown to result in dramatic improvements in severe problem behavior as well as the quality of individuals’ lives”. Please refer to the following websites for more information: <https://drive.google.com/file/d/0B3CGK1GZRaf4bW5UWVlyUHFxekhwMHJkUmlBOC1xQ2dta2xr/view?pref=2&pli=1> and <https://drive.google.com/file/d/0B3CGK1GZRaf4dDNzN2EwZGd0NGNjX1kyYXNpZHFTUVNHeWZB/view?pref=2&pli=1>

The DVHA’s stance on the use of restraint and seclusion is in alignment with ABAI’s statement above. All lesser restrictive interventions should be utilized first. Restraint and/or seclusion should be used only as a last resort. Clinical judgment and best practice need to be highly regarded in making the decision to utilize restraint and/or seclusion.

Parents, caregivers and family members:

ABA treatment plans should include parent and caregiver training that involves the parents receiving direct and indirect coaching, and with the emphasis on developing skills and support. ABA services assist parents/caregivers in the development of skills to support, prompt, and reinforce when appropriate, and when modeling an intervention, the child should be present. When reviewing a new protocol, the child should not be present. Guidance for determining the need and adjustment of the natural environments (home and community) is also provided. Training for parents should be individualized and customized and may include modeling, skill demonstration, educational presentations, coaching, and support for problem solving and strategy implementation. ABA treatment plans should clearly identify how the parent(s) and/or caregiver(s) will be trained in the skills necessary to support their child in meeting treatment goals. It is recommended that parent training happen on a weekly basis, in order to keep the parent/caregiver current on interventions and treatment approaches.

Supervision:

ABA treatment requires high levels of case supervision to ensure effective outcomes because of the individualized nature of treatment, the reliance on frequent collection and analysis of client data, and the need for adjustments to the treatment plan. Supervision should include both *direct* and *indirect* activities as they are critical to producing best treatment outcomes concurrently with the delivery of direct treatment to the client. *Direct supervision* includes directly observing BT implementing interventions with client, monitoring treatment integrity to ensure the programs are implemented with fidelity, and directing staff and/or caregivers in the implementation of treatment protocols. *Indirect supervision* includes developing individualized programming and data collection systems, summarizing and analyzing data, evaluating clients progress towards goals, adjusting treatment protocols based on data, coordinating with related service providers, crisis intervention, reporting progress, developing and overseeing transition/discharge plans, reviewing clients progress with staff without the client present to refine individualized programs/protocols, reviewing and directing staff and/or caregivers in the implementation of a new or revised treatment protocol (without the client present).

Coordination with other health/mental health providers:

ABA providers should consult and coordinate care with other health/mental health providers to ensure the beneficiary's progress. Coordination among the health/mental health providers who are involved in the beneficiary's treatment increases the probability that the beneficiary will achieve his/her treatment goals. ABA treatment plans should identify treatment providers involved, specify existing services, and outline a strategy for continued communication and coordination of future services to be provided. It is recommended that collaboration between related service providers should happen on a monthly basis or more frequently if needed.

Transition/discharge:

Transition and discharge planning from ABA treatment should include specific reasons as to why ABA treatment is no longer required or needed. The plan should include recommendations for follow up services for the beneficiary and the family. Discharge planning from ABA treatment should be gradual and initiated three months prior to discharge in order to best prepare the beneficiary and his/her care providers/family. Transition and discharge planning from ABA services should begin when at least one of the following occurs:

- The beneficiary has achieved treatment goals; or
- The beneficiary no longer meets diagnostic criteria for ASD (as measured by appropriate standardized protocols); or
- The beneficiary has not demonstrated progress toward goals following modification to the treatment plan over successive authorization periods. Progress, for this document, is defined as: a change in behavior that is durable over time and exists outside of treatment sessions. The changes are noticed in the beneficiary's residence, school, and community settings; or
- Treatment appears to be negatively impacting the beneficiary and is causing symptoms to become persistently worse; or
- The beneficiary demonstrates an inability to maintain long-term gains from the treatment provided.

Exclusions:

Authorization of ABA services will not be approved for any of the following:

- Vocational rehabilitation;
- Services duplicative of those provided under an individualized educational plan (IEP): ABA services authorized by DVHA cannot occur at the same time (hour of day) as ABA services provided under an IEP;
- Supportive respite care;
- Orientation and mobility;
- For individuals requiring 24 hour medical/nursing monitoring;
- Psychiatric hospitalization;
- Individuals in long term out of home placement/care outside a community setting; or
- Individuals who have reached the age of twenty-one.