# Clarifications Regarding *Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers (2nd ed.)*

FEBRUARY 2019

In 2014, the Behavior Analyst Certification Board® (BACB®) published the second edition of *Applied Behavior Analysis Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers* (referred to hereafter as the *Guidelines*). As indicated in the Executive Summary and elsewhere, the document's main purpose is to provide healthcare funders and managers with information to guide decision-making about applied behavior analysis (ABA) treatment for developing, maintaining, or restoring the functioning of individuals diagnosed with autism spectrum disorder (ASD). The *Guidelines* reflect the scientific evidence and expert clinical opinion about ABA interventions that were extant when the *Guidelines* were published.

The purpose of this statement is to assist payers and providers by clarifying and amplifying the *Guidelines* that pertain to the **intensity of treatment**, the **intensity of case supervision**, and **caregiver training**. Some of the key features of ABA services that are outlined in the *Guidelines* are reiterated first to provide emphasis and context.

## KEY FEATURES OF ABA SERVICES

By its very nature, human behavior is complex. So is ASD, which affects individuals in myriad different ways. Behavior analysis is a natural science whose subject matter is individual behavior interacting dynamically with the physical and social environment. Research in basic and applied behavior analysis conducted over several decades has produced a very large array of procedures for improving socially important behaviors by changing environmental events. Designing and implementing effective ABA interventions for people with ASD therefore involves many variables. Although the *Guidelines* reference some quantitative treatment parameters that have been derived from research and expert opinion, they state repeatedly that ***all aspects of ABA interventions must be customized to the strengths, needs, preferences, and environmental circumstances of each individual client and their caregivers, and must be flexible so as to accommodate changes that occur over the course of treatment.*** Some excerpts are highlighted here:

- Due to the variability and symptom presentation, no two individuals with an ASD diagnosis are the same with respect to how the disorder manifests and its impact on families (p. 4).
- …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 (p. 4).
- [Core characteristics of ABA include] an objective assessment and analysis of the client's condition by observing how the environment affects the client's behavior … [and] … understanding the context of the behavior and the behavior's value to the individual, the family, and the community (p. 10).
- [One of the essential practice elements of ABA is the] use of a carefully constructed, individualized and detailed behavior-analytic treatment plan (p. 11).
- Treatment may vary [across individuals] in terms of intensity and duration, the complexity and range of treatment goals, and the extent of direct treatment provided (p. 12).

- Treatment programs … vary along several programmatic dimensions, including the degree to which they are primarily provider- or client-directed … Other variations include the extent to which peers or parents are involved in the delivery of treatment … Decisions about how these various dimensions are implemented within individual treatment plans must reflect many variables … (p. 15).
- Treatment dosage … will vary with each client and should reflect the goals of treatment, specific client needs, and response to treatment (p. 25).
- ABA treatment requires comparatively high levels of case supervision to ensure effective outcomes because of … the individualized nature of treatment … (p. 31).
- Training of parents and other caregivers usually involves a systematic, individualized curriculum … (p. 37).

## INTENSITY OF TREATMENT

The *Guidelines* note that treatment intensity (sometimes referred to as dosage) typically comprises both the number of hours of direct treatment per week and the total duration of treatment. The comments that follow focus primarily on the number of hours of treatment per week.

**Focused ABA treatment** is described in the *Guidelines* as "…treatment provided directly to the client for a limited number of behavioral targets [functional skills, problem behaviors]." Intensity levels in a range of 10-25 hours per week are mentioned, with the caveat that the intensity may need to be higher depending on the nature of the target behaviors and other considerations, individualized to each client. For instance, behaviors that put the client and/or others at risk of harm may well warrant high-intensity focused ABA treatment for some period of time. Those may include maladaptive behaviors to be reduced and/or adaptive behaviors that need to be developed or strengthened in order to enhance the client's health, safety, and overall functioning.

**Comprehensive ABA treatment** is described as "…treatment of the multiple affected developmental domains, such as cognitive, communicative, social, emotional, and adaptive functioning" as well as maladaptive behaviors. The *Guidelines* state that intensity levels of 30-40 hours per week are common and necessary to achieve meaningful improvements in a large number of treatment targets. The *Guidelines* emphasize, however, that the intensity of comprehensive treatment must be individualized to the client's characteristics and other factors. To expand on those points, we note that analyses of data from multiple studies of comprehensive ABA treatment for children with ASD show that

- high-intensity treatment produces the largest improvements (Eldevik, Hastings, Hughes, Jahr, Eikeseth, & Cross, 2009, 2010; Klintwall, Eldevik, & Eikeseth, 2015; Virués-Ortega, Rodríguez, & Yu, 2013). At least 36 hours of direct ABA treatment per week for at least two years is associated with clinically significant, reliable changes in cognitive and adaptive skills (Eldevik et al., 2010).
- low-intensity ABA treatment produces smaller improvements than high-intensity ABA treatment (e.g., Eldevik, Eikeseth, Jahr, & Smith, 2006; Eldevik, Hastings, Jahr, & Hughes, 2013; Green, 2011; Peters-Scheffer, Didden, Mulders, & Korzilius, 2010).
- eclectic treatment comprising some ABA treatment plus a mixture of other therapies or methods is ineffective (at best) for most children with ASD, even when it is individualized and intensive (Eikeseth, Smith, Jahr, & Eldevik, 2002, 2007; Eldevik et al., 2009, 2010; Howard, Sparkman, Cohen, Green, & Stanislaw, 2005; Howard, Stanislaw, Green, Sparkman, & Cohen, 2014; Klintwall et al., 2015).

Although most of the participants in the studies cited above were 2-8 years of age when they entered treatment, extensive research shows that *the effectiveness of the multiple behavior-change procedures that comprise comprehensive ABA treatment is not limited to clients of a certain age or diagnosis (e.g., Hassiotis et al., 2011; Ivy & Schreck, 2016; Wong et al, 2017)*. Therefore, ***determinations as to whether ABA treatment should be focused or comprehensive and the intensity of treatment should be based on the medical necessity of the treatment for each individual client rather than the client's chronological age, duration or nature of previous ABA services, or the like.***

Whether ABA treatment is focused or comprehensive, the *Guidelines* make it clear that *treatment comprises services delivered directly to the client*. ***Therefore, if the professional behavior analyst determines that X number of hours per week of ABA treatment is medically necessary for a client, that is the number of direct ABA treatment hours that should be authorized. That number should not encompass or be reduced by the amount of time the behavior analyst spends supervising the case or training caregivers, or time the client spends in other therapies, services, or activities. In other words, case supervision and caregiver training services should be rendered in addition to the services delivered directly to the client, and the time involved in case supervision and caregiver training should not be deducted from or offset against the number of hours of direct ABA treatment recommended by the professional behavior analyst. Nor should time the client spends in activities such as school and other therapies be counted in or deducted from the recommended number of hours of ABA treatment.***

## INTENSITY OF CASE SUPERVISION (CLINICAL DIRECTION)

The *Guidelines* note that supervision of a client's case (also referred to as clinical direction) typically involves a number of different activities on the part of the professional behavior analyst, and that the appropriate intensity and other aspects of case supervision are determined by multiple variables. Although the *Guidelines* characterize a minimum of 2 hours of supervision for every 10 hours of direct treatment as the general standard of care, they also specify (p. 34) that

- …the amount of supervision for each case must be responsive to individual client needs…
- [The] ratio of case supervision hours to direct treatment hours reflects the complexity of the client's ASD symptoms and the responsive, individualized, data-based decision-making which characterizes ABA treatment.

***In other words, the proportion of supervision hours to direct treatment hours suggested in the Guidelines is a general parameter that should not be interpreted or applied rigidly to every case. Instead, if the professional behavior analyst determines that X number of hours per week of case supervision is required, that is the number of hours that should be authorized, with the understanding that the number may need to be adjusted up or down over the course of treatment. Further, those hours must not be counted toward, substituted for, or offset against the hours of ABA treatment delivered directly to the client.***

## CAREGIVER TRAINING

The *Guidelines* state that involving family members and other caregivers in treatment planning and training them to implement certain components of the client's treatment plan are important to promote carryover of treatment gains to times, people, and places outside of treatment. They also describe the many challenges faced by the caregivers of people with ASD, and emphasize that training must be individualized to the caregivers' needs, values, priorities, and circumstances. For some families, the time and effort that can be devoted to acquiring skills to implement ABA procedures is constrained by such factors as the number of parents in the household, parental employment outside the home (including deployments in the case of military families), the needs of siblings and other family members living in the home, language differences, and financial and other resources. Although efforts should be made to involve parents and other caregivers in treatment to the greatest extent feasible, *clients should not be deprived of the opportunity to benefit from medically necessary ABA interventions if caregiver involvement is less than optimal*. That is, ***authorizations for services to the client should not be predicated on requirements for parents or other caregivers to participate in training or to implement treatment protocols with the client for any fixed, pre-determined amount of time. Further, that time must not be counted toward, substituted for, or offset against ABA services delivered directly to the client by professional behavior analysts, assistant behavior analysts, and behavior technicians. As the Guidelines state, "…while family training is supportive of the overall treatment plan, it is not a replacement for professionally directed and implemented treatment" (p. 37).***

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