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NCHAM Gearing Up for a New Screening Year: Intermediate Level Webinar for Early Head Start Programs Will Christenson August 20, 2015

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>> This is an audio check. If my team can confirm that you can hear me, that'd be great. Thank you. Lenore, can you confirm that you are hearing this audio transmission? Thank you. I was just kicked off, that's always a little unnerving when that happens. Jeff, be prepared to pick it up for me if that were to happen again. Thank you.

>> I'll be ready, William. Looks like we're at the top of the hour, which is great. I'm going to initiate the recording for today's webinar.

>> Audio recording for this meeting has begun.

>> I'd like to welcome everybody to today's webinar, Gearing Up for a New Year of Screening. Intermediate Level OAE Webinar. We're funded by The Office of Head Start. With a focus on early Head Start and Head Start programs supporting evidence-based hearing screening practices, my name is Will Eiserman. I'm the director of the echo initiative and I'm joined today by Jeff Hoffman, who is a Pediatric audiologist, Jeff, do you want to say hello?

>> Hello, everyone, I'm really glad you can join us today.

>> Thanks, Jeff. Our goal today is to really focus on those of you who are already experienced at doing OAE screening and are getting ready to go for another round of screening. You've most-likely done screening in the past and need a refresher and reminder of some of the elements you want to have in place as you prepare to screen another cohort of children. Now we know from some of the questions of folks that register for today's webinar that some of you may be new to OAE screening, that's fine as well. Although, some of us may feel a bit more advanced for you, we'll be covering some basic information about the purpose of OAE screening, how it works and some of the elements of putting in place equality evident-based hearing screenings. For those who are new to OAE screening, we invite you to look at our resources at kidshearing.org, our primary website, which can help you in the initial planning and preparation phases of developing an OAE screening program.

And to also attend other webinars that we have. We had one just earlier this week that will be on our website shortly and we would encourage you to look at that, because it's of a much more fundamental get-started kind of nature. In today's webinar, we're going first go over our key, the key program elements of, that you, steps and elements that you'd want to cover as you think about another year of screening. We'll then review the basic screenings and follow-up practices, as a sort of refresher, those of you who have received trainings or attended some of our other informational meetings in the past will find this as a recap of, of some of the most-important elements in doing your screenings.

We'll then review the protocol that we always recommend everybody have a good and clear understanding of, for when children don't pass and then we'll talk about our tracking tool. Which is a really critical element of having a, a quality evidence-based screening program so that you have a solid mechanism for tracking all children who are being screened in the program from beginning to end. And then, lastly, we'll, we'll introduce you to some of the current resources that are available at kidshearing.org so that you know that you always have an ability to go to resources that will help you in very practical ways.

In continuing to improve your screening practices. So...again, if you don't remember anything else from our webinar, we hope our website, kidshearing.org, you'll find a wide variety of resources that will help you. Jeff is going to take us through some of the basic elements of, of implementing an OAE screening program and some of the things you'll want to check off as you get ready for another round of screening. Jeff, do you want to do a review of this with us?

>> Certainly, and thank you, William. To gear up for a new year of hearing screening, there are general ideas you need to pay attention to, initially. First, is your equipment working well? Check it out by screening yourself and several other adults and see if you get the results you'd expect or if you notice anything different in the way the equipment is functioning. Check if it's been calibrated within the last year, if not, arrange to have that completed and any software updates to the equipment be added at that time.

Do you have an adequate supply of probe tip covers and other supplies you need for the year? We recommend making sure you have enough probe tip covers, 50% more children than your funded enrollment. That takes care of rescreening you may need to do and new children enrolled in your program during the year.

And be sure to include some adult-size probe tip covers so that you can periodically check the equipment by screening yourself and other adults there in your program.

Another factor is will you need to train any new staff to conduct OAE hearing screenings or will you need to offer refresher training for those who have been screening before, for most of you, probably been on our website, kidshearing.org, but there are video tutorial modules and materials to support any training efforts or retraining efforts that you need to conduct in your program.

Have all of the staff been informed about the plans for conducting the OAE hearing screenings and have they been scheduled? Has everyone been told about that schedule? Have you informed the parents about the hearing screenings? One thing, just a reminder that on kidshearing.org, we have information sheets for parents and Health Care providers that you may be referring children to and teacher information sheets. Check that out as part of your gearing up for a new screening. And then, finally, does your program have the plans to follow-up for those children who don't pass the initial hearing screening? And...and has your health services Advisory Committee been informed and approved your follow-up plans? We'll spend time later on explaining our recommended screening and follow-up protocol which has been developed over the years with input from many early Head Start programs and really created an effective and feasible screening and follow-up plan so you make sure your

children who don't pass those initial screenings receive timely and appropriate follow-up services to determine if permanent hearing loss exists or not.

So, William, I'm going to turn it back to you to talk more about screening children who might be older than early Head Start years.

>> Thanks, Jeff. Yeah, this is always a good place to begin. We know many of you are working both in early Head Start and regular Head Start settings. This is a very common question about whether we're talking exclusively about birth to 3-year-olds or what we're talking about today also applies to slightly older children.

Jeff, can you confirm you're still hearing me okay? >> Yes, I'm still hearing you, William.

>> Okay, great, thank you. So...the answer to that question is that for 3 to 5-year-olds, Puretone audiometry is the recommended screening method for that age group, by organizations like the American Speech-Language-Hearing Association. We also know though, 20 to 25% of the children in the birth to 3 age range can't be successfully screened using the Puretone audio metric method. They aren't developmentally in a place to perform the tasks necessary for Puretone audiometry.

So, OE screening is a next best method, at the very minimum, for those children that can't be screened with Puretone audiometry. Beyond that, some audiologists are now actually encouraging and entertaining the feasibility of using OAE technology with older children, 3 to 5-year-olds as a matter of general practice. And we've certainly learned of a number of Head Start programs that are, in fact, using OAEs with all of their 3 to 5-year-olds.

So, we encourage you to consult with your Health Services Advisory Committee as you consider what methodologies to use. For those who may be on here thinking about 3 to 5-year-olds and using Puretone, we hope you'll stay for a couple reasons. So you learn more about OAE screenings. Particularly at the very minimum, for those children you can successfully screen with Puretones, but also so you learn about a protocol that we recommend for follow-up when children don't pass. The follow-up protocol that we'll be going over for OAE screening is really the same protocol, the same follow-up sequence that we'd recommend for when children don't pass Puretone screening. For those who are really thinking about OAE screening, we hope that this is, these are familiar photographs to you or familiar settings. You can screen children in their natural environment. We don't need to pull children out of their normal settings. We can go to where they are comfortably engaged. Playing with a toy, being held by somebody or even sleeping. That's an important thing to remember. Most OAE equipment has been designed to be able to work in this way. If you happen to have a piece of equipment that is hypersensitive to the sound you might be experiencing in a setting like that, you may want to evaluate your equipment. A good equipment result would provide for good screening if there's a modest amount of noise there. This isn't the one I wanted. Whoops... I wanted this one. Here we qo. This is an actual realtime screening of a little guy who is especially cooperative. You see a few key elements here. You see two adults working together. That's a good thing to remember when you go back to starting screening. Can you work with a teacher or a helper? We'll talk more about that and the child is relatively quiet. You're starting it again, there's the handheld device. She started the screening. We always give children praise and let them know the screening process is done no matter what the result was. If a child doesn't pass an initial attempt during a screening, as long as they're cooperative, we generally like to try it again and make sure there wasn't just a, a noise reason for why the child didn't refer. We like to give it another shot before we record the results for that screening session.

Jeff, why don't you walk us through the training procedure now so everybody has a good refresher of the key elements of conducting a screening and some of the main things that they want to remember to do.

>> Certainly and thanks again, William. It's important to know how the OAE screening procedure works so you understand why it's possible to screen a very young child or even one is asleep and why it's relatively easy to do. We want to make sure there's no visible sign of any infection or blockage in the ear canal. If there's any of those things, you want to refer directly to a Health Care provider for an evaluation. During this visual inspection, also a great time to check the size of the ear canal to help you select the correct size of probe tip cover. The probe, which is part of the small handheld device is placed in the ear canal and let me advance this slide just a second. Then the, the probe, wait just a second here. The probe, here we go, I'm connected with the right ones here, sorry about that, folks. The probe, which is illustrated as the blue object on the outer part of the ear canal on the left, delivers a low volume sound stimulus into the ear. The sound travels through the outer ear and middle ear to the cochlea or inner ear, the snail-shaped portion you see in the diagram.

And inner ear that's functioning normally will respond to the sound by sending up a signal to the brain and at the same time, producing an, an otoacoustic emission or OAE which is a sound that travels back through the auditory system and is picked up, analyzed by the screening equipment. Either it finds it or it doesn't find that OAE. If the child's ear canal is blocked with wax or a foreign object or if the middle ear is filled with fluid, commonly associated with an ear infection, the sound going in or the emission coming back out is blocked. And the ear will not pass the OAE screening. Specifically designed to screen the ear for permanent hearing loss, OAE screening helps us identify children who have a blockage in the ear canal or otitis media or an ear infection with fluid that impedes the sound transmission or other types of middle ear abnormalities. Can display the result in as little as third seconds. The results are displayed on the screen as either a pass or as a refer. There were several questions submitted in advance about getting a good probe fit. Ensuring good probe fit is key to successful screening and efficient screening. A good probe fit stabilizes the probe in the child's ear. It also minimizing the effects of noise from the environment. Most equipment will let you know when you don't have a good probe fit and it will give you a message like refit or retry, something like that. None of the equipment tells you when you've achieved a good probe fit. There are several steps to achieving a good probe fit. We'll review the modules on kidshearing.org that go over these.

The first step is to check the probe of the equipment to make sure it's clean and not plugged with earwax. It's okay to wipe the probe with a dry cloth. You always want to wipe away from the probe itself. You don't want to push anything into the probe or get any liquids near the tiny speaker or microphone in the probe.

The second step for a good probe fit is to clip the cord to the back of the child's collar. This takes the wait off the probe and also keeps it from pulling out of the child's ear. It keeps it out of the child's reach. It's helpful in that way too. The third step is to select the largest probe tip cover that's possible, always use the largest size probe because the tight seal ensures that an accurate signal is put into the child's ear and also helps to keep out background noise from the environment.

Remember that the probes and tips were designed to not alter the child's ear if you have the correct probe size tip. Keep in mind, you should only use the probe tip covers that are designed for your specific equipment. It's not interchangeable from one type of equipment to another.

The fourth step in achieving a good probe fit is to place the tip on the probe by pushing it gently, but firmly toward the probe. Make sure it's pressed onto the probe so there's no gap between the base of the probe and the probe tip cover itself.

Some equipment has foam tips. You want to make sure the little plastic tube is pushed all the way to the probe itself.

Step five is to open the ear canal to place the probe. You want to gently tug back and down on the ear to fully open the ear canal. Six, you want to firmly insert the probe. As you insert the probe, angle it slightly toward the nose and straighten it out a bit. You need to use some firm pressure, sometimes giving it about a quarter of a turn will help to insert the probe far enough into the ear to obtain a tight seal. You want to release the ear after you insert the probe and let the air canal close snuggly around the probe. If the probe doesn't stay firmly in place, you may need to use a larger size probe tip.

Lastly, the seventh is to release the probe, let go, don't pull onto the probe while administering the screening, you may push it up against the ear canal or intentionally create noise. Both of which will interfere with the screening.

If the probe is placed properly in the child's ear, it will stay in place by itself. So we talked about how OAE screening works and how to achieve a good probe fit, it's also important to remember that OAE screening is the first step in the evaluation process to determine if a hearing loss does exist. And so, we're now going, to I guess I'm going to continue on here with looking at some effective strategies. One moment here. There we go.

So, we're going to step back and look at some of these effective strategies of these, some of these -- on the OAE skills

screening. The checklist can be used to test the screening. You can use it as an observation tool. The checklist addresses four areas. The first is environment incentive. The second are screening steps. The third area is child management and the last area is documentation.

So, we'll kind of just go through a couple of these, talking through a couple of them. You'll first want to inform parents and caregivers and teachers about the screening and if they're part of the screening, as, as far as being your helper, you want to make sure that you can explain to them how they can be helpful in the process. You'll want to select an area in the natural environment that's relatively quiet and free of activity and it's really important to have all of your materials and supplies available and handy. You want to an size your hands and following whatever universal precautions your Services Advisory Committee has recommended.

We already covered the seven steps of completing that improvements once again, just a quick review to check the probe for wax, clip it to the back of the child's collar. Select the largest tip possible. Correctly place the probe, the tip on the propellor, open the ear canal and firmly insert the probe and make sure to release it once it's in place. If you didn't obtain a good probe fit, use a different size probe tip. You want to press the appropriate buttons on your equipment. Usually two or three button pushes.

If you get a refer result, simply remove the probe by grasping the probe, not the cable and check to make sure it's not blocked with wax. And clean it if necessary. Reinsert the probe and try it again. If you get a result indicating excessive noise, you can make adjustments to reduce the amount of noise, typically external to the child and try it again. When you switch to the other ear, check to make sure there's no accessible wax on the probe tip cover and usually you can use the same tip to screen both ears for a child, but all tips are disposable, so shouldn't be used on a different child. Keep those used probe tips under control. We just use baggies for those. In a minute, we're going to watch a couple video clips to demonstrate several aspects of managing children's behavior during the screening process, but first, let's talk for a moment about documentation. As we everything we do in early Head Start, it's important to document the results. You'll need to document the results of the visual inspection, the screening

results for each year and note the appropriate next steps to be taken. Be particularly careful about recording the results for the correct ear because it's very easy to mix up left and right results, especially if you're looking at the child from the front. Your right and left is reversed with their ears.

We'll now watch some of the short video clips that illustrate some of the primary factors to keep in mind. These factors are environmental considerations' approaches to interacting with the children and the use of distractors. We recommend finding several distractors that are novel and only used during the screening, so that the children are interested in these toys. As you watch these videos, reflect on your own screening experiences and, and once again, we're going to be focusing on environmental considerations, approaches, and, and the use of distractors. In this first clip, you'll notice the screening in the natural environment. It's a relatively quiet corner in the classroom. It's a closed space, notice how the screen replaced, but the clip to the back of the collar. She's using a book as a distractor. With a mirror, which is intriguing to the child. She's screening by herself which makes it more difficult but she's doing a very good job of keeping the child occupied, as well as managing the equipment at the same time.

Right here at the end, notice what happens with the probe. I guess, yeah, there we see it. We saw her hand go up to try to stabilize the probe. That's not something you want to do because that's going to introduce some noise and perhaps invalidate the screening process. The next video clip we're going to watch is our drive through screening.

This is one where the little girl and her cozy coop is driving along in the outdoor learning environment and pulls up and has her hearing screened. Notice how, actually the next one, the natural and easy-going manner that the screeners are using. Attracting the child's attention as part of distracting her, they're done. So...that was just a very, very natural environment in the outdoor learning environment to, to be screening.

In this next one, this screener has everything set up, she has a puzzle in place to use to keep the child's hands occupied, but notice how she very gently and quietly redirects the child's hands when they go up for -- there she just takes the child's hands, puts the puzzle piece in her hands and the child

continues on, then, with the, the puzzle and at the same time, the screening is advancing.

There are several video tutorials, modules on kidshearing.org that focus in depth on what we've covered here, as far as the screening itself and the strategies to use with, with children. To, to assist screeners in keeping all of these different elements in mind, the seven primary steps of the OAE screening procedure and the different child management strategies, here's, here's a screen shot of the OAE skills checklist. That we talked about earlier, it's on kidshearing.org. I don't expect you to be able to read this, but this is what it looks like when you get it on kidshearing.org. It lists all the important details to guide the screener through the OAE process. It's helpful for new screeners or as a refresher for experienced screeners. Furs a manager, it can be used as a competency-based observation for those that you're, you're supervising.

So...you know, screening is the first step for identifying a possible hearing loss. We talked about the screening process, William's going to talk more about the steps that are necessary. If a child doesn't pass that initial screening.

So, William, I'm going to turn it back to you.

>> Thank you, Jeff. So, it's always a question, you know, what do we do if a child doesn't pass? We, and we should probably start by just saying when a child passes on both ears, you can consider the screening complete, but what happens if we don't? So...we want to remember that a good screening program is only as good as our ability to implement an appropriate follow-up protocol when children don't pass. So...here's a quick overview of the screening follow-up protocol, again, the protocol will be used for all children and also for OAEs as well as Puretone screenings, the same series of steps.

And no matter what age group you're screening. So, if the child passes the screening on both ears, the, the process is considered complete and the other rule is that if they don't pass, they've gone all the way to an audiologist, then it's complete.

So, those are the, the main overarching rule of knowing when your process is complete, either the child has passed on both ears or they've gone through a series of steps that have ended up with a complete audiological evaluation. Now, let's talk about the steps that might get you there. We're going to start off with screening, conducting the first OAE screening and if there is a pass...on both ears, then the process is complete. But if the child doesn't pass on both ears, during the first screening session, a rescreen needs to be conducted in about two weeks. We recommend this so we don't overrefer children to Health Care providers and/or audiologists. We typically see in the birth to 3 population, about 20 to 25% of the children screened won't pass the initial screening on one or both ears. And those children will need the second screening. Sometimes they'll pass the screening in about two weeks though, and, and then maybe, because they had a mental ear condition that went away in the meantime.

So, we rescreen those children in two weeks. And if they pass, the process is complete. If the previously-non-passing ear still has not passed, the child should be referred to a Health Care provider for a middle ear evaluation to see if the middle ear has anything going on in there, like a wax blockage or an ear infection or fluid. We typically see about 8% of the total number of children that we're screening that will continue on in this process and actually have to go for middle ear evaluation because they hadn't passed the screenings twice in a row.

For those who are referred, you'll really want to stay in touch with the Health Care provider and really on top of this process. You might want to stay in close contact with the family and those providing the middle ear care so you know what the outcome is and when you can proceed with, with the remaining portion, excuse me, of the screening process.

Once the Health Care provider indicates that the middle ear should be clear, which means they either treated it or they are confident that the ear is healthy, this percentage of children, this 8% of the total number of children being screened will then need to be screened a third time using your OAE device. Most children will pass by this point and their process will be complete. But, those who don't pass on one or both ears at this point must now be referred for a complete audiological evaluation. We're really concerned at this point. We've screened the child now three times, they've had their middle ear evaluated maybe even treated and they're still not passing. So...that, that really does underscore why we are now concerned. Especially concerned about these children. We typically see 1%, 1 to 5% in this group that go all the way to the audiologist for an evaluation.

So, that's overall protocol. The overarching rule to remember for knowing when a child's particularly screening process is complete is really seen in the bottom. The process is complete when either there's a pass that you've obtained on both ears and documented that or the child goes through a whole process through an audiology capital evaluation and you obtained those results.

All right...so, now, how are we going to keep track of all these children that are being screened and being followed through these different steps? They won't all be having each step occurring at the same time. So we must have to have some kind of mechanism, some kind of tracking system that's going to reflect the protocol so that you can easily see where you're at in the process. Jeff, you want to talk about documentation and the tracking process now?

>> Certainly, one of my favorite topics, thank you. The first step in managing the data aspect of your hearing screening program is to accurately record each child's hearing screening results for both ears. The OAE hearing screening form is available for download on kidshearing.org. The form allows you to fill in identifying information at the top such as your child's name and birth date and unique identifying number that may be generated by your programs date in the system. Notice there's a section to report the results for the right ear and for the left ear.

The preliminary step for any hearing screening, as you may recall, is to conduct a visual inspection of the outer ear and so, the outcome of that visual inspection can be marked for each ear. As you see with the purple arrow. There are three different OAE screening results and can be recorded for the first screening of each ear. Those results can be can't test, refer or pass. For those children that don't pass the initial screening, a second screening must be completed and results recorded in the second OAE section. Once again, they're the same three screening results that can be marked for the second OAE, can't test, refer or pass. If the child still doesn't pass, you need to follow the protocol, refer the child to the Health Care provider for a middle ear evaluation or consultation. Notice how the arrows here, in the, on the form direct you to the next step of, in the process. So, if there's a can't test or refer, it directs you on to the next step in, in the protocol. You'll also find a diagnostic follow-up form on kidshearing.org that continues to guide you through the next steps and the recommended protocol. As you can see here, the results of the middle ear consultation and the OAE rescreen and the audiologic evaluation can be recorded on this diagnostic follow-up form.

It's very important to maintain accurate documentation of all of the hearing screening and evaluation results for the child's individual health records. There are also many advantages to maintaining a comprehensive tracking log for all of the children's screening and evaluation results to make sure you're in compliance with 1308.6 and to monitor the quality of your overall hearing screening program.

>> I'm going to chime in for a second. Just going back to those forms for a second, on kidshearing.org, you'll also find a form that looks just like this, where you see OAE, it says Puretone. And so, you can use those forms and it follows exactly the same steps. Instead of repeating with an OAE, you're repeating with your Puretone, but that protocol is really the process that you want to follow either way.

>> Great, thanks for bringing that up, William. We'll now take a look at the echo initiative OAE screening and diagnostic log and with the form, there's also versions available for Puretones. So you can use this for either OAE or Puretone. Really to support easy input of the information from the forms, there are instructions to enter the results of the logs, in detail, the name of the document is instructions for using the logs and it's also available on kidshearing.org. This is really hard to see, we're going to go in and take a look at each of the different sections and features of the log. We'll also do a demonstration at the end here on how to enter some of the screening results into the log.

In the lower left corner of the heading section of the log, you'll see the word status. There we go. And this field is automatically filled with the word complete. When the child is either past the hearing screening in both ears or has been evaluated by an audiologist and you have the result. This field is blank if the child is still in process in some way. The other fields in this section are the identifying information for the individual child, first and last name and unique identifying number that was recorded on the hearing screening form and the location, you know, classroom or a particular site they happen to be at. Some programs are also reporting their results of their OAE hearing screenings to their state's newborn hearing screening or Early Hearing Detection and Intervention program and if that's the case, then additional information is needed so that they can, the state newborn hearing screening program can match with their records and that information is the date of birth, birth facility and mother's name. Those light blue columns can be skipped if you're using the log.

The next section of the log is for entering the results of the initial OAE hearing screenings. The first section of the log allows you to enter the child's newborn hearing screening results and we really encourage you to get those newborn hearing screening results to see what the child's hearing status was at birth. The date of the first OAE hearing screening is entered into the next column. And if the child passes the OAE hearing screening in both ears, enter the number one in the pass column.

We use the number one in this log because there are hidden formulas, but if the child doesn't pass on one or both ears or if either ear cannot be tested, then we would want to enter the number one in the not pass column. If the child doesn't pass the first screening, as per our protocol, repeat screening at about two weeks is needed and notice how the arrows guide you from this non-pass result to the next step which is the second OAE.

There are four different possibilities that can occur with the second screening, the child may leave the program for any one of a number of reasons. This could be recorded by entering the number one in the exited column. For those children who receive a second screening, the results that were recorded on the screening form can now be entered here as a pass or as a non-pass, which would be they got a refer or couldn't be tested.

Some, occasionally, there might be a reason why one would skip that second screening and refer directly on to the Health Care provider for middle ear evaluation so that can be reported there.

The next section of the log is for the middle ear consultation. As with any of the other sections, you know, the child may have exited the program, so you can mark that. If the results of the middle ear consultation, which have been probably recorded in the diagnostic follow-up form or at least in some communication from the Health Care provider, they're transferred by either indicating there was a normal evaluation or a condition or a disorder was detected in some way. And...once again, occasionally, this step might be skipped and you'd mark that accordingly.

The last section of the log is the, looking at the inner ear outcomes. Since you know, the, the middle ear consultation is a medical evaluation with possible treatment, routinely, hearing screening or a hearing evaluation is not part of that, so...our recommended protocol, as William explained, was that after the middle ear consultation is completed, an OAE rescreening is needed to check the functioning of the inner ear. We know the outer ear and middle ear are clear.

The, as with other steps in the protocol, the child may exit the program, but...you know, if, if otherwise, you could record the, the pass or the not pass results for them, and...occasionally you may want them to skip directly on to the audiologist. Sometimes the Health Care provider will have made that referral.

When we look at recording the results of the audiologic evaluation, then we can see that once again, some children may exit, but the results of either being that the child has normal hearing or that a hearing loss has been identified. So, you'd mark those accordingly in those columns.

And you could mark the date of the last final inner ear outcome in the next column. By having the initial screening date and the last result recorded, you're able, that way, to start to get a sense of how long it's taking to move the child through the protocol process. We don't want children to not be moving as rapidly as possible through the process. If there is a hearing loss, we want to identify it and make referrals for early intervention as soon as possible.

There's another section at the end of the log at the top. And, in this section, it gives you a couple pieces of information. It automatically calculates your initial pass rate, as William mentioned earlier, that you know, we, we expect and see about 75% of the children pass that initial screening. Your initial OAE pass one rate is. There's also a section to record notes of the child. Going to look at a couple examples here, just to, to show you how this actually works. That was kind of a tour, here's a screening form for a child named Marissa Lee. She was screened on April 15th. And Marissa, as is the case with most of the children, passed in both years. So, let's start by entering those results onto the screening log. We see here that we've, I've already preentered the identifying information, her name, ID number, where she's at and the date of the screening.

So answer, to record a pass result in both ears, we would enter the, the number one, there we go. The number one, in the pass column and at the same time, notice over here, on the left-hand column, the status column, how the word complete automatically appeared in that column to indicate she met the criteria that she had cast in both ears. So she's done. For this screening period. And...the next one, we're going to look at the other end of the continuum, a child identified with a hearing loss. This is Noah Keller. As we can see from Noah's results here on the first OAE screening, Noah referred on both the left and the right ear. A rescreening wasn't done, they skipped -- this was a child who hadn't passed a newborn hearing screening. Thev skipped him forward in the process and referred him to the Health Care provider. We'll show you how we record those results for the refer. Notice that, in the columns that says not passed, we recorded the number one to indicate that Noah didn't pass that hearing screening in both ears and that also, we entered the number one in the skipped column to indicate there were no results for OAE2 and he went on directly to the Health Care provider.

This is the diagnostic follow-up form for Noah. We'll see that, there was a normal evaluation with the Health Care provider. There was no condition or disorder detected. Came back and rescreened him for the third screening and Noah, again, referred on both. When that happens, that's a really great red flag to really move forward because this is a child who doesn't have any outer ear problems, any middle ear problems and isn't passing the hearing screenings. Noah went to the audiologist and was identified to have a permanent hearing loss, a moderate hearing loss, as you can see there, and so how would we record that on the form? We'd indicate in the middle here consultation section that there was a normal, there was a refer on that OAE rescreen and there was a hearing loss identified by the audiologist and notes that Noah was referred for early intervention and hearing aids were recommended. There are prerecorded webinars, going through the data log, should you choose to be using that and also the instructions that are there will also guide you through some examples that give you all the details on that. William, I'm going to turn it back to you now, okay?

>> Thanks, Jeff, this is kidshearing.org's landing page. As a quick refresher of resources we have there, that maybe benefit you as you engage in another round of screening. Ιf you're just getting started, if we were to go here to, if you click on OAE or otoacoustic emission screening, there's Puretone resources here. We'll click on OAE screening. It opens a set of video tutorials. These are the preliminary getting started video tutorials. People new to screening, you'd want to have them watch these. Over here on the right under implementation tools is where you'll find the screening checklists. Resources for finding an audiologist, you want to go here and see how you can find a local audiologist. Here is where you'd find help in selecting equipment that will be really effective and screening the children that you have in mind for screening and in the natural settings that you'll be working.

And then there's some resources here for an audiologist to know how to help you. So there's all sorts of things available for them to help you with the training and planning process.

I'm going to skip forward through this and then show you the next set of resources that are our gaining skills videos. They include some practice exercises, and some of the things you'd want to do to get to know your equipment and things to do to learn how to successfully screen children when they might be waiving in ways that are more challenging.

The protocol guides and forms that Jeff went over are found over here. This is where you'll find information about our protocol, the screening forms, both in English and in Spanish and that diagnostic form that Jeff was just using are found here. Under here, under preparing children and parents and partner Health Care providers, this is where you'll find a referral letter, letters to Health Care providers, you'll find that here and then under sharing results, you'll find the referral letter, letters to, to Health Care providers and some other information for parents. There's a script here for what to say to parents given different screening outcomes.

In this last group, you'll find the tracking tool that Jeff just went over and that will walk you through how to use it. There's a little video too, that will show you different scenarios for using the tracking tool, that you'll find there and a number of other bonus resources here that relate to Head Start specifically and performance standards and other things, as well.

So, we encourage you to go and spend some time on our website. The resources there will help you learn and improve your skills, but there are also resources there that just help you maintain your program. Like the use of these forms, the tracking tools, and the letters.

So...don't feel like you have to recreate all of those things, we've tried to create them for you.

So...that's all that we were planning to cover today in our presentation, we've got a few minutes, so why don't we open up our Q&A field so that you can ask some of your questions that you might have that we can address for you in our remaining time.

One of the questions is about calibrating equipment. Jeff, do you want to talk about the importance of calibrating equipment and making sure that it's ready to go for another year of screening?

>> Certainly, thanks, William. It's important to make sure your equipment is functioning properly. One way to do that is to have an annual calibration, this is done typically by the distributor of your equipment and the, you know, they go through and they check all of the signals, the auditory signals, the responses, they make sure that everything's working correctly. They give any possible updates that may happen to the software in there. And it's just a way to make sure that your equipment is doing what it should be and that your results are accurate results, given that the equipment is finding the OAE, the emission or not. And reporting those correctly. So...and the manufacturers recommend that on an annual basis.

The cost of it is going to be several hundred dollars. It can range anywhere from about 150 up to about \$400. So...it just depends on your distributor, but it's important to do that annually, and make sure it's working okay.

>> What do you recommend for families who receive a second refer and then don't follow-up with their medical provider for the middle ear consultation? That's, I'm sure a challenge you've run into, not only related to follow-up of hearing screening, but a variety of other things.

So, I would, I don't think there's a simple answer to that question, but rather a whole constellation of strategies that can be used. From making sure that parents understand the significance of what it might mean that their child hasn't There are some, you may want to show them one of our passed. videos on here that explains this. You might might want to show them what OAE screening is actually looking at. Maybe there's a wax blockage in the ear that is a simple thing to treat. And to help them understand that even when children have untreated middle ear infections, they are most likely not hearing normally. And if that's a chronic condition, that can delay their language development. And to help them understand this is a totally treatable condition. You might want to start with the treatable conditions and not emphasizing so much our most serious concerns so that they can see the value of that.

Sometimes it's a matter of checking in with the families and saying let me help you make an appointment and let me put it on my calendar when that appointment's going to be so that I know that in the day or two after that appointment, I can connect with you again. And find out what the outcome of it was so that I know what the next steps will be. And that way they know that you're following along in that follow-up process as well.

Jeff, do you have anything else to add around some of the strategies we've heard? Other Health Care or other health and disability specialists using in programs to support follow-up?

>> I think a couple things to add onto that, one is that on kidshearing.org there, are some parent scripts that outline what you can talk to parents about. If they're not following through, you want to increase the importance and urgency of it. So there's some wording in there you can take a look at. You can always rescreen the chimed again. If the parents aren't following through, if they pass, you're done, but if they don't pass, then that's even added emphasis on look, this child hasn't passed, we need to get to the cause of it and find out. Potentially you could skip the middle ear consultation and go to the audiologist. I know sometimes you need that Health Care provider referral for insurance purposes for reimbursement purposes, but you can also, sometimes the audiologist can make that connection, so, it's just simply the, seeing about going to a Health Care provider, you can get them to the audiologist,

that's an option too. The thing you don't want to do is let it languish and not do anything about it. We've seen where children are 3 and 4 years old before they're identified with a hearing loss that could have been treated medically and nonmedically through amplification much earlier and the child's development wouldn't have been delayed.

>> One of the questions is for every screening we do, do we print their results? Is that mandatory? Printing results using the OAE devices printer is not mandatory. You always want to document the ultimate outcomes, meaning a pass or a refer. The printed results will give more details, but some Health Care providers or audiologists may find useful. But it's not essential that you do that. The most important thing is that you document the date and the ear-specific results, that you obtained and show them a protocol they're using so they understand the role they'd play once they've been referred to a child and our forums actually include information about that protocol for the Health Care provider and indicates we are referring this child to you for a middle ear evaluation because the child has not passed two times on this or both ears.

Jeff, you want to take the next question?

>> Certainly, Michelle has a great question here. If you have an infant coming in with results from the newborn hearing screening, is it required or recommended to screen that child? Typically, if a child has passed both ears on the newborn hearing screening and you have documentation of that, that screening will be useful for six months, maybe twelve months. It's not going to pass for life. We recommend screening annually anyways so...you know, you want to, some time in that six to twelve-month age range, rescreen the child again. Ιf those screening results were not a pass, that is a time to start to connect with the child's Health Care provider and also the state's newborn hearing screening program, Early Hearing Detection and Intervention program. EHDI and you can get to those folks through kidshearing.org. There's a link to those folks. And coordinate with them on the follow-up. You can play a very valuable role in helping parents to move forward on non-passing results if they've not done it. Sometimes the newborn hearing screening program loses track of kids because, you know, the families move or telephone numbers change, whatever. So you can play a valuable role in making sure that the child gets the necessary follow-up.

>> And I'm showing you where you would find that link to

your state's EHDI program or newborn hearing screening program where they'd help you find a local audiologist.

This question, actually folds nicely into a question we just got from Brittany about whether we know about any hands on trainings. The resources on kidshearing.org are designed to be a full course from beginning to end in developing your OAE screening program and your actual screening skills. And...if you have an audiologist or a skilled screener, who can work through these, these video modules with you, again, they're only a couple minutes each and answer questions as you go through them, that will be a hands-on training and you wouldn't really need to recruit or go anywhere. You could have that training come to you.

Now...not everybody is able to find an audiologist, so now what? That's when you'd reach out either to us or to your EHDI program to see what you can do to find that training opportunity. So...get in touch with us through our website, at kidshearing.org, be sure to tell us where you're located and if you have an audiologist that is associated with your program, we'll be happy to talk with an audiologist partner of your program and help orient them to what you're trying to achieve and help them know what their role would be in supporting your development or your screening program.

So...we encourage you to do that and then sometimes we actually will be, in different part of the country, offering training. So, if you have a training need, let us know and we will let you know if there's an opportunity anywhere nearby.

- >> Could I just add on there --
- >> Yeah, please.

>> There are some states that have developed training systems for early Head Start programs and Head Start programs. So, we could connect you with those individuals also if you happen to be in those states. It's important to know where you're from. I'm going to take one of the questions from Christie in New Mexico.

>> Wait, Jeff, before you go on, there's a question from Sandra about how we got to our last screen to show where the audiologists are. Sandra, when you go to kidshearing.org, you land on this page and then you're going to go here to the yellow box and click on otoacoustic emissions, that will take you to this page. And then over here on the right, you'll see find an audiologist. You'll click on that and that'll open up what you just saw. I'm going to go through two steps, first, to get there, but there it is. If I clicked on find an audiologist, you'll have the drop downs here. That's where you find that. I encourage all of you to go and click around on our website. You may be surprised at how many things you'll find there that could be useful to you. We don't take full credit for everything that is there. We have worked with hundreds of programs across the country and they've given us lots of different ideas and examples of resources that they use and we just want to make them available to everybody. So...go see what's there.

All right, Jeff, you were moving forward?

>> Certainly, certainly, we were just talking about statewide systems and Christie from New Mexico who is on and has a question was very instrumental in establishing a statewide training system in the state of New Mexico. Christie's question and hello, Christie, is will the webinar be archived and available on kidshearing.org for agencies that couldn't attend? Yes, we'll send out a link once we get the recorded rendered. That'll be in a week or so. Everybody will have that.

>> Yep. And the other thing that's important to point out too, this webinar is an hour-long now, little bit over, the other, the videos that we have really include a lot of the content that we have covered today, but in bite size pieces. So, if you're looking for specific pieces of information, the protocol overview or screening skills, you can look at those videos and you can also look at the manual that is a text version of all of the content that we've covered today.

So...while the webinar doesn't, does allow an interactivity to this process, it is a longer way of accessing the information that we've put in bite-size pieces up on the website. So remember that you can find it that way too.

>> William, Myrna has a question about whether she'll receive a certificate of participation. Go onto kidshearing.org and there's a section on contact us, send us your information and we will get a certificate to you. We don't routinely do that because we don't have all the contact information when people sign on to the webinar. So...but...we will get that to you if you let us know.

>> So, we are back at the top of the hour and so, we will adjourn with that. Jeff's e-mail is right there, as well as our web address. Kidshearing.org. We invite you to come to future webinars that we offer. And feel free to contact us. If there's anything that we can do to help you either get started with your OAE screening, endeavors or if you're already down the road and need technical assistance. That's why we're here. Thank you Jeff and thank you, everybody.

You'll now be taken to our website.

>> Audio recording for this meeting has ended.

>> You'll now be taken to our website so you can, if you have a few minutes, you can tool around there a little bit and see what we have.

[Call concluded at 4:07 p.m. ET].

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