Optum Health Education™

Autism Spectrum Disorder: Treatment Options for Children

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Dr. Elizabeth Albert: Hello, my name is Dr. Elizabeth Albert. On behalf of Optum Health Education, I would like to welcome you to today's activity, "Autism Spectrum Disorder Treatment Options for Children."

I would now like to welcome Drs. Tiffany Hodges and Debra Katz. Dr. Hodges is Assistant Vice President ABA/Autism with Optum Behavioral Solutions and Dr. Katz is Senior National Medical Director for Optum Behavioral Health. It is with pleasure that I welcome Dr. Katz and Dr. Hodges.

Debra Katz, MD: Good afternoon, everybody. Of course, good morning if you're on the West Coast. I'm Debbie Katz. I'm a board-certified child adolescent and general psychiatrist. I partner with Tiffany Hodges on everything having to do with kids with special needs, especially autism. And I have been at Optum for 20 years. Tiffany.

Tiffany Hodges, PsyD, BCBA-D: Good afternoon and good morning, everyone. I'm Tiffany Hodges. I'm a licensed clinical psychologist. I'm also a board-certified behavioral analyst at the doctorate level. I've been here at Optum about 14 years and am grateful to have the opportunity to share a little bit of information with everyone about autism and different treatments.

Just to get started, Dr. Katz and I don't have anything to disclose. We work here at Optum so just as we move forward.

Our goal today we've got about five different objectives, but our goal today really is to review the multiple types of treatment that are out there for autism, from things like outpatient therapy to medications, speech therapy, occupational therapy, and other behavioral treatments.

We'll also take some time to talk about the different safety profiles of different Complementary and Alternative Medicine treatments for autism. We'll spend a few moments talking about telehealth as well, and we'll take some time to go through Applied Behavioral Analysis which is a common treatment for children and adolescents on the autism spectrum.

Obviously, this is a very broad topic, so our goal today is to stay high level and give everyone an introduction to some of these different types of treatments out there.

Evidence-Based Treatment

So to get started, we want to take us a moment back and just talk about the fact that autism itself often co-occurs with other conditions. And what other conditions it co-occurs with will really impact the success of the treatments that are chosen and really which treatments are going to be the best fit for that child or adolescent or adult.

So on the behavioral health side, children who have a diagnosis of autism may also have other concerns like attention deficit hyperactivity disorder or communication disorders like receptive and expressive language challenges. Individuals with autism can also have comorbid intellectual disabilities. You know, research has varied on the percentage of individuals that have that co-occurring condition. The newer research says that about 20 to 30% of individuals with autism have a co-occurring intellectual disability with another 20 to 25% having potentially like a borderline intellectual disability.

Individuals with autism may also have anxiety and depression, even bipolar disorder as well. And then children on the autism spectrum and adolescents and adults can be more prone to having a trauma-related disorder too. Research in that area is still emerging, but there's certainly an increased risk of exposure to traumatic events for individuals who have autism. So it's important to be aware of the full picture of an individual's sort of behavioral health profile when choosing a treatment.

On the medical side, there can also be a higher risk of co-occurring medical conditions. Approximately 25 to 30% of individuals with autism also have seizure or epilepsy disorders. Sleep disorders, gastrointestinal issues, and food-related challenges are very common as well. So when we talk further in our presentation today about treatments, we'll talk about sometimes how these treatments can impact not only the autism but the co-occurring conditions that that individual may have.

Dr. Katz: So, high everybody. What I'm going to review is now we've talked about the different conditions, now I'm going to relate them to the kind of benefits.

You know, unfortunately, and I say that is that we tend to break things up to what is behavioral and what's medical. From my perspective, the brain is an organ just like the heart and the lungs, so it's all medical to me. But just in terms of how we compartmentalize it or the way we talk about it through the insurance company but also through our medical diagnostic is that specific treatments are bucketed under medical and under behavioral.

So under behavioral, psychiatric management, meaning seeing a psychiatrist or advanced practice nurse practitioner who would be prescribing medications, doing an evaluation; family therapy, individual therapy, which, of course, both would be with a licensed clinician and a licensed social worker, marriage and family counselor. We've got Applied Behavioral Analysis which are by board-certified clinicians, and Tiffany will talk about that. And then, of course, we have social skills development will it be group therapy, will it be skills training, etc.

Then on the medical side, we, of course, have pediatric neurology. As Tiffany said, 25 to 30% of kids may have a seizure disorder both grand mal and petit mal. Developmental pediatrics is often the place where sometimes the first diagnosis happens. There are a lot of developmental pediatricians who do the comprehensive evaluation and treatment, so they will guide all the developmental testing, the intellectual testing.

Occupational therapy lots of children on the autism spectrum may have fine motor even gross motor difficulties. Occupational therapy will help them with their writing. It's not just doctors that have messy hand-writing unless there's a high percentage of doctors on the spectrum, but kids who are on the spectrum really can have fine motor and gross motor problems.

Speech therapy is probably one of the most important in my mind, and I'm going to talk more about that later. Often the first thing the parents notice with their kids is they're not talking or haven't started to either mimic the words or making the sounds or even using simple words at the age of three.

And gastrointestinal/feeding we know that GI disorders are highly prevalent in members with autism spectrum disorder. The kind of things we see is reflux. We see, in terms of feeding disorders, lots of

children on the spectrum will be very picky about textures, smells, what foods look like, and they'll end up with feeding treatment.

Next slide. So how do you choose? How do you decide what's the best thing? I mean we all know from watching television I mean if each of us called every number on the TV for every treatment that's advertised, we would be in clinical care 24/7. As you know, there is so much information out there, whether it be on Facebook, Google, TikTok, you name it. What's really important in treatment is you want to look at evidence. What's evidence? Evidence of effectiveness. What does that mean? Have there been trials? Have researchers in the field done clinical trials of whether a behavioral treatment, a medication treatment, a speech treatment with people/individuals who are on the spectrum compared with people not on the spectrum to see if there's real evidence that a treatment will work?

Remember, one of the first tenets is first do no harm, so we really empower our clinicians, but also empower our families, to do the research, to talk about who's gotten this treatment. Did the FDA approve it? Is it a standard of care by the American Psychiatric or the American Child and Adolescent or the American Academy of Pediatrics?

And also, professional judgment. Go to your doctors, be empowered, and your clinicians, with lots of information, ask lots of questions. Don't be shy and don't be put off. Sometimes I mean I believe that the combination of knowing the evidence with professional judgement is the way to go. Why? Because not every treatment is going to work for every kid or family. It's really about matching what's appropriate, and, the third one, what does the family prefer? What's going to work for them? It's great to prescribe treatments and if someone is not interested, no one's going to follow. Treatment adherence is really challenging, especially if the patient family isn't really interested but they don't want to tell the clinician they don't want to do it.

So part of it is really creating that rapport with your patients, your clients, your member, your family to be able to get their buy-in and share the responsibility for how you go in terms of the treatment plan.

And do they have the capacity? If you would prescribe, "You need-" – I'm making something up – "five hours of family therapy every day," first of all, that's not appropriate, but, secondly, nobody could ever do

that. Or telling a parent, "You need to be doing skills training with your kid 10 hours a day" when the parents work, etc. So it's really about a match game, matching the appropriate treatment that's effective, that the family can support, and it's backed by the literature.

Next slide. So in terms of psychopharmacology, we always look to treat the comorbid disorders. There is no medication for autism, okay. In child and adolescent psychiatry, we don't necessarily medicate disorders. We find behavioral target symptoms.

Let me give you an example. So if you're talking about anxiety and phobia, if a kid has difficulty getting to school and separating, you would use behavioral interventions and perhaps some kind of antianxiety and SSRI for that.

Or lots of kids on the spectrum may also have obsessive compulsive disorder. Well, you would use behavioral cognitive treatments and you may also use some kind of medication.

And ADHD, ADHD and anxiety disorders and, of course, intellectual developmental disorders, or cognitive disorders are probably the ones that overlap the most with kids on the spectrum.

And, of course, the incidence of depression is the same whether you're on the spectrum or not. Just because you have an autism spectrum disorder, you can get depressed, you can have bipolar disorder, and you can have a disruptive disorder. So, clearly, it's about what are the behaviors? Inattention in school, sad mood, no energy, fear of spiders that they won't go to sleep at night because they have to triple check the corners of their room.

And then, of course, one of the big things that's always talked about, which, unfortunately, gets our youth to get higher levels of care is the irritability and aggression. More severe cases of autism in kids who have lower IQs, okay, cognitive functioning, there will often be self-injurious behavior – head banging, using their fist to hit their head. Some of it may look like self-soothing and there can be some dangers; they can harm themselves. In addition, aggression towards their siblings, caretakers, staff, etc.

Depending on the severity and all of the behavioral treatments using ABA, you may also use low-dose antipsychotic medication Risperdal and aripiprazole. Especially Risperdal is FDA indicated for the

treatment of aggression and irritability in those on the spectrum. But, of course, I always say behavioral interventions come first.

Next slide. So this is always a very interesting topic to talk about. When I started my training, everybody was talking about a certain diet, low keto, no fiber, no gluten, etc. 95% of patients are going to try something, of course, because there's a lot, as I said, written out there about like, "Get them off sugar," or "Don't give them anything with gluten," or "Give them this supplement. If you increase-" – I'm making it up again – "zinc in their diet and you also give them beets," like what is in all those commercials for those beets supplements, "that's going to make a difference." The truth is nothing has shown effective.

I think that's what's really important is there's an article that's referenced here out of the American Academy of Pediatrics that talks about it. And, really, there has not been anything that's really proven.

Now parents, if you notice that something affects the behavior of your child, well, of course, don't give it to them. I mean that's where good judgment comes. It may not be cause and effect, but if you know if your kid eats chocolate in the afternoon and that you see a behavioral change, well then, of course, don't give chocolate. But there's really been no connection.

And I think the next point is really important. Everybody has tried gluten-free diets, okay. Even adults, lots of people the kick is on gluten-free diets. 88% of gluten-free foods for children are unhealthy. And I want to underline that, okay. In the *Journal of Pediatrics* they did a study nutrients are missing that kids need to grow. So unless your child has been tested for celiac sprue, which is the disease that is the one disease associated with gluten, there is no reason to give a gluten-free diet.

People have tried a hyperbaric oxygen chamber. I think Dr. Hodges told me about she had a patient whose family had one in their basement. Nothing has ever been shown.

And the other therapies that might include herbal supplements, vitamins, you know, equine therapy, art therapies those are great things, especially animal and art therapies, but they're not best practices. But they do help kids, so we wouldn't discount them.

Next slide. This is a really important slide because statistics show that one-third of two-parent households, a third of those families when both parents are working one stops work to care for the child. It is very stressful to have any child that needs a lot of care whether they have an autism spectrum disorder, any kind of special needs. Parents get frustrated. Parents get sad. They deal with grief. They're overwhelmed. They're more likely to experience anxiety and depression. And if they get the help they need, it's going to improve their interactions. A depressed parent is not good for a child.

So we really recommend self-help interventions, mindfulness. There are great support groups out there, outpatient therapy, group therapy, adult peers meaning talk to other parents who have kids that are diagnosed with autism spectrum disorder. And, of course, pay attention how important sleep, exercise, eating well, getting respite, relaxation, and always seeking support. There's no super parent. It is challenging to be a mother, a father, a caregiver of any child. It can be more challenging and very satisfying with a kid on the spectrum, you know, diagnosed with a spectrum disorder, but no one should do it alone. We don't have to be superheroes.

Next slide. Tiffany.

Dr. Hodges: Thanks. So one of the important parts about children who have a diagnosis of autism is a lot of the treatments that we're going to spend time on today are really covered through part of their insurance as a behavioral treatment or a medical treatment. There's also different resources within the community that we want to talk about. Obviously, individuals are, hopefully, being diagnosed as a young child or even adolescent, and we want to make sure that everyone who's working with that individual if they're a treating provider is aware of the services that are in the child's natural environment.

So, for example, if a child's diagnosed from birth to three or even suspected of having an autism diagnosis and they're in that sort of birth to three age, there are services that are a part of each state's setup that can include things like speech and occupational therapy, physical therapy, and different behavioral services.

Usually a child to be eligible for programs like that just need to show a developmental delay and an area of development which can include things like physical development, cognitive development, or

communication or social development. And certainly children on the autism spectrum are likely to show delays in their social skills as well as their communication skills. So typically you will need a pediatrician to agree that there's a probability of some sort of developmental delay and that'll help gain access to these birth-to-three services.

They can receive things, like I said, like occupational/physical therapy but also helping teaching perhaps sign language. There can be family training, caregiver training that can be provided as well. If the child potentially needs some sort of device to help them speak, that can be part of it as well. Evaluating hearing doing audiology appointments can all be covered under that birth-to-three program, which can be really beneficial because that helps with the overall financial impact to the family.

Once a child ages out of that, you now have the option for what's called an Individualized Family Service Plan, or IFSP, that's really part of the individual's, the IDEA, the Individual's with Disabilities Education Act. What this can provide is potentially access to a special needs preschool or like a developmental preschool. They can also just receive services through their local public school district with the parents driving them there, for example, again, that speech or occupational services can be available and that's for that ages three to five or really until they're ready to start kind of public education. The school system, the local school system may do an evaluation to help identify the child's strengths and opportunities, which can guide some of these different services.

As the child becomes of sort of traditional public school education, so starting kindergarten, they would shift into being eligible for an Individualized Education Plan, or an IEP, or possibly a 504 Plan. So let's start with what an Individualized Education Plan is.

So this is a plan that would be in place at the school to help ensure that the child is getting the most appropriate education for them, including things like modified instruction, how they can learn academicals, it can include social and communication goals, and behavior intervention plans.

One of the specific eligibilities that children can qualify for an IEP is autism. I've listed out here the other options for eligibility, but autism is a specific eligibility. So once a child has that diagnosis, if they need

those modifications in school, it's important to educate a family or a caregiver about how to begin accessing those types of services.

A 504 Plan is something that's often more utilized when the child is capable of learning the same materials that the teacher is utilizing, like they don't need to pull our services or different educational materials but maybe they need some environmental modifications to help them succeed to the best of their ability. Things like preferential seating or modified textbooks, right, maybe a textbook that is audio rather than written. Sometimes they need additional time on tests or materials presented in a different modality.

That's sort of the difference between what an IEP and a 504 Plan would be, but all of these require meeting with the school. And that can be a very overwhelming situation for a parent. So we encourage providers to talk to families about would having someone be there be helpful? Whether it's that provider, sometimes there's parent advocates locally in the state that that family can access to have someone attend this meeting with the school system to help them champion the interventions that their child will need.

Shifting gears into another type of common treatment for individuals who have an autism diagnosis, we're going to talk about different intensive behavioral therapies. This is really an umbrella term for different outpatient behavioral interventions to treat autism. One of the most common of these is Applied Behavior Analysis, also known as ABA. The goal here for ABA is to help reduce problem behaviors that children can sometimes have and help develop alternative behaviors and skills.

ABA also works to break down different communication and social skills into tiny parts to help children learn them. ABA really came from different behavioral treatments that existed to work with children and adolescents potentially with developmental disabilities. The whole concept of Applied Behavior Analysis is to reinforce the positive behaviors that we see and to help identify if there's a function behind a behavior that's problematic but also to help teach a child new skills by breaking them down.

ABA is really one of the gold star treatments for autism recommended by the United States Surgeon General along with the American Academy of Pediatrics and the American Academy of Child and Adolescent Psychiatry. It's really recognized by multiple organizations as this recommended treatment.

However, it's important to note there has been some controversy within the field related to ABA. ABA used to be referred to more as behavior modification, which can really have a little bit of a negative connotation when we think about that word sort of behavior modification. But the goal of ABA is, again, to teach those new skills and reduce challenging behaviors. If we give an example for a moment and think of a child, whether neurotypical or neuroatypical, the child who's struggling to complete homework – I have three kids of my own; this happens in my house sometimes, right – the child starts to act out and leave the table. As a parent, you're trying to figure out why is homework aversive? Are they tired, are they hungry, is the work too hard for them, is it too hard for them to sit that long? So you're trying to think through what's going on that's causing my child to have this outburst? You're looking for the function of that behavior.

But when you work to determine the cause of that, you're now teaching them, hopefully, a new way to get what they're needing. Maybe the child needed additional breaks, it was too hard to sit that long and is hungry. So we're now going to work to help teach that kiddo, "Hey, ask for a break when you need one or we're going to take a break every 5 to 10 minutes," and incorporating snacks before homework to help them be ready to move on. So we might also modify the environment, adding a visual timer to show how long until there's a break. All of these things is really behavior interventions that we would see as part of ABA.

And the ABA that we talk about now is different from the ABA that was in place 50 years ago. Modern ABA places an emphasis on positive reinforcement and a holistic environment that's really focusing on each individual child's needs.

One of the concerns you hear, and I say this because if you go into Google or Yahoo! Search and say, "Negative reviews about ABA," one of the things that you're going to see is that punishment used to be endorsed as a way to manage behaviors. That's no longer part of what ABA does. It's not endorsed as

an option. There's certainly a concern about trauma that can come from that. We really focus now on positive reinforcement – how do we give children the praise and the focus for doing the things that we want them to do that they need to do to function throughout their day?

Treatment plans need to be really uniquely considered though and pull in all of the relevant caregivers to ensure that they're on the same page for what treatment needs to focus on. And that can include bringing the child or adolescent, if they have the ability to do so, into treatment planning to say what we need to focus on.

So I said a moment ago ABA is an umbrella approach. So this slide has a lot of words on it, but the point of this is to show you that ABA is a massive variety of interventions. Often people when they think about ABA think of what we refer to as discrete trial training, which is teaching this very small skill over and over again.

So if we think about an example where we're trying to teach a child colors, and we have a red ball and a blue ball, and we put both of them in front of them, and we say, "Touch red." And when they do touch red, we go, "Great job. That's awesome." And then a few moments later we're going to ask it again. Put those same balls in front of them and go, "Touch red or touch blue." And when they do a good job, we're clapping or doing a high-five to reward the fact that they got that right. That's sort of this concept of discrete trial training which is taking these tiny skills and rewarding them as a child does them. It's because for children on the autism spectrum learning those types of skills that other children may naturally pick up in their environment is more difficult.

It's also sometimes difficult for children to generalize skills from one thing to another. So if we think about that red ball and that blue ball, maybe a child learns a red ball is red, but now we put in front of them a car, a red car and a blue car, they may not realize that that red is still red. Generalizing that concept can be difficult for a child on the spectrum. And so ABA can work to really try to break down those skills into different environments.

We do this as part of the working with young children anyways. I think parents likely do this all the time. When they're reading a child a book, right, and you open it and say, "Oh, what shape is this?" And when

the child answers correctly, mom and dad are going, "Yay!" ABA is taking that whole concept and expanding it to a variety of skills.

There's lots of other examples in here and just to call out a few, something like a token economy. So think about when a child earns stickers for completing homework or using nice hands throughout the day, right, not hitting anyone else, or maybe it's just they've attended to their teacher for 10 minutes at a time without a disruptive behavior, right, having a sticker, that concept of a token economy is a behavioral intervention.

We also talk about things in here like chaining and shaping. These are things like if we think about learning to brush teeth, right, that's a really complicated task learning to brush your teeth. You've got to find the toothbrush and the toothpaste, take the cap off the toothbrush or the toothpaste, turn on the water. There's a lot of steps here.

Now for your typically developing child they learn all that by watching the other individuals in their home through modeling. Children on the spectrum may need us to break that down to its different components and slowly chain those steps together. And that's an example of sort of that chaining and shaping concept.

Individuals on the autism spectrum sometimes struggle with verbal skills, right, so we talk about things like teaching them verbal behavior. That's understanding not just how to speak but how to use language to navigate your environment – requesting items, requesting breaks, requesting attention, being able to label the things in your environment. Those are important parts of behavior therapies as well.

Other things that you'll see in here are things like social skills training, learning skills through video modeling as well, learning how to communicate through using pictures. So if a child is nonverbal, we may use pictures around the house to help them label different things or request things in their environment to also things like TEACCH, which is the Treatment and Education of Autistic and related Communication handicapped CHildren. It's a very long name, that's why we often call it TEACCH. And it uses visual cues such as picture cards to help a child navigate their day, like visual schedules, and breaks things down into small steps.

My point here is to say that different approaches can work differently for different kiddos. So a therapist needs to work to find the right approach for each family. And as Dr. Katz said earlier, family preference is part of that. There's a lot of cultural things that we have to take into account when choosing the right types of interventions for a family. So if you're a parent listening here, it's also important to ask, "Hey, which one of these may work best for my child and what's the research that's going to support that this is the right intervention?"

So we've talked about the different things that ABA can be. So now we put all of those things together, right, all of these different intervention options that are out there into this comprehensive plan that exists. This type of intervention can be a few hours per week, but it can also be a full-time program that's 35/40 hours a week. When Dr. Katz was talking earlier about a family's capacity to be engaged in treatment, ABA is quite intensive and so it requires a family's ability to be available for that type of intensive intervention.

ABA is often done by a board-certified behavior analyst. That's a person who has a master's degree in a related field, but then they decide to go back and take additional coursework, a national exam, and they have ongoing continuing education credits just like all of you who are here today. They also have a national ethics board and many states now have licensure requirements for BCBAs as well.

ABA is not only comprehensive, but it needs to pull in all these people you see on the slide. Coordination is really key for ABA therapy and, really, any treatment for a child or adolescent or even adult with autism to be successful. Individuals with autism are going to be receiving multiple therapies in all likelihood. Coordination of care across those individuals is really important. Often, that tends to fall on the ABA therapist. Because they're there in the child's life, you know, 20, 30, 40 hours a week, they're going to see behavioral changes first. So it's important that that ABA therapist is coordinating with say the child psychiatrist or pediatrician who's prescribing a medication. They may see a medication change or behavior change first and need to be able to coordinate that with the appropriate physician.

Caregivers have to be a very active part of this. Even as an intensive treatment program of 40 hours per week, our children are home with us far more than 40 hours per week, so that therapist will leave. And so

teaching caregivers skills for how to handle challenging behaviors when they come up and how to reinforce different skills that the child is learning is really important.

There's a lot of different elements of ABA. I will say it's a very data-driven type of approach, meaning that that ABA therapist is going to be taking data on how a child does. This is a really helpful thing because you can quickly see if an intervention is working. If you're trying to teach a child how to do maybe give and take of a conversation, right, when you have a conversation with two people, there should be a natural ebb and flow – one person talks, the next person talks, no one talks over each other; you wait for the other person to finish. And you may have this intervention that's really teaching that child or adolescent with autism how to have that give and take.

Well if you're trying something for a little while and you're taking data on it and seeing it's not working, we now try a different approach. So that ongoing data analysis is really important and it's a good aspect of ABA because we can see if it's working relatively quickly.

It also takes these big skills, like I was talking about, and breaks them down to those tiny parts. When we talk about that give and take in a conversation as that example, you're going to be teaching that individual just one interaction first, right, not the five-minute conversation you're going to have in an elevator but just one on one like say "Hi." Say "Hi" back. "Great, how are you?" "Good, how are you?" You're going to teach each step of that so you're taking skills and breaking them down.

ABA is going to focus on the core deficits of autism so things like increasing social understanding of the world, learning how to read emotions, what people's facial expressions are telling you about how they're feeling and how they may react to you. That's not something that's going to come naturally for a child with autism. It has to be taught.

Sometimes they need to learn how to understand jargon, how to act in different situations. For example, we have to be quiet in the library and we can be loud outside on the playground.

ABA is going to focus on communication learning things like how to label items, how to request for help, giving them tools on how to manage change, and it can even get so far as to helping a child increase their

food options and being comfortable with different foods. As Dr. Katz mentioned earlier, food-related challenges can be there, right, so we have to focus on if that's an issue, ABA can also assist with that.

The other thing I would want to say here is that ABA isn't just that daily intervention. It's also setting up the environment for success teaching the family about things like visual schedules, how to have labels around the house for what's coming next; have sensory items to help with some of those sensory issues that can occur with a child who has autism; having calm spaces the child can go to throughout their day, whether that's at school or at home; visual timers, knowing how to request a break. All of these are behavioral interventions that can help an individual with autism learn new skills and reduce some of those challenging behaviors that Dr. Katz mentioned as well.

To start ABA, there's often going to be an initial assessment that seeks to identify that person's strengths and opportunities. I say assessment here. You're going to have a comprehensive diagnostic evaluation to diagnose autism. So this is before starting ABA itself to say, "Where are our challenges that we need to work with this family on and where is this child already succeeding?"

As I said earlier, it's really data driven. Analysis has to occur over time really on a daily/weekly basis. This is a pretty complex treatment though and can be in place for several years, so we're sort of looking at formal updates to how the child is progressing maybe every six months to sort of look at that broad view of their data but really that board-certified behavior analyst is taking a look at that data on a regular daily basis to see how a child is progressing.

We're going to switch gears a little bit now and talk about speech therapy, so I'm going to pass it back over to Dr. Katz.

Adjunctive Treatment Strategies for Individuals with Autism

Dr. Katz: I think this is a really terrific slide because I think it's not intuitive, and I think this really explains, you know, in a diagram the relationship between communication and social interaction. Communication is not just the tone of your voice, the words that you say; it's your eye movement, your eye contact, your facial expression, your body language, etc. And if you have impaired communication, whether it be

expressive or receptive, it can affect your social interaction. Lots of children on the spectrum have really difficulty, as Dr. Hodges mentioned, interpreting body language or interpreting facial expressions or knowing when to get into a conversation.

And when there is impaired social interaction, it'll affect the development of communication, so that's why I would say that probably aside from ABA if there are target behavioral symptoms that speech therapy, which is not just learning how to talk, it's learning how to communicate, really affects one's social development and can be the place that reinforces ABA but also can be the place to teach those skills to using all different kinds of methods to be able to help the child develop appropriate and be able to process what they're seeing and what they're saying or what they're communicating.

Next slide. So there are lots of language problems associated with autism spectrum disorder. I think what's really important, and I think I said it earlier that often the first thing patients notice is lack of responsiveness to the language that a parent says or that the child themself doesn't use any kind of language or doesn't even point to objects or doesn't make an attempt to have any kind of reciprocal communication be child and adult or child and anybody that's around.

So in terms of receptive, it's developing the vocabulary. And when we think of receptive, it's understanding language, understanding the meaning of words and how you use them, concepts, remembering things, and processing them. And that's why like ABA is part of what can help in that process to be able to- You and I may be able to find the right vocabulary but that is something that has to be taught to a child on the spectrum.

And expressive language. They may not be able to know what right words. They'll come out with odd phrases. They can't remember the words that are appropriate for the situation or putting words together in a sentence or telling a story or having back-to-back reciprocal conversation. That's a big one because if you've ever been around a child or know someone, and my son is on the spectrum, all of a sudden, they could start talking about something that has never been part of the conversation and you're like looking around and like, "Where did that come from?" Well, it's helping teaching a kid on the spectrum say that or to announce, "I want to talk about the latest *Star Wars* movie and how Chewy acted in this film," etc.

And, of course, another expressive language is when you have kids who will often repeat words over and over again, whether it be echolalia, which is repeating words, or expressions like, "Whippy!" A child will every second, "Whippy!" or "Oh my gosh! Wow!" If anybody ever watched *America's Got Talent* and one of the winners, I think it's Kodi Lee, he's an amazing singer. He's blind and he's on the spectrum and he always says, "Yeah!" I mean so that is sort of an example of what the expressive language can be.

And then, of course, as I stated before, the nonverbal communication – your body language, the posturing, hand gestures, rocking, flailing, facial expression, eye gaze, making eye contact, difficulty reading the room. Now we know many people that have difficulty reading the room, but we're talking about that skill that really starts out when you're a young child not understanding what's going on and not reacting or not having the emotional intelligence to react like if there's something sad going on and people are, obviously crying and the child or the adult doesn't have the same reaction or can't process why are they crying.

And, of course, the social communication knowing joint attention. "Hey, Tiffany, let's look at this together." And, "Oh my god," we're sitting in a movie and discussing the movie and not talking about something else. And understanding why people do what they do or why what they say. And also, being a listener, listening and being able to respond in turn to what's being said to you. Taking turns, flexible thinking. A lot of these skills are complex skills that can be learned over time, but, remember, when you're starting a treatment or ABA or speech and language, it really corresponds to the developmental. A 4-year-old is not going to give you abstract thought, otherwise we're going to call them Einstein or something else. I mean it doesn't happen, but if they're 14 or 15, we may expect that, so we work with them to get more age developmentally-appropriate language.

Next slide. Okay, so as I said, a speech pathologist is going to evaluate, going to label the speech communication disorder. Of course, usually it's more than one and the social concerns related to that. So as I said before, it's dependent on age, their developmental understanding of language and severity of the autism spectrum disorder. Their social development, their behavior, how can they attend? Do they have a comorbid like ADHD that's going to make it challenging for them to attend? So that needs to be evaluated in treatment.

So there are whole host of interventions. You can use interventions like teaching sign language. You can use interventions like picture exchange communication, sticky notes like Tiffany had said, augmented and alternative communication device. You see this sometimes in also kids who are physically disabled like say from very severe cerebral palsy. They will have a picture board and a way with pointing to words that the computer itself will communicate what their thoughts are. And also, it's developing the relationship between all of these interventions to be able to get the child to appropriately communicate.

And interestingly, many of these can also be used in people who have aphasia but also not just habitual speech and language treatment, which is people who haven't learned speech and language like someone who has autism, but also you could see it being used in people after a stroke and they lose some kind of ability to speak. So it's not a stagnant process, it has multiple applicabilities, but whatever will work for that child so they could communicate their thoughts and idea.

The reality is you see agitation and frustration in all individuals when they feel like people around them can't understand or hear them. And I think we've all been in situations when we feel we're not listened to so it's not an uncommon dynamic.

Next slide. Of course, there are other treatments – occupational therapy, which I think I talked about fine motor, having balance issues; feeding issues, feeding therapies. I've heard of taking kids to grocery stores to help them learn to experience other textures, other colors, colors of food. Regular outpatient therapy, individual group, family, family psychoeducation. I will tell you that there is so much for parents and caregivers and anyone who interacts with a child who has autism to understand what the child's going through and what will work. People react in all different ways to a child on the spectrum, including never talking to them directly, which, of course, you can imagine is not correct because they're able to communicate. So it's really a lot of education.

So there are many kids on the spectrum who are higher functioning. My son went to college, has been in vocational training, can use technology and apps. Lots of jobs out there, job coaching. The problem is like a lot of kids who get special education are persons with disability are underemployed and there's really a movement and there should be a movement now to support on-the-job training and providing

those support services to accommodate anyone who has any disability to be able to do their job. And, of course, the interventions can occur across all settings and could be generalized to many, many different situations.

Next slide.

Dr. Hodges: The last little part that we want to talk about before opening it up to questions is really about how telehealth can also come into play here. Certainly, telehealth became a lot more common as we went through COVID, but one of the things that was great about it is it improved access to different types of services. It can improve access to doing those medication checkups. There can be a lot of parent coaching that can occur across telehealth. Even within ABA and those intensive interventions, you may see that parent coaching occur over that telehealth environment. You can also do sort of that traditional outpatient behavioral health through telehealth too. So it's important to keep in mind that just because the individual is in a rural area or maybe can't make it to certain appointments physically, we can still use telehealth as an option to really support the different treatment options that are out here for individuals with an autism diagnosis.

I want to add, for that last slide that Dr. Katz went through, all of these treatments can be used across the lifespan too. So autism treatments may start when an individual is quite young, right, even those itty bitty toddlers, but these treatments of outpatient therapy, speech therapy, occupational therapy to focus on those sensory challenges can often occur throughout the lifespan. And then that vocational work really comes in when your child is transitioning into adolescence and into young adulthood.

Dr. Katz: Okay, we like to end on like a positive note, okay. And what we find is we really want to reinforce People First Language. What that means is is that a disability descriptor is just a medical diagnosis, so it's not the autistic kid, it's the child with autism spectrum disorder. People First Language respectfully puts the person before their disability. A person with a disability is the same as a person without a disability, just different.

So it's the same thing with neurotypical and typical, atypical and neurotypical. So as it says here, "It's not the Downs kid, it's not the autistic kid, it's not what used to be called," and I want to choke on this, "the

retarded kid. It's the child with Down syndrome, it's a child with autism spectrum disorder, and the child with an intellectual disability."

People/kids/individuals on the spectrum can live long, productive, and satisfying lives. And we are both proud to be able to work with this population. And thank you for your attention, and we'll start with the questions now.

Q&A Session

Dr. Hodges: As we start into the Q&A, I'm going to slowly talk through the different resources that we have attached to this as well. Looks like there's a lot of questions in the chat specific to ABA. So one of the first questions that I want to address is the typical age for ABA treatment. So I will say ABA often starts at a very young age. We think about it, hopefully, starting around three to five, however, that doesn't mean it can't occur for adolescents and even young adults as well to focus on very specific skills.

One of the other questions that came up was about requirements of the frontline ABA therapist. And that's a great question. I didn't speak to that when that slide was up there. We talked about that master's level supervisor, but the reality is there is that frontline technician that is doing a lot of the one-to-one work with an individual.

The requirements that are out there that are recommended by the board for ABA, the BACB, is that they are registered behavior technicians, which means they have a high school degree, they go through an additional period of training that's supervised by a BCBA, and then they pass an exam. You can actually look up to see if your technician has done that on that BACB website there's a way to verify that you have a registered behavior technician.

There's questions in here about how do you find an ABA therapist in your area? I can speak to Optum's view here. So there's a website called liveandworkwell.com or often even in your Myuhc if you happen to be an Optum UHC member, you can actually look up for ABA as a specialty within that.

Questions about ABA treatment for teenagers. So, yes, ABA treatment can still be a valid approach for teenagers. You're probably working on more focused skill development or managing problem behaviors

as a teenager and sometimes it can be a little harder to find a provider who specializes in adolescents, but there certainly are those out there that specialize in that arena.

"How long does ABA therapy take place?" So we did talk about ABA being quite intense of that 25, 35, 40 hours per week. The range of ABA can vary somewhat as to how long it happens. So for some children, that can be maybe it's very focused. They have very specific challenges they're working on; you can talk about six months to a year. You can also have individuals who are more severely impacted with autism and we may talk about that happening for several years at a time.

ABA can certainly occur across environments – things like you can have this done in a center, like an ABA center. This could also occur in the community or the home. And in terms of which location is best, it's often dependent on that particular individual and their symptom presentation. Are they having challenging behaviors when they are waiting in the grocery store checkout line with mom? Well now you need ABA sort of in the community versus maybe in the home or a center-based program.

Sorry, guys, there's a lot of questions. I'm scanning through our options here. There's some questions, and, Dr. Katz, I'll pass this one to you. So, "How do you distinguish between language issues and autism since they can have sort of similar struggles?" Maybe determining kind of ADHD versus expressive language versus autism.

Dr. Katz: Well I think it's really about the comprehensive diagnostic. I think it's really getting them- It can be hard to distinguish and that's why getting the appropriate assessments. I mean many times pediatricians will notice certain things, and I think I want to empower parents to ask for those diagnostic tests. I mean lots of pediatricians may say, "Oh, he's just slow to talk." Or, "Oh this." Well I would say ask to be referred to a psychologist for a diagnostic eval or to a speech pathologist to really sort of hone in on what the differences are because someone who has a speech and language only, like a receptive or expressive, isn't going to have some of the more social challenges – eye contact, etc., etc.

I mean we recommend that all children get hearing tests because kids who have difficulty hearing are going to have some of those weird reactions in terms of how to express or receive language. So I think

it's really about being smart. Go hard first, meaning do the spectrum of diagnosis evaluations to really put the picture together of what's going on with the child. I hope that works.

Dr. Hodges: There's another question in here about ABA treatment with ADHD. And I would say that for most of the time if you're seeking insurance reimbursement for ABA, you're going to need that diagnosis of autism. Especially if you have an individual with a commercial insurance plan that autism diagnosis is really key to accessing those ABA services.

There's two questions in here about resources, so I want to talk about those. So there's a question about support groups for parents and caregivers. I would recommend Parent to Parent. They have local chapters in each state and can help connect you.

And then another question, and, Deb, I'll pass this to you, "Are parents encouraged to talk to autistic adults to get an idea of what their children are experiencing?"

Dr. Katz: Brilliant. Absolutely brilliant. I mean I think absolutely. I think that adults who are on the spectrum have been great ambassadors. I will bet my dollars to donuts that there are people on the spectrum in our workplaces, in our social corners. I would recommend going to some of the big advocacy groups, whether it be Autism Speaks or people with disabilities – not just Autism Speaks there are a lot of other ones out there – and ask for the peer groups. I think talking to an adult because I think lived experience is the best resource to give you the possibilities of what may work for your child or for your adults. Because having lived through it, they can often tell you, "This is what really annoyed me. This didn't work. I would love something else."

Dr. Albert: I'm just going to jump in here and say that we have come to the top of the hour and we've run out of time, unfortunately. We have received so many good questions for our presenters. So I would like to say to Dr. Hodges and Dr. Katz thank you so much for this excellent presentation. And thank you all for joining us today.

As a reminder, we ask all individuals to complete the post-activity materials which are now available. To receive continuing education credits, these materials must be completed by no later than December 1.

On behalf of Optum Health Education, I would like to sincerely thank Dr. Hodges and Dr. Katz for their participation today. I would also like to thank Optum Behavioral Health for their support of this activity. Please contact us at moreinfo@optumhealtheducation.com with any questions.

This concludes today's webcast. Thank you.

END OF WEBCAST