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DISCUSSION AND REVIEW PAPER

Navigating a Managed Care Peer Review: Guidance for Clinicians Using Applied Behavior Analysis in the Treatment of Children on the Autism Spectrum

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Abstract As autism rates increase, providers of applied behavioral analysis (ABA) services are more frequently engaging with managed care companies to discuss the medical necessity of treatment. In an effort to maximize the efficiency and effectiveness of these reviews, we draw upon our experience as *peer reviewers* for a managed care company to guide ABA providers in discussions with managed care on behalf of their patients. In this article, we first provide an overview of the managed care peer review process. We then discuss the elements of medical necessity that managed care companies ask about during the review process. Finally, we review specific strategies that ABA providers can use during the process to optimize authorizations for payment for services. Throughout the paper, we provide sample dialogues between providers and peer reviewers based on our experience working for a managed care company along with specific recommendations that we hope will ensure a more collegial and effective peer review process for all involved.

Keywords Managed care · Applied behavioral analysis · Autism · Peer review

The rate of children diagnosed on the autism spectrum has jumped from 1 out of every 150 children in the year 2000 to 1 out of every 68 children in the year 2014 (Autism and Developmental Disabilities Monitoring Network, 2014). Complicating effective intervention is the rate of psychiatric and/or developmental comorbidities among children on the autism spectrum. A retrospective study designed to determine the rate of comorbid conditions of over 2500 children on the spectrum found that 83 % of the study's population had one or more non-autism spectrum, developmental disorder; either a neurologic disorder (16 %), psychiatric disorder, (10 %); or a genetic or neurologic disorder (4 %) (Levy, Giarelli, Lee, Schieve, Kirby, Cunniff, Nicholas, Reaven, & Rice, 2010). Most consistently present was intellectual disability, with 54 % of the population having intellectual quotient (IQ) scores of less than 85 and over 30 % of that group scoring less than 70.

As of this writing, 41 states mandate insurance coverage for applied behavioral analysis (ABA) (Autism Home Support Services, 2015) when such services are deemed medically necessary in the treatment of autism. Accordingly, providers are increasingly engaging in peer reviews with managed care companies to discuss the elements of medical necessity as they apply to specific cases.

While peer reviews with managed care companies can feel burdensome, time consuming and even contentious to providers, they need not be any of these. As professionals who conduct per reviews for a managed care company, we have reviewed thousands of requests for coverage of ABA for individuals with autism over the past 15 years. In this paper, we offer a unique set of observations we believe will aide ABA providers in seeking coverage for these services. To our knowledge, this is the first article of its kind written specifically for practitioners working with children on the autism spectrum. Our goals for this article are to provide an overview of the peer review process and strategies for more efficient, effective peer review interactions.

Throughout the article, we provide a number of examples (with identifying information altered to protect privacy) based

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on actual peer reviews, most of them with the first author. We selected these examples because they reflect the most common conundrums faced by providers. In addition, they explain why specific questions are asked during a peer review and how the answers to those questions guide decision-making about medical necessity.

Origins of the Managed Care Peer Review

By the mid to late 1980s, modern-day managed behavioral health care organizations (MBHCOs) had been in existence just short of a decade. Charged with managing mental health benefits for myriad groups, practice guidelines were established for the most common psychiatric conditions such as anxiety and depression. Little attention was paid to autism because epidemiologically, the numbers were small, research was nascent, and requests to cover treatment were sparse.

Managed behavioral health care rose to prominence due to rising health-care costs; there were few guidelines for effective treatment and even fewer practice parameters shared industry wide. Clinicians had been free to treat their clients using treatment modalities of their own choosing, for whatever length of time the clinician deemed appropriate—regardless of outcome. Indeed, the initial use of the term "medically necessary" was initially without formal definition. It originated as a prompt from the physician to the third-party payer, indicating that the provider determined that the service in question was important enough (i.e., medically necessary) to the well-being of the patient to merit reimbursement. Today, the term remains an enigma to many practitioners because it cannot be defined in a single sentence, but rather as a group of characteristics that must be met in order to qualify for usage of the term.

In addition to complications related to diagnoses and effective treatment, those practicing in the early 1980s were not accustomed to oversight or examination of their clinical work. The introduction of the clinical review between the provider and the MBHCO was unprecedented and not very well received. The shift from complete autonomy to accountability for practice engendered not only anger and frustration among providers but also anxiety and concern as to how these new rules were going to change patient care and providers' revenue.

Conflict over these changes, however, cannot be solely ascribed to the practitioner. The industry of managed behavioral health contributed to the discord. For example, definitions of medical necessity were not as readily available from companies as they are today. The lack of essential information needed to comply with parameters for authorization understandably hardened providers' perceptions about the motives of managed care.

Practitioners working with children on the spectrum today have been spared much of the initial angst endured by therapists of more than 30 years ago when the practice of applied behavior analysis was relatively unknown outside of a small group of researchers and practitioners. The number of children with autism in treatment was a fraction of the number today, and there were few training programs to prepare individuals for practice. The Behavior Analyst Certification Board (BACB) was not created until 1998. Although some clinics have instituted internal peer reviews to improve clinical care and enhance outcomes (e.g., Luiselli & Russo, 2005), in this paper, we focus here on provider strategies for peer reviews with managed care companies which we hope will both enhance care and lead to more effective advocacy for ABA when clinically indicated.

The Review Process

Providers working with children on the autism spectrum and who are using ABA may need to interact with professional representatives from the MBHCO regarding coverage. These conversations are referred to as "clinical reviews." They occur for a variety of reasons and can occur at any point during treatment:

1. Initiation of treatment at the completion of a behavioral assessment. The purpose of this review is to ensure the treatment plan is in accordance with basic tenets of ABA including identification of behavioral goals, methods of measuring progress over baseline, parent training, and identification of any known barriers to the child with autism's success.
2. Requests for coverage of ongoing treatment at the end of an authorization period. The purpose of this review is to determine if medical necessity (discussed in the next section) is still present. The reviewer specifically looks for meaningful progress on goals over baseline. In the event of limited progress, the reviewer looks for changes in the treatment plan to address those barriers.
3. A significant amount of time between coverage reviews has elapsed. This situation may be due to conditions beyond the control of the provider or the reviewer. The most common condition dictating the time between reviews is the set of temporal requirements established by the state in which treatment occurs. For example, some states require authorizations be created for no less than 6 months. Others require the authorization period to be no less than every 12 months, which means the MBHCO is not allowed to call for updates or coverage reviews before the required time has elapsed. This situation does not, however, preclude the provider reaching out to the peer reviewer if questions arise during that 12-month period.

Clinical reviews are typically the first step and, in many cases, the only step required to procure additional

authorization of coverage. These reviews are generally conducted by clinicians working for the MBHCO.

When the reviewer is satisfied that all necessary elements for ongoing authorization are present, the reviewer will authorize coverage for the request. However, in those cases where the clinical reviewer is unable to obtain enough information to render a decision about medical necessity, or believes that medical necessity is not present, the case is often referred for a *peer review*. When offered a peer review, the provider has two options: engage in another live review or opt out of the live review and agree to a *read-only* review which means the authorization decision is based solely on information that is in the record.

In the event the provider opts for a live review, the most important action we can recommend is preparation. Understand exactly *why* the case is recommended for a peer review. All determinations are based on medical necessity and benefit coverage parameters set by the health plan. These are publicly available online for easy reference. Alternately, a hard copy can be sent in the event of limited or no access to the internet. Ask the case manager which parameter is not being met. This will help focus preparation for the peer review. Lack of preparation is one of the most common reasons cases are sent to peer review. Preparation must include familiarity with the medical necessity criteria. Repeating the same information to another peer reviewer is not likely to change the outcome.

There are times when a provider will opt out of a live review and agree to the read-only review. From the perspective of a peer reviewer, opting out of a live review may decrease the chance for an authorization because the purpose of a peer review is to obtain clarification about a part of the treatment plan or the child's progress. If the provider is not present to answer questions, there is less opportunity for the peer reviewer to consider new information, discuss barriers to progress, or otherwise, ascertain what is missing.

Most MBHCOs will make attempts to be as accommodating as possible regarding the scheduling of reviews. However, there are regulatory time constraints for making coverage decisions. The most common length of time for rendering non-urgent pre-service and concurrent care coverage determinations is 15 days. Barring extenuating circumstances, this is usually enough time to schedule a review, gather additional information, and render the determination. However, there are some states that require a determination within two business days and a few that require the determination be made within 24 h. These timeframes are mandated by states for fully insured health plans.

The provider, however, has the option of "stopping the clock" by asking to withdraw the request for services. When this happens, the timing of the review can be more thoughtful and the provider is afforded more time to prepare. Withdrawing the request (by simply asking to do so) is common under these circumstances, and the request is just as easily reinstated. There are no penalties for invoking this option.

Recommendations

- When informed that a peer review is necessary, be sure to understand why, i.e., what specific information may be missing. It will help in preparing for the review and will increase the chance for authorization of coverage.
- Educate yourself about *timeframes*; determine if the state in which you are working has imposed short timeframes for pre-service coverage determinations for insured benefit plans.

Medical Necessity

In order for health-care services to be covered under a health plan, they must be determined to be medically necessary as defined by the plan. While the definition of medically necessary may vary slightly by an insurer, a typical definition would be like the one referenced in Cigna's guidelines (Cigna, 2014): health-care services that a provider, exercising a prudent clinical judgment, would provide to a patient for the purpose of evaluating, diagnosing, or treating an illness, injury, disease, or its symptoms and are (a) required to meet the essential health needs of the patient; (b) consistent with the diagnosis of the condition for which they are required; (c) consistent in type, frequency, and duration of treatment with scientifically based guidelines as determined by medical research; (d) required for purposes other than the convenience of the provider or the comfort of the patient; and (e) rendered in the least intensive setting that is appropriate for the delivery of health care.

To properly evaluate medical necessity for behavioral interventions rendered for the treatment of autism, the following information is required:

- Diagnosis of an autism spectrum disorder as per the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) using standardized measures such as the Autism Diagnostic Observation Schedule (ADOS) (Lord & Rutter, 2012) and the Autism Diagnostic Interview-Revised (ADI-R) (Rutter & LeCouteur, 2003)
- Assessment of current functioning via the use of standardized measures
- Thorough developmental history; include any event or circumstance known to influence development on either or both a prenatal and postnatal basis, such as length of gestation; maternal alcohol or drug use; maternal illness; incidences of hypoxia or anoxia; any accident, illness or injury known to influence development (traumatic brain

injury, exposure to toxins, childhood diseases, etc.); known medical syndromes or genetic anomalies (Down syndrome, fragile X, Klinefelter syndrome, tuberous sclerosis, seizures, palsies, dystrophies, etc.); and problems with vision and/or hearing

Table 1 summarizes the characteristics of medical necessity.

Strategies for Effective and Efficient Peer Reviews

In this section, we focus on the "trouble spots," i.e., areas of misunderstanding or abject disagreement that are present frequently during a peer review for coverage of ABA. We offer explanations for many of those areas and offer suggestions about strategies that may improve efficiency.

Diagnosis

The answer to the question "What is the diagnosis?" requires more than simply *autism*. Understanding that Board Certified Behavior Analysts (BCBAs)—by virtue of the limits placed on their certification—are not allowed to render a diagnosis, reviewers will expect the provider to *know* that the diagnosis was made, when it was rendered, and by whom. The following scenario demonstrates one of the most frequent areas in which assumptions can interfere with the purpose of the review.

Provider: We're done with the behavioral assessment and are requesting 30 h of one-to-one therapy per week and an additional 3 h per week for BCBA time.
Reviewer: OK, let me get some information first…does this child have a diagnosis of autism?
Provider: Yes.
Reviewer: I understand the question might sound silly, but we just need to document information about the diagnosis…. I am looking for the name of the individual who determined the diagnosis and the child's age when it was made.
Provider: I'm not exactly sure.
Reviewer: OK, but how do you know the child actually has the diagnosis?
Provider: His mom told me.
Reviewer: Did she happen to bring in—or might you have asked about a copy of the assessment or a letter from his treating physician indicating the diagnosis?
Provider: I just don't go into that much detail with parents.

When ABA benefits first became available, there was little demand on the provider to furnish *proof* of diagnosis. This is changing. Gradually, managed care companies are requiring formal documentation attesting to the diagnosis of autism. This is due in part to providers' assumptions that a diagnosis for autism had actually been rendered when in fact, it may have been simply a diagnostic *rule out* or was made by a professional who lacked the credentials to do so, e.g., a teacher, a speech, and a language therapist or an occupational therapist.

The most effective way to ensure the diagnosis has been rendered by a qualified professional is to obtain a copy of the diagnostic evaluation and keep it in the child's record. Competent diagnostic evaluations typically include information about, e.g., significant pre- and postnatal factors, medical history including known illnesses and genetic disorders (if known), development across domains including major milestones achieved or still needing to be achieved, fine and gross motor skills, and basic vision and hearing information.

Recommendations

- Anticipate questions about the diagnosis, i.e., when it was rendered and by whom.
- Obtain a copy of the diagnostic evaluation for reference and proof, should proof be required.

Table 1 Elements required for meeting medical necessity for ABA

Patient characteristics and requirements	Treatment strategies and interventions	Outcomes
DSM-V autism diagnosis supported by symptoms	Interventions are evidence-based and consistent with recommendations for type, frequency, and duration of treatment	Measurable reduction in symptoms
Symptoms of diagnosis causing impairment	Goals are constructed *with* the patient's family (and patient, where applicable)	Symptoms are manageable
Motivation for change via adherence to treatment directives, exemplified by sufficient family involvement	Outcomes are measureable and patient and family are aware of what to expect for outcomes	Day-to-day functioning has been restored or has improved over baseline
	Occurs in the least intensive/restrictive level of care that is appropriate	
	Required for purposes other than convenience for patient or provider	

History

History is the most common element missing from an initial review. Attempts to obtain any type of history regarding a child presenting for behavioral intervention is one of the most difficult endeavors reviewers face. A part of the challenge is due to the philosophical underpinnings of behaviorism, i.e., that learning is based on the response to a stimulus that is observable and measurable. While this theory has many merits, we advise clinicians to also consider the child's history, especially with regard to comorbid conditions. The history may influence the treatment plan, goal setting, and outcomes. This is especially true when considering the child's medical and developmental history.

The goal of this section is not to challenge the underlying philosophy of behaviorism; it is simply to demonstrate how knowledge of a child's history may lead the provider to re-think expectations, consider alternative reinforcements, or to even consider the possibility that ABA may not be the best clinical fit for the child and the family.

Additionally, consideration of the history is consistent with recommendations from the BACB: "Information about medical status, prior assessment results, response to prior treatment and other relevant information may be obtained via file review and incorporated into the development of treatment goals and intervention. Examples of assessments that should be reviewed include intellectual and achievement tests, developmental assessments, assessments of comorbid mental health conditions, and evaluations of family functioning and needs. In some cases, if assessment information is incomplete, the Behavior Analyst should refer the client to other professionals for needed assessments" (BACB, 2014, *Applied Behavior Analysis. Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers*, second edition, p. 19).

We have reviewed many cases for continued coverage in which the history was ignored and where its absence led to considerable confusion about the lack of progress. The vignette below, taken from a live review illustrates this point.

"Lily" is an 11-year-old female who has been receiving 30 h of ABA intervention since she was diagnosed with autism at the age of 4. In addition to the 30 h of intervention which occurs in the home, she is in a self-contained classroom at a school for children with special needs. She attends school 25 h per week.

She is described as a loving child who smiles and gives hugs. She has made good gains in areas related to self-help and is now able to bathe alone, brush her teeth, select her own clothes, dress herself, and comb her hair.

The current target behaviors for intervention are related to speech and language. She was non-verbal when she started and is now able to tact between 80 to 90 words. When using her words, however, her speech is garbled and unintelligible to those who do not know her and sometimes even to those who do, e.g., her parents and treatment team. Lily had started using an assisted communication device to improve her communication but was recently been weaned off because she appeared to be adding new words. The provider is asking for re-authorization of 25 h per week for the next 6 months.

Provider: Good Afternoon. I was asked to talk with you about Lilly.
Peer reviewer: Yes, the case was referred for a peer review because the care manager had some questions about medical necessity, especially in the area of a fade plan and discharge criteria.
Provider: I know, but I told her there's no way we could begin a fade plan; she's really starting to catch on to the language piece but has a long way to go. I am convinced she can get to the point of communicating without the Proloquo.
Peer reviewer: Help me understand what evidence there might be for that. I understand she's been receiving ABA now, at 30 h per week for the past 7 years. I went thru all the information you sent, including the data graphs. And while she's made some gains in relation to her self-help skills, the language gains have almost been flat. Is there some reason you don't want to continue with the assisted device?
Provider: Well, I just know she can do it.
Peer reviewer: Is it possible there's another reason she might be having such a difficult time? Is there another diagnosis that might be interfering with her ability to learn?
Provider: Well, she does have a seizure disorder, but that's it and that's probably not causing the delay. Her progress is just slow—everybody makes gains at a different pace you know.
Peer reviewer: I realize that, but the limited gains in these areas in 7 years have me wondering if there isn't something that's being missed. Are there any other medical conditions or anything from her history that might suggest something else is interfering?
Provider: No.
Peer reviewer: I noticed in the write up you sent there was mention she's been diagnosed with a mitochondrial disorder. Have you spoken with mom about that at all?
Provider: No, I didn't see that and mom's never mentioned that.
Peer reviewer: Oh…well it was on the write up you just sent, in the history section.
Provider: I guess I'll have to look into that.
Peer reviewer: I am certainly not an expert on mitochondrial disorders but I am aware that it causes a number of problems like severe problems with fatigue, memory issues, intellectual disabilities, periodic 'zoning out,'

and difficulties with learning. It might be a good idea to revisit this with mom. It may be a clue as to why her learning has been slower than was expected.
Provider: OK.

The expectation is not that providers educate themselves on all medical disorders: rather, it is recognizing medical conditions when they are present and understanding the potential influence on learning. When medical information is altogether missing, the provider is expected to directly ask, e.g., "Have any of your son's doctors ever expressed concern about any medical disorder or condition?" Many providers balk at the suggestion, stating "I can't ask those questions…. I'm not a physician" or "It's really none of my business." However, as the provider, it is important to have any information that could potentially interfere with progress. Solid information allows for more effective treatment planning and for the development of realistic goals. The influence of medical conditions in children on the autism spectrum is addressed in the new code of ethics published by the BACB and which go into effect on January 2016 and states: "Behavior analysts recommend seeking a medical consultation if there is any reasonable possibility that a referred behavior is influenced by medical or biological variables" (BACB, 2014, *Professional and Ethical Compliance Code for Behavior Analysts*, p. 11).

Use of Standardized Measures in Diagnosis and Assessment of Function

There are two types of assessments for children suspected of being on the autism spectrum: (a) the diagnostic assessment and (b) the behavioral assessment. A formal diagnostic assessment is often preceded by the use of screening instruments administered by a primary care physician or a pediatrician during well-baby checks. Among the most common screening tools are the Checklist of Autism in Toddlers (CHAT) and the Modified Checklist for Autism in Toddlers (M-CHAT-R/T) (Robins, Fein, & Barton, 2009), the Screening Tool for Autism in Two-Year-Olds (STAT) (Stone & Ousley, 2015), and the Social Communication Questionnaire (SCQ) (Rutter & Bailey, 2003) for children 4 years of age and older. In and of themselves, these are not sufficient to render a diagnosis, but they are very helpful in determining who may need to be referred on for further evaluation.

Children who are referred for further diagnostic evaluation undergo a more complete assessment by an independently licensed psychologist or a board-certified physician with expertise in pediatrics, developmental pediatrics, pediatric neurology, or a similar specialty. There are many more screening tools than there are diagnostic tools. Instruments considered to be the gold standard for diagnosing on the autism spectrum are ADI-R (Rutter & LeCouteur, 2003) and the ADOS-2 (Lord & Rutter, 2012).

Following confirmation of the diagnosis and prior to initiating treatment, children are behaviorally assessed by the supervising BCBA to determine deficits and strengths and to use that information in the formation of a treatment plan.

The initial behavioral assessment is used as the baseline against which later gains are plotted to provide an "at a glance" depiction of change over time. These changes are measured against baseline data for each targeted behavior. The simplest depiction of these results is a simple behavioral graph demonstrating change over time.

There are numerous assessment tools for measuring change against baseline. Instruments typically measure a series of skills across several domains and are broken down into much smaller components for mastery.

When providers are asked about instruments used to establish a baseline, against which progress will be measured, it is not uncommon to hear they refrain from using a standardized instrument but rather have developed their own instrument. While the development of a measuring tool may add elements to the clinical picture, most MBHCOs want to ascertain that tools in use are valid (i.e., actually measure what they claim to measure) and reliable (i.e., that they do so consistently over time). The use of standardized instruments helps reassure consistency of meaning when discussing outcomes.

Recommendations

- Familiarize yourself with the elements of medical necessity for the governing health plan at issue or the MBHCO with whom you will be reviewing as there may be slight variations.
- Anticipate the type of information needed for reviewing the case at hand and have it available in order to reduce the amount of time you will spend on the phone with the reviewer.

Necessary Elements of a Treatment Plan

As mentioned earlier, preparing a case for coverage review is critical. Deciphering which parts of the case are in question allows a more focused preparation. Preparing for the review is different from writing the treatment plan. The purpose of the written plan is to provide a description of the goals, i.e., the *what* that is targeted for change. In addition to reviewing what is going to change, the peer reviewer will likely want to know *how* those changes are expected to occur, i.e., what are the specific mechanisms used to obtain compliance from the child as well as the parents.

In the following sections, we cover treatment guidelines and identify those areas most likely to be problematic during a review. The four major elements needed for a treatment plan are the following: (1) design and supervision of

plan by an appropriately certified behavior analyst, i.e., either a BCBA or a BCBA-D, or an independently licensed mental health professional with appropriate training in ABA; (2) operationally defined target behaviors with baseline measures for each target and changes in those behaviors over time; (3) parent/caregiver participation; and (4) fade plan leading to discharge.

Supervisor Role and Requirements

The BACB has established performance expectations for the role of supervisor; among these are the completion of systematic behavioral assessments, interpretation of results, evaluation of progress, changes to the treatment plan when necessary, and supervision of the behavior therapist(s) (BACB, 2014, Applied Behavior Analysis. Treatment of Autism Spectrum Disorder: Practice Guidelines for Healthcare Funders and Managers, second edition, p. 32). Despite the apparent straightforward nature of the requirements, we have encountered a number of variances in these procedures. Below is an example of one:

> Peer reviewer: Good afternoon Ms. Smith. I'm calling to go over the treatment plan for Lydia. This case was referred for a peer review because the case manager had some questions about the treatment plan.
> Provider: Yeah, I wasn't quite sure what the issues were and I'm not really sure why it was sent for peer review.
> Peer reviewer: Okay, well let's go over the questions the reviewer had. The first question is who is the supervising BCBA on the case?
> Provider: Well, that depends. There are several of us.
> Peer reviewer: I mean, who actually did the assessment and who will be providing the supervision?
> Provider: There were four BCBAs involved in the assessment.
> Peer reviewer: Why so many?
> Provider: Because basically, it's a staffing issue. We don't have enough BCBAs for the number of intakes so whoever is available is the one who takes the case and gets as much of the assessment completed as possible. If the assessment cannot be completed by one BCBA, another one will pick up and try to complete it.

This situation is more common than one might expect and poses a number of problems. Not only it is inconsistent with the BACB's guidelines, it dilutes responsibility for the child's assessment and, subsequently, for the design and execution of the treatment plan. If the clinicians are not sure who is responsible, how will parents know, and how will managed care plans know with whom to review a case? Staffing issues are common in most fields but by the time treatment plan is reviewed, the expectation is that there will be one identified BCBA responsible for the case.

Goal Setting and Tracking Progress

One of the theoretical advantages of discussing treatment goals derived from behaviorally based intervention plans is specificity. Goals are operationally defined and targets are set for mastery. Treatment plans can be submitted for a review in different ways. Most providers choose to send in the narrative of the treatment plan which may or may not include criteria for mastering overall goals. Some providers send a short report of current behavioral targets and supply the response data in graph form; some do both.

One of the most efficient ways to review progress on several goals is to provide a summary data on each of these goals. Cooper, Heron, and Heward (2010) recommended the use of graphic displays for communicating progress because "it provides the practitioner with an ongoing and progressive record of participant behavior…graphs are a simple and easily analyzable format…and visual analysis of behavioral data is… less time consuming, and does not rely on mathematical or statistical assumptions."

A common conundrum when reviewing treatment outcomes for children receiving ABA intervention is the lack of a standard definition for "progress" or "gains." This can lead to fundamental differences when considering discharge. As there are no consistent definitions for either of these terms, parents, providers and managed care reviewers often struggle to define what constitutes a successful treatment and a logical endpoint.

There is no operational definition for the word "enough" when referring to behavioral changes for children on the spectrum. The definition will most certainly be driven by expectations and perceptions of those most involved in the child's life. There will always be resource limitations of some kind. We are not speaking here about financial currency, rather we refer to currency that is rarely discussed but acutely felt and can be measured in emotional and psychological energy; sustained attention to one child in a family with other children; distraction from other important relationships (e.g., marriages and partnerships), vocational goals, and avocational interests; and the toll exacted by fatigue. The brief scenario below describes a common conversation related to the concept of enough.

> Reviewer: I am looking at the treatment plan and data on the goal, "tying his shoes." I see where the first several tasks in the hierarchy were met within 8 weeks of introducing the goal. But in the 5 months since then, the data line appears flat—as though there hasn't been much progress.
> Provider: Oh, I disagree completely. Skills are acquired at different rates for different kids. Not everyone learns at the same pace and given where he started from, I think he's making excellent gains.

> Reviewer: While I agree that kids do indeed learn at different rates, 5 months seems like a long time to stay in the same place on a goal that may offer little in terms of improving his overall quality of life….
> Provider: Tying his shoes is every bit as important to his development as it is to his two siblings who are not on the spectrum…. Sometimes it just takes time.

When positive movement towards a goal stops, the reviewer will likely ask about barriers to further gains and how those barriers are being addressed. In addition to the barriers associated with the intervention itself, we are increasingly hearing about barriers that have little to do with clinical decision-making and are more related to such matters as staffing shortages, staff turnover, clinicians who are still in training or are new to a case, or scheduling difficulties with parents. Although we are sympathetic to the realities of clinical practice, the readers of this journal need no reminder that attempting to provide ABA with less than sufficient resources is also identified as a potential breach of the Behavior Analyst's Code of Ethics which states, "Behavior analysts follow through on obligations, and contractual and professional commitments with high quality work and refrain from making professional commitments they cannot keep" (BACB, 2014, p. 11).

Parent Training

For ABA to be optimally successful, parents are "indispensable in the child's program…and play a critical role…studies show that children whose parents are actively engaged in the process make measurable gains" (Johnson, Handon, Butter, Wagner, Mulick, & Sukhodolsky, 2007). There are many varieties of parent training (Matson, Mahan, & LoVullo, 2009), and evidence strongly suggests that children with autism receiving ABA intervention, and whose parents participate in treatment, make more gains than children whose parents do not (Oono, Honey, & McConachie, 2013; Lovaas, 1987). Collaboration with other professionals such as school staff is also important (Sheridan & Kratochwill, 1992).

The BACB (BACB, 2014, *Practice Guidelines for Healthcare Funders and Managers*, p. 11) also considers an essential practice element "to be direct support and training of family members and other involved professionals (is needed) to promote optimal functioning and promote generalization and maintenance of behavioral improvements." Accordingly, providers can expect reviewers to ask about the specific components that the BACB lists: (1) a description of specific training procedures that will be used with the parents, (2) methods of measuring parent progress, and (3) identification of proposed goals and objectives for the parent training.

Each goal or objective is expected to encompass the following: current baseline for the behavior; the specific behavior that the parent or caregiver is expected to demonstrate including conditions under which it must be demonstrated and mastery criteria (for the parent goal); date of introduction; estimated date of mastery; specific plan for generalization; and report of progress of goals.

Lack of compliance with this parameter accompanied by marginal expectations for parent participation and training is a common reason for which cases are referred for a peer review, and not uncommonly leads to the denial of benefit coverage. In our experience, providers often report a variation of either "Our program requires parents meet with us for training one hour each month" or "I have tried and tried to get them involved but it just hasn't worked out." Both responses are problematic but for different reasons.

Regarding the first response, some providers assert that 1 h per month of *training* is standard and sufficient. They may be reticent to ask too much of parents who are already very busy, i.e., "something is better than nothing." In these situations, we often hear about in-home training where the parent is physically present in the home, but not in the session. Providers sometimes represent this presence as meeting the guidelines for training, e.g., "About half the time she is in the kitchen but she can hear what's going on. The other part of the time she will come into the area where we are working and observe interactions." In these situations, the board's stance is clear, i.e., "Such training is not accomplished by simply having the caregiver or guardian present during treatment implemented by a Behavioral Technician" (BACB, 2014, *Practice Guidelines for Healthcare Funders and Managers*, p. 37).

The second response occurs when the provider is keenly aware of the need for parent involvement yet, despite best efforts, has not been able to successfully engage the parent for training. This often leaves providers frustrated as much with themselves as they are with the parents, particularly when the child is not progressing adequately. When parents are either unwilling or unable to make the necessary time commitment needed to learn basic tenets, concepts, and the language of ABA, it may be time to closely examine to what extent the child with autism can truly benefit from ABA. ABA may not be the most appropriate nor the most effective method for every child that presents for treatment. Other treatments that require less parent time may be more suitable. Transferring a child to a different treatment modality, especially if ABA is not going to fit into family life, typically results in feelings of failure for the provider; e.g., "There is no way I can give up on this kid. I feel like we are punishing the child because the parents are not doing their part."

In our role of rendering coverage determinations for a major MBHCO, this is not an easy subject to broach. Ultimately,

however, both peer reviewers and providers want to be sure the treatment is medically necessary.

Recommendations

- Present parent training as a requirement and necessary condition of ABA. Consider a parental *contract* to ensure understanding of expectations.
- Educate parents as to how goals are developed and explain why certain goals need to be mastered before moving onto others.
- Ensure understanding of *operational definition* and its importance in collecting data and measuring progress.

Discharge Criteria

In this last section, we address a conundrum as vexing as any other, i.e., discharge criteria. When the peer reviewer asks "What are the discharge criteria?" the most common response is "When he meets all of his goals and is on par with his peers." Having reviewed hundreds of treatment plans that are theoretically designed to lead to progress and discharge, the case in which a child has actually been discharged because "all goals have been met" is extremely rare.

First of all, treatment goals are rarely, if ever, finite. Regardless of how much progress has been made, there will always be more to do. But this is true for any individual, adult, or child, regardless of the diagnosis, for whom behaviors need to change in order to improve functioning in the world. Barriers to communication, relationships, social skills, and a basic understanding of the emotional makeup of self and others must be identified and addressed. But do we hold a different standard for therapeutic *success* when it comes to children on the autism spectrum than we do for children with other types of disorders? For what other clinical conditions characterized by severe behavioral manifestations, do we expect *all goals* to be met before considering discharge, especially when those goals require such significant change that the child would appear to be typically developing.

Children with autism, especially those on the lower end of the spectrum, present with deficits so pervasive and difficult to manage that they can overwhelm caregivers and entire families. For many children with autism, every domain needs attention. The treatment plan identifies crucial behaviors that must be present for progress but also targets behaviors for which reduction and/or extinction is necessary for overall improvement. Regardless of whether a behavior needs to be strengthened or extinguished, the gold standard for measurement is the operational definition of each targeted behavior. Progress on behaviors that need to be extinguished is easier to measure because the goal is to rid the behavior from the child's repertoire altogether. For example, assume the target is a self-injurious behavior such as "head banging." While extinguishing this behavior may require a number of interventions over a protracted period of time, once the criteria for extinction have been achieved, the only task left is observational follow-up to ensure the behaviors remain extinguished.

The ability to operationalize a behavior for extinction does not seem nearly as problematic as operationally defining "when he is on par with peers," because a single behavior is easier and more conducive to measurement than an entire group of behaviors for which 100 % mastery is required for each. What happens to plans for discharge when only some of the behaviors meet 100 % of the criteria for mastery? Can there be room for operationally defining behavior change that constitutes enough progress to warrant discharge from the direction of the BCBA and into the hands and direction of parents and caregivers?

The second problem with "on par with his peers" as a legitimate discharge criterion is the assumption that every child in treatment is indeed capable of *catching up* to developmental levels of children unencumbered by the effects of autism. This assumption will be questioned during a peer review, e.g., "What evidence is there to suggest that the discharge criteria are realistic?" The most consistent answers given by providers combine "hope" with a "never give up" orientation that precludes consideration of whatever limitations (known or unknown) there may be for the child. While hope and tenacity are not wrong, they are misplaced. They do not fit the evidence for a scientific model.

Much of the way discharge criteria are regarded may depend on the philosophical orientation of the BCBA, i.e., how she perceives her role in the context of the child and the family. We illustrate two different orientations (provider A and provider B) with the following, common example. A peer review is conducted for an 8-year-old boy, "Joey", who has been receiving ABA for 5 years. At baseline, Joey was nonverbal and had no effective way of making needs known; engaged in daily tantrums that lasted up to an hour; made no eye contact; was aggressive with peers to such a degree that he had been asked to leave three different day care settings; had very few self-help skills, e.g., ate only when spoon fed by his mother, did not tolerate any clothing with a zipper or Velcro; was unable to imitate the simplest gestures; and would only play with objects that were red. At the end of 5 years, Joey still does not speak but is now able to communicate effectively with an assisted communication device. Tantrums occur less than once per month. Instances of aggression have not been recorded in the past 2 years. He makes eye contact up to 75 % of observed opportunities and can now dress himself independently if his mother lays his clothes out on a special chair the night before. He is toilet trained and uses eating utensils appropriately. The peer reviewer asks about discharge criteria in the exchange below.

Peer reviewer: Can you tell me about what the plan might be to fade hours and discharge Joey from the program?
Provider A: There is no way we can even think about discharge at this point. He still struggles with transition and his parents want to try to get him into an adaptive sports program. They are going to need help with that transition.
Peer reviewer: I understand how transitions can be a problem, but for children on the spectrum, won't there always be a few bumps with transitions? It's part of the diagnosis and he may not ever get to the point where transitions are completely comfortable. There will be transitions for him in the future and it's not clear to me why parents would not be able to facilitate those. Have you been able to identify specific barriers that prevent them from helping him with transitions and change?
Provider A: Well, not exactly. I think they're very worried about him…afraid he will get back into the old behaviors and they won't know what to do. Plus, we have barely touched on some of the socialization skills he needs. He still doesn't know how to make friends. There is still so much to do.

The responses from provider A suggest that after 5 years, she perceives the parents as not ready to proceed on their own for fear of future transitions. She does not see them as being able to handle these future challenges on their own. She may be inadvertently sending parents the same message which only underscores their own anxiety. This is not intentional on the provider's part. It does, however, suggest a philosophical orientation—be it conscious or unconscious—that ABA intervention will need to be a *permanent* fixture in the life of Joey and his parents.

By contrast, the same conversation about the same client is held with provider B.

Peer reviewer: Can you tell me about what the plan might be to fade hours and discharge him from the program?
Provider B: Well, I tried to have that conversation about a year ago with parents but was not very successful. They were extremely apprehensive about continuing on without the treatment team. So I asked them to make a list of skills they thought they needed and didn't have. What I learned was that it wasn't so much the lack of particular skills as much as it was just thinking about not having the same degree of support they have had these past 5 years.
Peer reviewer: So the barrier wasn't really a feeling they didn't know what to do as much as it was a fear for what might happen in the future, or maybe a lack of confidence?
Provider B: Yeah, I think so…because they've both been very involved in the treatment. They know what to look for when a new behavior pops up or an old one reappears. They have the antecedent-behavior-consequence thing down really well…and my observations confirm that they're consistent between themselves with responses…and that was not the case when we first started. But they have really have worked hard on consistency.
Peer reviewer: So how have you been addressing the 'confidence' barrier?
Provider B: About 6 months ago we started cutting back on hours and they did really well…better than they thought they were going to do. They were quite pleased. So over the past couple of months, we all agreed that discharge would happen by Thanksgiving…we have a month to go and I have no doubt they'll do well. We've started explaining to Joey that he won't be seeing the treatment team after a while, but we made a 'countdown calendar' with a huge, red rocket for the last day.
Peer reviewer: That's a pretty creative discharge! How do you think it's going to go?
Providers B: I think there will be a few difficult moments, but we tried to anticipate those by discussing what they might be and how parents will address them. I think overall, they'll do just fine.

Provider B clearly has a different orientation about her role and position in the family. She is clear about the need to discharge, sees behavioral intervention as a tool, and consistently sends parents the message that they have what they need to continue on.

There is no doubt that for a number of reasons, the topic of discharge is difficult. But in our opinion, it is an important part of the treatment plan often overlooked by providers in their discussions with parents. This apparent lack of attention to discharge and discharge criteria often serves as the basis for misunderstanding by parent and provider alike. In our opinion, many of these misunderstandings could be mitigated by intermittent conversations with parents by providers who are responsible for setting overall expectations for the treatment itself.

In summary, discharge (or termination) is a misnomer. It is better described as transitioning the program from the therapist to the parents and the community. As with learning to ride a bicycle, the parent prepares the child with appropriate equipment (sturdy shoes, a safe bike, and a helmet), escorts the child to the sidewalk, helps the child mount the bike, and then serves as the *balance* until the child masters riding on his own. So too does the BCBA and treatment team offer appropriate *equipment* by giving parents the skills to (a) understand the different components of a specific behavior, (b) identify behavioral triggers, (c) understand the purpose of the

behavior, (d) determine what factors keep the behavior alive, and (e) learn to construct an environment that is clear and consistent. Over time, parents are able to take over for the BCBA and treatment team and continue to help the child grow by responding in a manner that reduces maladaptive behaviors while increasing those that are adaptive. The increasing competence of parents to foster the child's growth and improvement where gains are, in fact, achievable, is probably the best indication that discharge is appropriate.

Summary

The numbers of children diagnosed on the autism spectrum continue to increase. Success as a behavior analyst requires setting and adhering to professional standards. We have great respect for the difficult work that countless BCBAs and their colleagues do every day on behalf of children with autism. We have tried to summarize, based on our experience as peer reviewers for a managed care company, practices to help ensure successful advocacy on behalf of the children and families they treat. These practices include communicating a clear diagnosis and complete history, specific elements of medical necessity of the treatment, goal setting and tracking by means of standardized instruments, meaningful parent training, and achievable discharge criteria. We hope that by following these guidelines, ABA providers will find the peer review process to be more collegial, collaborative, and ultimately less frustrating or bewildering going forward.

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