>> Hello, everyone. Welcome to day 2, 3, or 4 depending when you got here of the EHDI conference, this is Changing Old Mindsets: The Truth About Unilateral Hearing Loss. So I want you to welcome and be ready to be enlightened and entertained by Robin and Valerie Abbott.

>> Good afternoon, the word "entertain" scares me a little bit. Oh, she was in the last session, that's why she said that. Good afternoon and thank you all for joining us for this very, very important health topic. My name is Valerie Abbott and I'm a parent of a child who is hard of hearing, who was late identified and she is now 17 and will be off to college in a few months, God willing.

I am a co-chair of the Virginia EHDI Advisory Committee and very invested in our state EHDI programs and supporting them. And I am thrilled to be joined by my friend and colleague, Robin Blithen

>> Good afternoon, my name is Robin Blithen. My sign name is Robin. I am the outreach services director at the Virginia School for the Deaf and Blind. I live in Chesapeake, Virginia, near Virginia Beach and work to serve families and professionals throughout the State of Virginia working with children with all type and degree of hearing loss, their families, as well and providing resources, webinars and professional development. So I'm very excited to be here because this topic is a particular research passion of mine. And it's one that we need to be taking more about.

A few disclosures, I have relevant financial relationships. I'm a children's book author on the topic of pediatric late on set hearing loss and co-chair of the EHDI Advisory Committee which I don't receive compensation for that. Robin is also a member of the same committee. Our learning objectives today are for all of you to be able to recite how today's research contradicts prior understanding of how unilateral hearing loss impacts language, acquisition and general childhood development. We're hoping you will be able to explain how unilateral hearing loss can change neurological pathways within the brain. And you'll be able to provide examples how to discuss facts and impacts of unilateral hearing loss with families.

Robin, take it away.

>> So just as some background for you, when I got very interested in unilateral hearing loss, I was still a classroom teacher as a deaf Ed teacher. And I had a student who came into our district, she was in kindergarten and had normal language and vocabulary scores and could not learn to read. To be honest, she got preferential treatment because her aunt was a teacher in our department and her aunt had bilateral hearing loss. And may have fudged numbers a bit to get her into my program's school out of sheer nepotism to the family of trying to get her in a better program and school and my school was a better school. I did it saying, there's a bilateral hearing loss in the family. Maybe it's progressive because this was ten years ago. And ten years ago, we did not care if you only had a hearing loss in one ear. Didn't care.

There was one ear, you're fine. Now she's in my class and she's not learning to read. I'm like, what in the world is going on? I'm a research nerd. I like to read the medical and research journals, so I opened them up and started reading and thought, oh, my God. I'm screwing this up. I have missed this. I've messed up. I'm the lead for this department, and I'm sitting in IEP meetings every single day saying, kids with unilateral hearing loss dornlt have language and vocabulary needs. And kids with unilateral hearing loss don't need deaf Ed. That was on me. We need to talk about why that's changed and why we need to change our mind sets on it.

Research the last 15 years radically changed about what we know about unilateral hearing loss. It's something that the phrase that we have been saying for years and years of "well, it's just one ear" has got to stop. If you take nothing away from here, I want that sentence to leave your vocabulary. "It's not just one ear." There's so much there involved.

>> There are common signs of unilateral hearing loss and some of them mimic those of bilateral hearing loss. Some of you came to one of my presentations earlier and so some of what you are going to see looks familiar, but it will be different. Therefore, I want to highlight how it's different.

In some cases, we don't have children with unilateral hearing loss with limited or no speech. We don't have a unilateral hearing loss children who are unidentified, who are difficult to understand. We can understand them fine. And frequently, they are startled by sudden or loud noise, unlike their bilateral cousins.

This is where the overlap begins. Frequently, they prefer high volume on electronics, may ignore questions or struggled to respond appropriately or incorrectly. They are more easily frustrated than their typical hearing peers. They're a behavior problem. Again, this is with unidentified unilateral hearing loss.

They may have a short attention span. They may watch lips or faces very, very intently when we're talking. This is where, again, this is unique to unilateral hearing loss. Sometimes, they have difficulty understanding if you're face is out of view. And yes, there are bilateral hearing loss children who have this, but this is even more so with unilateral. And difficulty hearing in noisy environments.

For those who have seen my presentation on late onset hearing loss, some of this is similar, but for unilateral, some of it is different.

>> So, here's what we know now. All of the following areas are impacted by uni lateral hearing loss and this is all backed up by peer review research. My resources slide at the end of this is very, very long. Please notice that top box is bolded. Because what we are going to learn about today is children with unilateral hearing loss, do, in fact, have an impact on their language and vocabulary, which was our last hold out in our wrongness was, there's no language and vocabulary delay, what are you talking about? Yeah, there is. All of these areas are impacted by this mild hearing loss.

So we are going to try to make this something that is easy to take snippets away as you walk out of this room and have things you remember. Also, our presentation is uploaded, so, please, we say please steal this, please run with it. Because what matterses to the most is that this information gets out into the world. Share it with everybody. Especially your pediatrician. Everybody takes a big deep breath, oh, God.

Myth number one, it's just one ear. The research articles on this are wild. What we know now is after three years of sensory deprivation on one side of your head, the actual neural pathways in your brain reorganize. That is serious. So we're reading neuroscience journals as teachers because nobody else is telling us this, right.

It's called cortical reorganization that takes place. And it starts to shift your brain's work, I guess is the best way to put it, from the side that's not hearing to the side that is. And that has massive impacts later on. When we were little we talked about are you left brain or right brain? This is where you see that come into play. What else is very interesting is if the loss is on the right side, it has a larger neurological impact than if the loss is on the left side.

And that, as an early interventionist, as an educator, as literally anybody possibly in this room, it's important to know, that when the hearing loss is on the right, you need to have a higher academic red flag than you do if it's on the left. Don't ignore it on the left. Just know on the right, we'll probably see more significant impact.

Okay. This is the big one I was talking about. I can't even tell you how many time I have told teams that a unilateral hearing loss does not impact language and vocabulary. And it was one of the things that I even used as a justification to look at a different eligibility category. And I would say, oh, well, there's no impact from language and vocabulary from hearing loss on one side, so it's got to be a learning disability and something else going on. Boy, was I wrong.

This study done in France was actually really interesting. And it's really hard to get really valid standardized measures of deaf children because of all the variables involved. Socioeconomic status, language, parents, all the different things. What they did in France, which is very smart, was studied siblings. They took a sibling with normal hearing and a sibling with unilateral hearing loss and had vocabulary assessments on those kids a couple years in a row.

And steadily, the children with the unilat lateral losses went down, down, down. So they were not keeping pace with their hearing sibling, which was a great way to show, yes, this is having an impact by taking out all of those other variables of, okay, but what about? All of the other excuses we give to why perhaps a language score is lower than it should be.

The discrepancy in these scores is pretty small. You're not seeing standard scores that are well below average, but they are below average. And a slight vocabulary delay can be impactful on your literacy abilities. So this one for me was very big.

Because of these things, what we've been told is a unilateral hearing loss doesn't have an educational impact. And these kids were not being recognized in schools. Maybe they sat at the front of the room, but that was about it. So things we know to be true. A language delay will always impact your academics.

And the example I give people a lot in terms of language delay is if I have the language of a 7-year-old, but I'm in the ninth grade, would you give a 7-year-old a ninth grade history textbook, put it in front of them and say, read this? Understand it. Why don't you get it? What's wrong with you? He's just not paying attention. More Adderall.

And really what we need to be looking at is what else is happening? So the biggest area that we see impacted in terms of education, is the phonemic awareness. I joke around working with the student that made me get into all this, teaching her to read was the most maddening experience of my life because I see this kid responding and it's not working. We're going to sound out this work. At. Cat. And she's like, got, it okay. Your turn.

She's like at, lion. I'm like, no. What? How -- what is going on? And it does end up looking very much like a specific learning disability, which is the new term that we use for dyslexia. It comes out looking very dyslexic. And you take them to the educational psychologist and say this kid is dyslexic and they test her and come back and like, no she's not. Now what do I do? Knowing this phonological awareness problem is impacting these kids in reading.

If you are an early interventionist in here, the reason it matters to you is because we need parents to start caring about this at birth to 3. We need the parents to not go, well he can hear me. It's fine. It's fine right now. It's fine right now, but the house is going to be on fire in third grade and it's not going to be fine anymore. So we need to get in there early and make sure we are adequately, and accurately, educating our families. Yeah?

>> [Off mic].

>> I'm going to repeat your question. The question was, does that mean a kid at age two who has beautiful language, the reading will be impacted later? As the case with any deaf kid, if you met one deaf kid, you've met one deaf kid, so there's no way to accurately predict that what I would say is that kid is a, major, warning red flag to watch this. Even if my language is great my reading will be okay because my language and vocabulary can be awesome. My little friend, lion girl, her language never dropped, but she didn't learn to read until the fifth grade. No matter what I did. We finally got her to read Harry Potter, she liked it, and took all she's great and in all advance classes and we're fine and we caught up. But don't walk away from it early.

>> She's not done.

>> Another area that we see major problems is working memory. This is an issue with deaf kids across the board. And if you're not aware of this, get aware of it quickly. There's a lot of research coming out on working memory. A lot of times it feels like you're working with Dory the fish and you've gotten really far and you're in it and they know it and then they leave school and come back on Monday and they know nothing. You're like, oh, God.

Again, that's okay. That's typical. And the research now that's being done on working memory is interesting. It tends to be the last sub test given my educational psychologist so the prevailing thought it was because of fatigue and they are listening to us as professionals say, mem I have a problem here. But working memory is a major with unilateral kids. The other places we see significant educational impact are your classroom noise is a major issue. Hearing and noise with the unilateral loss is very very challenging. It causes a lot of processing problems.

Social interactions are kind of hard sometimes, friends. The number one place we interact is playground and cafeteria and both of those places are what? Very loud and noisy. So it's difficult to have those conversations and those interactions really well. And lastly, the behaviors. A lot of ADHD. A lot of inattentiveness. And they get labeled as the bad crazy kid in class and really they can't hear you and you don't know what you don't hear.

Okay. This is the most important thing. Student with a unilateral hearing loss are ten times more likely to fail a grade than hearing counter parts. If that doesn't tell you we're in a crisis situation, I don't know what else does. We have got to pick these kids up. And when we're talking about a baby, this is something we have to pay attention to. Because this baby is ten times more likely to fail a grade. And mom and dad are feeling good because they hear me when they're watching cartoons and it's great. But we now know, sitting in in room, we have a major risk factor involved. And you need to be very cognizant of it. Now it's your turn.

>> All right. At the center for family involvement, I talk with families who are -- of children who are recently identified and some of them are really small. And they're getting a lot of mixed messages. And in my role, I need to remain as unbias as I possibly can, but I'm also educated in unilateral hearing loss and impacts of it as a result of my first EHDI meeting I came to six years ago.

One of the myths I hear coming from families, they're hearing it from professionals in their lives and they're believing it is, well, my child can hear fine on one side. They can hear enough, and I don't think they would benefit from amplification or visual communication system or mode, or they're being told that or believing that, or they're questioning that. And we know the research tells us something else. So I was hoping Robin could talk to us about how do we dispel that myth, which is still really heavy and circulating?

>> So there's so many good options now. Hearing assistive technology. If you have not heard this term, it's the way to say FM system, now that it's switched to Bluetooth and you see it written as HAT. So hearing assistive technology is critical. This device up here is called an iSense. There's a couple different diversions depending on the manufacturer. It goes in the good ear and sounds like it's whispering. The first time I got this, I kept checking it. I changed the battery 87 times because I was convinced it wasn't working. It's so quiet I could barely hear it but it boost the signal to noise ratio for the good ear and improves access to sound.

Hearing aids are an option depending on the hearing loss. Cochlear implants for unilateral hearing loss. Did you ever think we would see it happen? It's awesome. Now, amplification is not always possible, okay. So working with a really well educated audiologist, an educational audiologist especially is an invaluable part of your team. It's really important to make sure we get that amplification going as soon as possible. Because what we do know is it's three years. Three years with no sound on one side is when cortical reorganization takes place. Can we stop it? Perhaps. Do we know how to mitigate it? Yes. Talking to your families about when their pediatrician who, I'm sorry, but they're the biggest barrier here is telling families no you don't need to go to the audiologist. It's just one ear, it's fine. Yes you do. Yes you do.

And letting the families work with audiology on if, when and how to amplify either side is really, really important.

So, again, working with families usually of itty-bitties, they're given information that may or may not be correct. One is about manual communication. The comment is, is, my child can hear me at least on one side. So I don't think we need to have a conversation about ASL or cued speech or any other language or mode of communication. You can talk a little about that?

>> Again, I hit the journals. There's really not much for this right now. So I don't have a lot of peer reviewed research. What I can do is let you know that JCIH, the Joint Council on Infant Hearing, they feel strongly we make all forms of communication available to all families, despite type and degree of hearing loss.

One thing to remember, and a conversation I've had a couple of times this week already is, you don't have to only have one way to communicate with your child. There are lots of situations in which having a manual form of communication as a backup even for you critical. Again, let's go to those noisy areas. I'm out of my six feet bubble I can't hear you. I can't wear my amplification because I'm wet. So an ability to communicate with your child all the time is critical. My kids know sign language. They're both hearing, but it's so I can chew them out in public, tell them to put their shoes back on through the Chick-fil-A window. We have an additional method of communication. And when my hearing children turn around in the dugout at a softball game to request water, food or talk smack about one of the players or coaches without anybody knowing what's happening, then all the other parents are like, wait a second.

So it's never a bad thing to have a way to communicate with your child beyond a primary mode. Another reason is because with unilateral hearing loss, a lot of times we see a progressive loss in the other ear. Be prepared for the unexpected.

Cued speech is definitely something that would be very, very helpful with a child with unilateral hearing loss, particularly when we're looking at those phonological processing issues in reading. We're not learning den additional -- an additional language, we're using those English in order to access literacy. It's something we are seeing cued speech to teach reading with deaf and hard of hearing kids regardless. So that's an area to explore with families.

Another great program if you're not aware of it I would recommend looking into it, is finger spelling your way to reading, which is a reading program developed jointly out of UC Boulder and Georgia State Literacy of Deafness and it's a wonderful tool. It's not a comprehensive literacy program, but it's to be used in conjunction with a reading program. And the research coming out of it is pretty remarkable. We are using at with Fidelity and our younger elementary school kids and their ability to comprehend literature has skyrocketed. If it's not something you are familiar with I encourage you to look into it but it's a way to give kids struggling with access to phonemic awareness, phonological processes, a leg up when we know there's literacy issues coming.

>> So my daughter is now 17. And I've had the chance to talk with families not just of the itty-bitties and 0 to 3, but families who are older. And one of the comments I hear families say -- and again, where are they getting this information? -- because my child only has hearing loss on one side, they don't qualify. They don't qualify. And specifically, they'll say, well I don't think my child qualifies for an IVSP. I was told they don't qualify or when they age out and move on to Part B, they don't qualify for an IEP. And as the child gets older and goes into middle school no when the hearing loss is identified later. We understand that to be different now, but not necessarily in all states. Want to talk about that?

>> So we know from the last four myths that that it is important and does matter. We know it has critical impacts on a child's development and under the IDEA, it counts as a disabling condition. We know one ear is not enough. If you're in a meeting and told your child doesn't qualify, request a professional audiologist to be part of the meeting. If your voice isn't being heard, use someone else who has bigger words. It's the person who says the biggest words wins because nobody wants to look it up. So when you start throwing around terms like, cortical reorganization, and everybody is like, okay. Here's your IEP. Have a good day. They don't want to fight you with about that.

Ask for people to say the big words at your meetings. Part C eligibility is determined by each state. The recommendation in 2007 is all types and degrees of hearing loss should be considered for eligibility and in the parentheses it specifically says, unilateral hearing loss. If you are in a state where they are saying no to unilateral hearing loss, there's a link in the presentation that will take you to the page so you can say, oh on Page 84, it says unilateral hearing loss should qualify for Part C.

There's also a link that has a list of all states and their eligibility requirements. So if you are curious about your state, or any state, you can go and dive in. I looked at a lot of them. I will admit, I didn't do all 50. But most all are now qualifying unilateral hearing losses. But I could still see in some situations where a supervisor who maybe isn't as up to date on this is going to say no not really. So here's the statement. All children who are identified with hearing loss of any degree, including those with unilateral or slight hearing loss, so pick up those mild kids, too, those with auditory neuropathy, and those with progressive or flushths fluctuating hearing loss receive appropriate monitoring and immediate follow-up intervention services. The fluctuating sometimes can be medical conductive ones that can be corrected. Unless they are corrected should be served. I'm sure all early intervention coordinators are having a panic attack now that I'm like all of them. Pick them all up. But it's true. This literally says "all". Because you're serving such a critical window.

Still me. Here we go. What do we do about it? I told you all of the bad news. Here's what we can do. Consistent and constant use of amplification. Clear and constant access to sound is what we're after. Language, language, language. It never stops. Stay ahead of it the vocabulary shift that takes place our kindergarten, third, sixth and ninth grades. Check again in seventh grade. Personally, check every year, but whatever.

Frequent comprehension checks. Never ask a deaf kid a yes or no question because what do they do? Nod and smile. This is the phrase, what did you hear me say? Don't say, did you hear me? Yes. Did you understand? Yes, cool. What did you hear me say? Nope. Okay, let's do it again. By the way, this works on husbands.

[Laughter]

I'm no longer married, so you might not want to take my advice on this. But I did it a couple of times and he would go, stop it. I know what you're doing. You say that to your students. And I'm like, yet, you didn't hear me, did you?

Ensure the good ear is closest to the signal. Even if we are amplifying the bad ear, it doesn't matter if we have an FM system on, whatever it is, we want to keep our signal to noise ratio as good as we can. Reduce the background noise.

Thinking about background noises is really important. We're talking about, how loud is the air conditioner? Are we sitting near the window? Is the window near a playground? Are you in a mobile unit? Oh, kill me. The pencil sharpener, where is that? Does the projector make a sound? Is the lighting buzzing? Things like that matter. They have sound meters on cell phones. We're working with baby friends, day care, holy Hannah, that is loud.

Making sure our teachers know if you are hollering at a kid across the room and you don't have an FM system on and we're in center time, baby child did not hear you. He's not being defiant. He's not ignoring you. He has no idea that you're talking. You all sound like Charlie Brown in the background.

Provide visuals whenever you can to help support auditory information. Frequent follow-up audiological appointments to monitor for progressive loss. We have a lot of progressive loss and unilateral loss predominantly because the etiology, or how that hearing loss took place is very frequently unknown in unilateral cases. Making sure we have eyes on it, that we're not losing the other ear.

>> So when Robin and I were presenting and talking about this presentation and planning it, we wanted to ask you all to consider a question which is, how will you use this information that you've gained today when you return to your community? And we wanted to leave some time for us to actually think through that. We have been -- I don't know about you, but we've been running from session to session. How many people at least once have like kind of run? Yeah. So we wanted to create a different experience, which is some time to actually process some of the information that we've received, but also process how hard is this going to be to change this mind set? What are we going to need to do? And these are two different things.

One is becoming informed. The other one is figuring out, how do we change the minds of others? So we wanted to open it up for this group to think about how you might use this information because your idea might spark an idea in someone else. And we also wanted to open it up simultaneously for any questions that you might have.

Again, we've been rushing around from session to session and sometimes not had enough time to ask the burning questions. So we wanted to have ample time for that. So I don't mind being the runner.

>> Okay.

>> Okay. Is this one working enough?

>> Yes.

>> Terrific. Questions or thoughts on what -- yes? There you go.

>> A bigger crowd but I'll say the same in Valerie's take. I'm a pediatrician, the chapter champion in Illinois.

>> My bad for all of the junk talking on pediatricians. I clearly didn't mean any of that. Sorry.

[Laughter]

>> So, yeah, pediatricians, anyone in the room really has to think about how much we're educated about deafness and hearing loss in our process. As a medical student, barely any. As a resident, maybe sometime in ENT if I was spending time with an ENT. It's not until me, the pediatrician and my wife, the speech pathologist, had a deaf boy in 2002.

She's a speech pathologist, doesn't work with deaf children. Works in schools, which they don't really consider -- they don't really think about hearing loss unless it comes in as a diagnosis. I don't want to get into that too much but ADHD is said more to me than, I don't know if the kid can hear or not. ADHD is one of my least favorite four letters. It's a four-letter word.

But about this, the pediatrician thing, develop tall milestones are tested repeatedly. We all do surveys. One thing is parents don't want to be surveys because they want to ask about sleeping, reflux, and depression and sibling rivalry and kids climbing on Chandlers and stuff and don't talk about hearing. Unilateral hearing loss is really going to go hidden unless a teacher notices or maybe parent notices the child can't hear over here but the child can hear over here. Bilateral is hard until they drop off with milestones. Hopefully six, nine or 12, they'll get to me. I won't get delayed too much past than for a newborn hearing screens. If it's a normal hearing screens, we still do ASQs all the way up. In terms of where you lose them, you need day care input. But they're not familiar with deaf kids either.

Yeah, the pediatrician thing, they're just one of many places you can drop the ball. Pediatricians can drop the ball. Parents can drop the ball. My wife and I, we're a pediatrician and speech pathologist, so we knew where to look for information. We moved from New Jersey where they said my son would be trainable with his hearing loss. And we moved to St. Louis with a richer environment for deafness and deaf resources and now he's an honor student in university at Southern Illinois engineering. My third son has a severe profound loss and he's knocking on the top two kids in his class. But it's all a matter of intervention, and it's all a matter of, you know, education.

Yeah, the pediatrician needs to educate parents, but then also it's not a thing you see a lot. So it's something that they're going to say, are they hearing okay? Well, I'll do this. And my babies going to jump, or babies did jump when we did that. But one was deaf, deaf, deaf, okay. So 80, 90 decibels sloping but. So I just wanted to defend the pediatrician as little bit.

[Laughter]

Also to, say I'm a chapter champion so I'm supposed to educate pediatricians and other people like this to have a clue about hearing. Maybe instead of diagnosing them with ADHD, either a school audiologists or I can refer -- it's important for pediatricians to say, any parental concern is a script for a hearing test. I do that. I wouldn't have done that before I have deaf children. Now I have deaf children, I say you want a hearing test, have a hearing test. That's the first step. If it's normal hearing go on to some other topic but at least rule it out. But not all pediatricians think that way I get it

>> Thank you so much for sharing.

>> Sorry, I'm Daniel, from Missouri. This is provisional data I've just really become this level -- this set of analysis, but it's something I stumbled upon that relates that I wasn't looking for and wasn't expecting. I was trying to understand what was happening -- we have diagnostic is where we lose people and we struggle to meet the 136 benchmarks the most. What I stumbled into, and I'll use this research to give it a little bit of emphasis, is the timed diagnostic from birth to diagnostic is greatest for initial diagnostic with unilateral hearing loss. The time between the first diagnostic and most recent diagnostic is greatest, and I'm talking huge with unilateral hearing loss.

And so something is happening within that population where it's probably they're just going, oh, they can hear out of one ear. I won't be able to definitively state that with my data. But it's something within the data I've got available to me, I'm seeing this kind of thing getting reflected of, we're not -- now they could be getting 87 diagnosis in between A and B, I don't know that yet. But it's something that popped out in my data that, hey, unilateral hearing loss, something is being done differently here than when it's bilateral.

>> Absolutely. Thank you.

>> There's a lot of hands. This is a great thing.

>> A couple comments and a question actually. The first thing is, I have a unique role. I'm at a county board of DD so I'm an early interventionist/audiologist so I screen the kids in the blended program. We try to get as many kids screened as possible. I have a number of unilateral hearing losses get screened that way. If anyone has the capability to do that, do it. You'll catch the kids. It's important.

The other piece, the reason I'm here is we have a number of kids on the case load with unilateral hearing loss. And even though I know all the big words, use all the big words, implement them, the thing that's been most powerful with that transition from Part C to Part B to getting an IEP for unilateral hearing loss is doing some type of evaluation, a functional listening evaluation. Again, educational audiology has to come in there.

I also do a number of questionnaires. So either for the day care provider for the teacher the kids may be seeing. And also with the parents. So those are helpful, too, but it's still not like functional data that shows a need at that point in time. And I don't know about your school districts but ours don't want to hear about a potential problem. They won't to see a real one now. Which is hard to prove.

What we've been doing is I will -- we strongly -- no. We make sure all the key players are there at the evaluation some of the who is part of that evaluation team. And of time it's a unilateral hearing loss kid, there's not a TOD or educational audiologist or one that specializes working with deaf or hard of hearing what so over. Don't go into an IEP or evaluation without somebody who is an expert in the field of deafness and hearing loss being part of that team.

Number two, making sure educational audiologist, regardless of the fact that kid is two and a half is doing a functional listening assessment in quiet and in noise. If you do those things, I've never had anyone that I've not seen as clinically significant difference in those two evaluations. Maybe they're developmentally delayed as well. Do body parts, do something to have data and numbers to show them.

In doing that, I'm able -- it's helping me to get those IEP services. But I'm here because of just that. I'm like, give me all of the tools and information so that we can be sure to advocate for the IEP needs. So thank you. This is so important. It's near and dear to my heart. And there's so many kids with unilateral hearing loss out there.

>> While Val is move together next person, Cheryl Johnson, the primary author on the functional listening evaluation, simultaneously works for the University of Colorado and Arizona now does do virtual classroom listening assessment training, TODs and SLPs can take that training as well. If you are somebody that has the power in your division to have trainings on classroom listening assessments that are comprehensive, you can contact Cheryl Johnson and she will do them. I've done four in Virginia, and it's a six-week series. And they come out and it's a case study, and they do one on a kid in their school and learn how to write the report, the whole thing, start to finish. I currently have 30 teachers in the state of Virginia who are trained in performing classroom listens assessments.

>> I'm Ashley. I'm from one of the states that does not auto qualify UHL so I'm in a huge advocacy position and sharing lots of information with our team. We qualify however, chronic ear infections, which I know they're in the same level. Yes, same face, thank you very much. I think my question is more, so you nailed it on the head when you said, most of these kids at 24 months of age in their assessments are not showing delays, at least not to the 50% or more children showing a 33% or greater delay, which is what recur numbers are in Colorado. However, what I'm curious to know, maybe you know, is there research somewhere that's comparative that shows long term benefits of early intervention for children impacts or less impacts failing a grade or reading levels compared to those that don't get intervention and have unilateral loss?

Because I'm a school based person, the first iteration of this PowerPoint presentation was really all school aged. And Valerie was like, hi, we're talking to early interventionist I need you to make a shift. I think the research on the impact of it itself is new they haven't shifted to, what does it look like in all places? So in my Google Scholar search of early intervention, all we have this is JIH statement. But it would be such a good thing to do for your PhD. Get to work. Chop-chop.

>> Questions on this side while I'm over here? Yeah?

>> You really have me thinking because both of my kids have bilateral hearing loss, but my son likes to run around with just one hearing aid. So now it's got me questioning if there's something else that we have not seen yet because he likes to run around with just one hearing aid.

>> I would have a lot of questions for the audiologist about why. What's going on with the other ear. What's going on with the other hearing aid. Why is there a preference for one side over the other. There can be a lot of things there. I would keep bilateral sound going at all times because you don't want to have a slide that direction if we're not aiding the other ear. Clear and consistent access to sound.

>> Hi, I'm Jill. I also love in Missouri but work at Kansas school for the deaf in the early intervention program and I have a question but -- something to say but first I want to address the other stuff. To the pediatrician, I don't think any of us expect the pediatrician to be the one that's the first one to diagnose or send the referral. But it's when the pediatrician knows and has that information that says you have a unilateral hearing loss and then tells the parent, it's no big deal. That's what I hear, and that's what is really frustrating because you have to know what you don't know.

And I think that all of us in, I don't know, speech language pathology or teachers of the deaf, we're constantly trying to know what we don't know in other professions. I don't know, I don't want to generalize but I think that's what we -- where we struggle. I love the comment about the functional listening assessment. That's my struggle. We automatically qualify our kids in Part C and the parents get sad because they're kids aren't qualifying in Part B because they worked really hard.

I want to throw out there about the comment on visual language or modes. All our kids deaf or hard of hearing in Kansas qualify for a deaf program regardless if it's unilateral or mild, whatever and we've seen good success with language outcomes with hearing that have unilateral hearing loss in spoken language when being diagnosed from the beginning.

>> That's great. Thank you.

>> As Val is walking, one of the hard things when you aren't a doctor is that what the doctor says trumps our opinion. When a medical doctor says to a parent, you don't need this, even though we have different information we get trump'd and the patient says, we don't have to.

>> [Off mic].

>> Hold on.

>> We need the captioning. It's only captured through the microphone.

>> I have scripts asking for audiological evals from the school audiologist and the parents come back and say, the school won't order this or do it. I don't know if it's from where I grew up as a doctor or where I am now in Illinois or what, but the school doesn't take my advice. If I give it as a script. It's not like they're a pharmacy. They don't have to. But if the doctor suggest it, they ought to at least try it. And a lot of schools don't. A lot of schools don't. And a unilateral loss, you did say that schools ignore unilateral loss for a long time, too. So if a pediatrician hears, they have one good ear. Okay, a 70-year-old pediatrician will say, they have one good ear. Move on.

>> Right. I think part of this is the conversation are the breakdown between the educational and medical communities on it regardless of which way that goes in terms of medical doctors feeling like they can't get the schools to do what they need to be done and schools feel like they're fighting doctors. I think it's a breakdown between the two.

>> I'm Angie Glass the School of the Deaf in the Pittsburgh area and my friend Gayle and I are intervention therapist we are seeing families we serve giving inconsistent reports whether or not to aid or not aid unilateral hearing loss and as teachers of the deaf, it's difficult because the audiologists have more training and knowledge than we do. But how do we support or recommend to the families one or the other? Of course we lean towards aiding all children and see the benefit of that, but do you have any research that you would suggest as far as that goes? Thank you.

>> The -- here's your resource page here. This is all on here so you'll be able to click links when you access the download of this. What I will tell you, when looking at a research article, very rarely is that parent friendly. As somebody who is working with a family, what is more helpful is to sit down the audiological with them and talk about why or why not that technology was recommended. I know there's audiologists in here. There's situations where amplification is not recommended for one reason or the other. It's going to be fuzzy or have no impact, cause discomfort. There's a number of reasons.

Going through with the audiologist and if you don't understand, or the family doesn't understand, get a consent and call the audiologist and say, I'm trying to explain this to the family. Can we work together.

>> I'm Shelly from Nebraska. I have a 16-year-old with single-sided deafness and presents wonderful at school, takes honors classes, looks great. They wanted to take her off an IEP and we talked about the struggles at home. There's a lot of anger and reteaching herself the material she miss at school. Because they considered the parents perspective in all of that, they allowedler to stay on an IEP which has been huge for her success so parents need to push what the kids' needs are.

>> A new component of the classroom listening assessment, which is a comprehensive functional listening evaluation is the Vanderbilt fatigue survey. Please Google it. It's phenomenal and it's free. It's a PDF. And it goes through and takes into account what the listening fatigue is, and guys, it can be listening or listening. Fill it out with signing kids, too. Because this listening is equally, if not more fatiguing, than this listening. Sorry, the interpreter is having to catch up with me there. The Vanderbilt listening fatigue survey. Outstanding resource.

>> I'm from British Columbia I work in early intervention. We've had a lot more children with unilateral hearing loss hearing loss using hearing aids now with early hearing screening and more resources being available. But one thing I've found coming up, and when they're going into the school system, is I've had mixed expenses with audiologists and teachers of the deaf around recommendations around FM systems and whether it should be a sound field FM system so their naturally hearing side can benefit and have most access versus the personal FM that would go right to their equipment depending on what their hearing levels are. I wondered if you have comments on that.

>> I am a TOD. Listen to the audiologist. If you have a TOD that's disagreeing with the audiology, you should still listen to the audiologist.

>> I know we have so many more questions but we're running out of our time.

>> Can we do one more?

>> We can do one more.

>> One more.

>> A quick comment. I think Lisa Coleman and I have children with hearing loss and made mistakes not going to a pediatric audiologist. If your children are not with pediatric audiologist, they will get misrecommendations for children services, amplification, testing all of it. And now I help families all over the state of Idaho and there are different regions that don't have pediatric audiologists and families can't get to them. And the audiologists are trying to do a good job, but there's specific training with pediatric audiologists and you can find out who they are through the EHDI Pals site is full of them.

>> There's a lot of telehealth services offered through audiology if you're only able to access an adult audiologist they can connect you with a pediatric audiologist that you could have further consult with.

>> I am the founder of the late on set hearing loss awareness campaign. Something I want to remind us all of is that children with unilateral hearing loss are at higher risk of the other ear being impacted than typical hearing peers. So if nothing else, if nothing else -- and we're not going to offer services, amplification, any of the options available to families, families need to know this some of the at a minimum, they're on top of their child's hearing health from birth and beyond. Because if that changes from unilateral to bilateral and that family doesn't notice, that can really turn into a tragedy. Robin and I are willing to take this show on the road. This is our contact information. And I think we're pretty much -- we'll accept about any invitation, especially if it's Hawaii or any fun islands. If anybody is from Hawaii or any other place. South Florida would be nice.

>> That would be lovely.

>> Reach out to us. We're available by e-mail. It's been a pleasure presenting this topic to you. Please, take it out there into the world and run.

>> Thank you.