Hello everyone. We're looking forward to sharing this webinar with all of you today.

Thank you Allison and Dinah. It seems to be coming through okay. A couple of you the audio was not as clear for most of the people. I would suggest go ahead and adjust the volume on your computer speakers on your headset. If you're having significant trouble, go ahead and log off and log back on. Okay? Thank you.

(Music)

While we're waiting here (music is playing in the background), Allison and Dinah have a couple of poll questions for you to answer if you could. Please go ahead and answer these questions. That would be very helpful for them.

Thank you, all. We're going to put another poll question up here. Just a second. If you could please complete this. And we'll get started in just a minute here.

Thank you all very much. And we have one more poll question that we will put up here in just a second.

(Music)

There we go. That's the last poll question. Okay, very good. Thank you all for answering those poll questions. We're going to get started just right now. I'm going to initiate recording of this webinar. So it will be available for later.
Okay, very good. Hello everyone. Welcome to today’s webinar. Early intervention Program Accountability: A Collaborative, Multi-Faceted Approach. We'll hear from Allison and Dinah about evaluating a program from many perspectives. We'll also hear from a number of state agencies to hear about how early intervention have evidence-based at the early intervention and programmatic levels. They'll describe a number of instruments that they've used across a number of domains. I'm Jeff Hoffman. This webinar will be recorded and will be available soon. Near the end of today’s webinar, we'll open up a text box for you to ask questions to have the presenters answer.

Allison Sedey is a speech pathologist and research associate with the University of Colorado at Boulder. She is managing a project called NCAP that involves establishing a national database for children with hearing loss from birth to age four. As part of that, she is assisting interested states in implementing state-wide outcome program.

Dinah Beams is with the Colorado School for the Deaf and Blind. Her responsibilities involve coordinating services for families with newly-identified children, program and curriculum development and systems building. Again, welcome to today's webinar and Allison, I'm going to turn it over to you.

DINAH BEAMS: Okay. Thank you all for joining us today. It looks like we have a great group. And we are excited about what we are going to be sharing and hope that it's food for thought for all of you. I will say this now so that we do not forget to say this at the end of the presentation. If you have additional questions about anything that Allison or I share, we will be giving you our e-mail contact, and you're welcome to contact us later on if we do not have enough time to get to those questions.

So with that, let's begin! So today we are going to just briefly describe the early intervention program for children who are deaf and hard of hearing here in Colorado so that everyone has a context for the information that we're going to be sharing. We're going to spend some time talking about our approach to program accountability, the different measures that we use, the data collection procedures that we use, and most importantly what we do with this data once we have it.

And we're also going to describe the roles, responsibility, and funding of the personnel involved. Because I know to those of you who are in positions of leadership in your different programs, the question of funding is an important one.

So just a little bit about the Colorado Home Intervention Program, or CHIP as we refer to it in this state, we are a program of the outreach Department of the Colorado School for the Deaf and the Blind. It's a birth to 3 early intervention program. It's in-home, family-centered services. We work in tandem with our Part C agency here in the state. And we serve about 95% of the deaf and hard of hearing children in the state of
Colorado birth to age 3. We are all over the place in our state.

It's a community-based program with nine regional coordinators. We have found that our program works more effectively when people are in the region know the unique qualities of their region and are better able to connect with the families and other professionals and agencies within a region. All of our early interventionists are highly-qualified. They hold appropriate certification and licensure and master's degrees in either Deaf education, speech pathology, or audiology. We honor all communication systems and options for families and share that information. And we have a data-driven approach to early intervention, which is a lot of what we're going to be sharing today as we talk about these accountability measures.

So just a little bit more about us. We serve approximately 350 children in the state. Over 90% of those children are receiving direct services. We have a few, particularly children with unilateral hearing loss who are on a consult basis. But the majority of those children are receiving direct services from the program.

Our frequency of home visits range from one-four times a month, an hour-long session. Our afternoon is three times a month. And of course all of this is determined by the IFSP and the needs and desires of the child and the family.

As a part of what we do here in the state, several years ago we established an Accountability Committee. CHIP is part of a school and accountability measures, as you're all aware, are very important.

We meet three, sometimes four times a year. And the role of this committee is to give feedback to the program coordinator for program decisions to look over the design of our accountability plan to receive reports about how we are doing with our different outcome measures and our accountability measures, to review these program outcomes, and then collectively to brainstorm what we need to do to move the program further.

The members of this committee, it's a small group. There are ten-twelve of us at any given time. But it's a diverse group. So it's made up of the program coordinator, the accountability coordinator, then we have interventionists with the program. We have parents whose children have recently graduated from the program. We have Deaf and hard of hearing adults who are providing some leadership. And then we have some of our regional coordinators are also a part of this group. We try to have the group really represent the families we serve in the state. So we have a coordinator who is one of our more rural-area coordinators involved. We have parents who are Spanish-speaking and providers who work with Spanish-speaking populations. We have providers who are very skilled in working with children who have multiple issues. So that we really can capture and respond to the needs of the program and the families that are in the program.
So what kinds of things are we measuring and are we reviewing with this accountability committee? We use a lot of different measurements. We are always looking at things from the interventionist perspective. We want to do everything we can to support our interventionists so that they feel like they have the materials, the training, what they need, to provide quality early intervention services for the families they work with.

So we want to keep a good tab on the kind of continuing education, training, conferences, opportunities that are available and that our interventionists have taken advantage of. We want to look at mentoring opportunities. How many of those have they received? What do they desire in terms of mentoring opportunities? We want to look at the kinds of information and support and resources they share with families. And what else might we need to do to supplement that? We want to look at their satisfaction with the support they're receiving from their supervisor in their region from those coordinators in their region.

And we wanted to look at their perception of their skills in a variety of areas. So to look at all of those things requires several different measurement instruments be used. We also are wanting to look at parent satisfaction with the program. And we're going to talk about that as one of the instruments we share. And then we look at both childhood outcomes and parent outcomes. Because as a family-centered program, you really need to look at both.

Now Allison is going to talk about this slide.

>> ALLISON SEDEY: Hello everybody. I don't know whether to say good morning or good afternoon. I guess it depends on where you're calling in from. But I hope it's as beautiful where you are as it is today in Boulder, Colorado. We saw in the poll that we took at the beginning of the webinar today that it looked like the most interest was in hearing about our parent survey and about our child outcome measures. So although we are going to cover each of the different accountability measures we use, we're going to put the most emphasis on those two particular topics. So I'm going to talk rather briefly about our interventionist survey just to start. Because as Dinah had just mentioned, what we want to do with our accountability measures is really look at all the various aspects of the program. So not just how the interventionists feel, not just how the parents feel, not just how the children are doing, but all of those different components. So the interventionist survey, we typically do about every other year. We will modify it year to year based on changes that may have been made in the program or feedback that we've gotten informally from our interventionists. And we have a sample of our most recent survey at our webinar today. So I believe that we sent out three PDF handouts along with the registration reminder. If that was not in your e-mail, it's something you'll be able to access coming back to the recorded webinar, which will be available within a week.

And Jeff has kindly put up for us on the screen right now what we call the facilitator survey. Our interventionists are called facilitators. So when you see the word
“facilitator” here, it's the interventionist. So you can see up at the top as Dinah mentioned, one thing that we want to track is if our interventionists are attending continuing education. It's a value and goal of the program that the interventionists stay up to date, keep themselves educated about most-current practices. And so we want to document if this is actually being done and to what extent. So that you can see starts the survey. We then have a section where we ask them questions about the assessment that we do on a six-month basis, and this is regarding the child outcomes, which we'll talk about towards the end of the presentation. Are they utilizing the assessment? Are they finding it valuable? Are they using it to document progress? Are they using it to set goals? And Dinah will talk a little bit about what we do with the feedback that we get from the survey. But in just summary, we want to be able to offer support and continuing education to people who are either not following the guidelines of our program or are not feeling like they are able to use them to their maximum capacity. Another thing we're looking at is what kind of support they provide to the family. So you can see those questions here. We want to know if they're connecting the family with Deaf and hard of hearing role models. If they're connecting them with Hands & Voices, the parent-to-parent support organization. So we ask that sort of question. And we also want to get at information about if they're not doing these things, why is it? Sometimes the reasons are very legitimate. Sometimes the reasons are that they need more support or don't have knowledge of some of the programs that we hope they share with families. So getting this information has been very useful in terms of providing mentoring opportunities as needed.

In similar vein, we have various organizations and opportunities in our state. We want to make sure our families are being connected with those. Seeing how many of them choose to take advantage of those other resources. And if the interventionists themselves are becoming involved with those groups, too. And then as Dinah mentioned, one of the things we always ask on the survey is how they're feeling about the supervisory support that they're receiving. If they're satisfied with it, if they're not, what ways do we feel like we can support them better.

Jeff, let's go back to our PowerPoint at this point. Perfect. So as mentioned here in the slide, this is a handout that you're welcome to look through a little more thoroughly at your leisure. This just summarizes the kind of questions that we have asked about in the past. You'll see some of the points here. Barriers to conference attendance. You won't see that on the survey I just showed you today, because that's a question that we asked in the past. But again, we don't want to repeat all of the same questions each time.

One thing we do think is important, though, is if we set goals as a program because we've gotten responses on an interventionist survey that we have not been happy about, we want to make sure that we re-ask that same question in the next survey to measure if we have had any success in changing an outcome.

So this is a little bit more about the kinds of support that we're asking interventionists if
they provided to their families. We saw in the survey. And then this section again is about their satisfaction with the support the interventionist is getting from their regional coordinator. And having a place for open-ended comments, we found to be extremely helpful. Because then people are able to comment on something maybe we haven't asked. That's the thing that is really at the top of their mind.

As far as how we use this information when it comes in, everything is tabulated. And as the accountability coordinator, I generate a report for our program director for our people are responding to the various questions. So I'm now going to pass it over to the program coordinator, Dinah Beams and she'll tell you a little bit about what the program does with the information that we get from this survey.

>> DINAH BEAMS: So we use this information in a variety of ways. We review it. All of the coordinators review the report, as well as the accountability committee reviews the report that Allison generates. And we look at it for any trends, anything that we need to address. Are there trainings that need to be provided? Are there some trends in the way things are going with the interventionists that maybe we feel as supervisors we need to address?

Perhaps we are not involving parents as much as we feel would be appropriate for one. And then that would be something that we would need to address. So we're really looking at this survey to guide us as we move forward into the next year. We typically do the survey in the Spring. We do not do the survey every year because we feel that would be a bit cumbersome and potentially a bit redundant. So we typically do it every other year, which is why you're looking at a survey that we did in 2014.

We can then look at the results of the survey and as we're planning for the following year, incorporate any changes that we need to make with our training, with our mentoring program, just with any of the emphasis that we need to address based on the results of this survey. So that's how we utilize this data. There has also been times when the data has been utilized to go back to the school to be embedded into our year-end review plan, our summary of how the year went, those kinds of things, so that the school can use that as part of the data that they then share with other constituents.

So that's pretty much how that goes. We are now going to move into our next kind of survey for the interventionists.

This is something that we did for the first time last year. It's an interventionist self-assessment. So the survey that we just shared, we have done for several years, every other year, and it is about program issues. This interventionist self-assessment really is an opportunity for the interventionists in the program to look at their own skill set and self-identify where they feel they need additional support or training to provide high-quality intervention for the children and families that they work with.
We came up with 21 questions and six focus areas. These questions were derived and the focus areas were derived from looking at the literature that has been published in the last five years or so on what does quality early intervention for families with deaf and hard of hearing children look like? What are the components of that quality intervention?

So we really wanted to try to capture that and give our facilitators an opportunity to look at their own strengths and rate themselves. We purposefully asked them to rate their confidence in each of these areas, rather than how well they feel they do that. Just thought that would give us a little bit better response. And then we were able to use this information in a variety of ways, which I'll talk about in just a moment.

So we had as I said six areas of focus. We wanted to look at family-centered practice, and how we promote the family-professional partnerships as kind of the starting place for family-centered early intervention. We wanted to look at the practices around being socially, culturally, linguistically responsive around language acquisition and communication development. How do you feel your skills are at supporting those goals of the family? Infant and toddler development, evaluation and assessment, and then technology.

Interestingly enough or maybe you won't be surprised, the area that came out as an area where the interventionists felt very secure in their skills, very confident in their skills was in language acquisition and communication development. Supporting that. The area where they felt they needed more support was either in working with the children with multiple issues, the Deaf + population, or in working with families that would be at-risk families: Moms with maternal depression, things like that were some of the areas that came, that kind of rose to the surface as where they needed to have some support.

This is just an example of one of the questions and how we stated it. So you can see that we went from a low-confidence of one to high confidence being a six. Many of the interventionists were hesitant to give themselves a six in anything. I think they felt like that was reaching a bit. But we did, when we tabulated the scores, we found that the scores overall were very high.

So one of the things about this survey that really worked well for us is that the interventionists were anonymous and they were doing a self-assessment. But then the regional coordinators were able to look at the results of this assessment and again use that to figure out what areas we need to focus on for our training, for workshops. We actually were able to identify areas in the program where we were needing additional resources and were able to put forward a plan as to why. Because we had some data supporting the need for additional resources in those areas.

So that wraps up our two interventionist surveys that we do. Again, one more programmatic. What kinds of continuing education are they taking advantage of? What
kinds of support are they providing to families? And then a self-assessment of skills. And if you want to see the full survey that was done in terms of self-assessment, that was another one of the handouts that you should have received with your registration reminder and that will also be available on the recorded webinar that will be posted within the week. So I'm going to move onto our parent-satisfaction measure, which also is done through a survey format. And I'll talk a little bit about how we collect the data. Because the interventionist survey, we are highly successful at getting an excellent return rate from that. It's a limited group of people. They're highly motivated to share their information. They're strongly encouraged by their supervisors to do so. Parents on the other hand they're varied in how much they're interested in sharing their thoughts and how much time they have to do so. So we have tried over the years to figure out how to maximize the response to this. We only do the survey every two years. Most of the families are in the program for almost a full three years. So we don't want to ask them every year to respond to the questions. And many of the questions are the same because we're looking for improvement over time. And in order to do that, we need to ask the same set of questions.

Also, many of our families are involved in another program that our school for the deaf offers, which is a sign language literacy program that also has accountability measures. So in the year we don't do the parent survey for CHIP, we do the parent survey on the signed literacy program. So we just alternate those two. So the parent survey is also available as a handout. And not yet. But in a few minutes, I'll be pulling that up. But I want to again say a few things about how we actually collect the data.

So I guess we're sort of old school. But we've tried to be technological and new school. And we haven't honestly gotten great results. We thought survey monkey would be a great avenue. Have people just click on a link, answer questions. We got a very poor response rate to that. We found that in that format, people were more likely to skip questions than if it was on paper and pencil, possibly just because of glitches through the internet and the recording of the responses. Possibly just because items were overlooked at people were scanning on a computer screen. And then we also had difficulty in that we found that the families' e-mail addresses were either incorrect or changed more frequently than our documentation of their mailing addresses. So in order for the survey monkey to be successful, we needed to get the information out through e-mail so that families could just easily click on a link to get to the survey. And we had many, many of the e-mails bouncing back to us as undeliverable to the family. So we've gone back to doing a paper and pencil version. And the last survey we mailed the surveys out to the families. We always attached and addressed and stamped an envelope for them to return the survey. I think that's a critical piece to getting a good response. And also we offer an incentive for completion. We have a little sweepstakes that we do where we give away several Barnes & Noble gift certificates to a few lucky winners who return their survey.

What we tried with our signed literacy program last year, and we may give it a shot with the CHIP survey next time we do it is having the interventionist actually hand-deliver the
survey to the family with the attached envelope. We haven't done that in the past because we thought that might put the family off. Somehow the interventionist is going to see their survey results. It wouldn't be anonymous. But I think with proper instructions, the interventionist could make it clear it's not something they're wanting the family to fill out now while they're there at the home, but something they can fill out later and encourage the family to send it in.

I know at least my mail tends to pile up. So we're hoping this might yield even a better response. We typically do get about a 40-45% response rate. So in general for a survey, that's a really good response rate. But of course we would love to have all of our families be able to weigh in and let us know how they're feeling about the program and the services they're receiving.

So a little bit about what we ask. We want to know what information they're getting from their interventionist. We want to know what information they're not getting that they wish they were. So in the past, we've had lists of different sorts of information that we thought many families would want. And they can check off if they received that, or if not. And if not, then we ask them if they would like to. We ask them what other resources they're receiving in the community related to deafness, and they're overall satisfaction with the program.

I'll show you a few sample questions in just a minute. But again, another piece of it that we're very interested in is their perception of the interventionist that's visiting their home every week. So there's a variety of qualities that we're asking them to rate the interventionist on. Everything from if the family is self-supported in the communication choices that they've made. If they feel they get support at their IFSP or transition meeting from their interventionist. And just the overall professionalism of the interventionist and the parent's perception of the interventionist skills. So we're trying to look at things from a variety of perspectives. How does the interventionist themselves rate their skills? How does the family rate the interventionist skills?

So before we move onto utilization, Jeff, if you could just put up the parent survey for a moment.

So one of the keys to the survey besides trying to find the right format that will work for the families in your area, whether it's through Survey Monkey, a paper and pencil version, focus groups, interviews, lots of options of things that might work best for you. The other key is to keep the survey a reasonable length. So nobody wants to fill out pages and pages of open-ended questions and people just don't have the time typically to do that. So our rule of thumb is that the survey can be no more than three pages. Ideally really I think two pages is better. But we just have so many things we want to ask. It's hard for us to limit ourselves to two pages. But to make the questions easy to answer. Check boxes, things they can circle. Very little by way of open ended. Ratings that they can circle.
You can see here we start with a couple of basic demographic questions about how long they've been in the program and how many visits they receive a month. But try to quickly move into what we really want to measure, which is various aspects about the program. So these first questions are about different opportunities, if they've taken advantage of them or not. And if they have, how would they rate their effectiveness? This section here is all about the CHIP facilitator or their interventionist, rating them. And I just want to point something out that we're doing a little bit differently in our most recent surveys in terms of the rating.

So you can see on this form we're having the parents rate various aspects of the program and their interventionist on a scale from one-five. So on a one to five scale, that allows people to default to the middle and be neutral and give a three. And what we found is it's more effective to actually have an even number of choices. For example, going from one to six. Most people really are not neutral. They either feel more positively or less positively about a question that you're asking them. Using a one-six rating allows you to capture that. It's nice when summarizing the results overall were parents leaning in the more positive direction, rating things a four, five, or six? Or were they leaning in a more negative direction? Rating things as a one, two, or three? All of our future surveys have utilized this one-six rating scale. In the assessment survey, we use the one-six scale, and would recommend that to others who are doing rating scales. However many numbers you want to have on your scale, make it an even number, which forces people to go to either a more positive or more negative slant.

Just like with the facilitator or interventionist survey, we do have an opportunity for the parents to provide open-ended responses if they choose to. I would say that 80% of people filling out the form do want to write something in. We have occasionally families don't choose to do that, which is fine. But again, it's a great opportunity for people to comment on things that maybe you didn't think to ask. We've gotten a lot of good information from that.

So let's go back to our PowerPoint. I'm going to pass this back to Dinah who is going to talk a little bit about how we use the results that we get from these parent surveys.

>> DINAH BEAMS: So what do we do with all this information? One thing we do is we look at any of the trends and how one survey compares to previous surveys. There have been times as we have tracked this data that we have notice add trend that we were not particularly happy with. And with something that we indeed needed to address as a program. This might happen if you had an increased number of parents reporting that they did not know about a particular resource or opportunity within the program. And so we would then need to come up with ways that we needed to make that information more accessible to people and make sure that the families that would be interested in participating knew that that was taking place. So that would be one example of some changes that we've made.

We have used the survey information to set goals for program improvement. Again, as
the accountability committee evaluates this information as the regional coordinators evaluate this information, we are constantly looking for gaps, holes, things that we need to address as we move forward. And then come up with an action plan. I feel that parents and providers both need to know when they take the time to complete a survey that those responses are valued, they're honored, and they do move programs to make changes that are needed.

We all receive a lot of surveys that we respond to. And I think sometimes we wonder if that information just goes into a black hole somewhere and it really doesn't effect change. So I think it's very important that the participant see that when they took the time to respond, that that indeed, that information was valued, it was respected, and changes were put into place.

We used this information to monitor the progress we've made towards the goal. So when we write the survey that we do every other year, many of the questions are the same. So we can look at them longitudinally, but there are other questions that we might add because of a particular emphasis on goal that the program has had that year. And we're wanting to measure are we making progress toward that? And so that would be a change that we would make in maybe one or two of the questions with the survey.

And then again, this is used to really address areas with our interventionists where we're needing additional training, additional resources, additional support.

When we look at the parent and child outcomes with all of this, we are now moving into our next area and this is the area that most of you said you were the most interested in. So we've tried to time our presentation so that we have a lot of time to talk about the child and parent outcomes and those assessment procedures. We have a packet of assessments that we do that again it's a very dynamic assessment. There are elements of these assessments that have remained the same for years. But as the program changes, as requirements change, there are pieces of the assessment that we have changed through the years, as well.

So we have a packet of assessments that are sent out by our assessment coordinator. Basically at six-month intervals. We are very fortunate to have an assessment coordinator who can manage the paperwork and the logging and all of these pieces so that the individual interventionists are not responsible for that. These assessments then are completed collaboratively by the parents and the interventionists. So there are some of the checklists that we will go over, some of the assessment protocols that are ones that the parents respond to. There are others that the interventionist does. And then there are some instruments that the two of them actually work on together.

Then our interventionist videotapes a parent-child interaction. It's a 30-minute interaction that's video taped. And we get a lot of really good information from this interaction when it's analyzed. All of these assessments and the video tape are then sent back to the assessment coordinator at the University of Colorado Boulder where
the analysis piece of things begins.

So when they arrive at the university, we have student employees who collect these things for us. The graduate video is transcribed. And then they generate a report based on that. The results are then reviewed and this report is written by the assessment coordinator and the reports are then sent back to the interventionist to be reviewed by the family. They're not sent directly to the family. They're sent to the interventionist. A copy of the report is then also sent to the coordinator. So the regional coordinator and the interventionist can have a discussion about what they're seeing on that report and can work together to generate some appropriate goals for the child and the family.

The big question is always how is all of this paid for? We have a number of funding sources and it's kind of pieced together to make this work. No one funding source totally supports this assessment process. We have a full assessment coordinator. A full FTE. We also have an accountability coordinator. And that person is a .5 FTE. And that is dually funded by grants at CU and the university employee who is are hourly, and that funding is through grants at CU Boulder and also through CSDB.

Now I'm going to pass this over to Allison so she can talk specifically about the various outcome measures.

>> ALLISON SEDEY: As Dinah just mentioned, we do send out a whole packet of assessment material to the interventionist to bring to the family. And what's included in any given packet is going to vary to some extent based on the child's age and also to some extent based on the child's cognitive abilities.

The assessment I'm going to speak most about is sent to families where the child may have some cognitive disabilities, but it does not seriously impact the child's cognitive skills.

So our packet of assessments leans most heavily on norm-referenced assessments. We believe these are the best measure to be using with our deaf and hard of hearing children because we can directly compare the child's performance with other children who are the same age who are hearing. So one of the main things we want to know in our program from an accountability standpoint is are children functioning at age level, and are they progressing in the manner that we would expect? So in other words, are they making six-months' progress when six months' time has passed. The only way you can measure that successfully is by norm-referencing, when you can compare them to other children of the same age and see their age scores and see how much growth they're making from time one to time two to time three, et cetera.

So for the majority of the instruments, for a given area whether we're wanting to assess vocabulary or syntax or listening skills, we will choose a norm reference assessment if
it's available. We do have to rely on some criterion reference assessments to some extent, because we have not found a norm referenced assessment for certain skills that we're comfortable with. Almost all of the instruments that we use are parent-report instruments until the child reaches close to the age of three when they're about to transition out of our Part C program. At that point, we do a mixture of clinician-administered assessments, partly in preparation to get them ready for all of the testing that is going to be happening once they do reach school. And also to provide information on instruments that preschoolteachers are highly familiar with, because they're instruments that they use themselves.

Up until the age of three, it's almost 100%. Parent report. In conjunction as Dinah said with the interventionists. Depending on the family's desires and abilities, the interventionist will contribute to the assessment to either no extent, a small extent, or a large extent. At a minimum, they will review what the parent has filled out and discuss any potential discrepancies that they might feel between their perception of the child and the parent's perception of the child.

Many of the parents, especially after they've done the process once fill out pretty much all of it on their own with a quick review. Other families really like the support of the interventionist helping them through the various questions on the assessment. So that is very family to family. And as Dinah said a huge and important piece of our assessment is to gather a spontaneous speech and language sample.

Now we are fortunate that we have students that can help us with the transcription process because it is extremely time consuming and it is not something that every program is going to have either the financial or time ability to do. But I still think whether or not you're going to do a formal transcription, either orthographic or phonetic, gathering the language sample is possible for any program, especially now with interventionists having the capability to bring a video camera or their iPad or their telephone to video tape the sample. It does not necessarily have to be formally transcribed. It can be viewed informally, looking at length of utterance, turn taking, vocabulary, et cetera. Because one of the things that we're finding is as deaf and hard of hearing children are doing better and better due to early intervention, improvements in technology, et cetera, often on some of these normed reference assessments, the child will score within the normal change, which is fabulous. But when they come to transition to preschool, isn't always something that is going to allow them to get to the kind of services we feel that they would benefit from. Whereas the spontaneous speech and language sample is often the area where we still see children struggling to some extent and not reaching the same level as their typically-hearing peers. So we found the information from that to be very useful in terms of securing the kind of services the child needs to be successful.

So just to give you some specifics about the instruments that we do use, we look at some general development measures that are going to do some screening for things like motor skills, where we might need to make referrals to other professionals. The
Minnesota Child Development Inventory is one of those instruments. That's an appropriate assessment. For children who are below one year of age, we give the Kent inventory of developmental skills. All of the children take the play assessment questionnaire, which is an assessment of their symbolic play skills.

Then all the families fill out a vision checklist. All of these are norm referenced. You can get specific age scores in terms of how the child is doing on the various skills. And then the vision checklist is more of just a screening to ensure that the interventionists are keeping in mind that often vision issues accompany hearing loss and things that they should look for, any red flags in terms of the child's vision skills.

For vocabulary, we rely heavily on the Mac Arthur Communicative Development Inventories, which are norm referenced. Widely used with children with hearing loss and other disabilities. And then at age three we do the word picture vocabulary test in addition to the Mac Arthur. We look at syntax, as well. This can be done through a language transcription process or more informally by rewatching a video tape language sample.

We're measuring auditory skills, and we use the LittlEars from birth to 18 months. We like this instrument because it's one of the few or only instruments that has norms on typically-developing hearing children. But we find that most children by the time they reach 18 months are quickly tapping out on that assessment. So at 18 and a half months we switch over to the Cincinnati auditory skills reference.

As far as speech production, we're getting that from the spontaneous language sample. And then when the child is ready to transition to Part B at the age of three, we administer the Goldman Fristoe Test of Articulation. We have an intelligibility rating scale that we ask the parent to complete. We ask an interventionist to complete it. And we ask a naive listener to also complete.

As far as parent measures go, one of the things that we're interested in is for parents who choose to use sign language with their children, the growth of the parent's sign vocabulary themselves. So we developed a sign vocabulary checklist, which again is just a checklist. Not with any sort of age scores associated with it. But it allows us to monitor the parents' growth in their sign vocabulary.

We have the interventionist fill out an involvement rating, a participation rating scale about the family's participation in the child's intervention process. And then we have the family fill out a checklist where they can indicate what areas they need more information about. And it can be anything from financial support, for therapy, to preschool programs, to information about how to facilitate language development. We have a whole variety of different things that parent might want to know. And we give the parent an opportunity to check off what are the things that they don't feel that they've gotten enough information about yet and would like more information.
As I mentioned, we have a different set of assessments for the children we serve who have severe special needs unrelated to their hearing loss. So for these children, we do the Kent inventory of development skills, which is again designed for children functioning in the 1 month to the 14-month range. We use the communication matrix, which looks at very, very small increments of improvement in communication, many of which are nonverbal.

Another instrument called Every Move Counts. For auditory skills, we use the LittlEars because it does exam the most basic auditory skills. And these families will also fill out the family needs checklist where they can indicate where they would like more information and support.

So how do we use all of these data that we collect on the child outcomes and parent outcomes? A big piece of it is about progress monitoring. That's the program accountability piece? Are the children we're serving making the kind of progress that we are expecting and hoping for? So we're able to look at growth over time. Because we do this every six months. We're able to see if their skills are at or below or above the average range compared to other children who are hearing of their age. And because we have been collecting the data for a very long time here in Colorado, we've developed our own set of norms or averages across children who are deaf or hard of hearing. So we can also compare the children to how they're performing relative to other children who have hearing loss.

Before I continue with other ways we used this outcome data, we did neglect to mention that this is used with our families who speak English, and those who speak Spanish, and also for our families for who ASL is primary. We accommodate those languages in our assessment. When we have a family who speaks another language, Mandarin, Korean, whatever the case may be, we go into a much more modified assessment to try to get information from those families' program assessment data for those children, as well. But we do not have all of these assessments translated into all of the languages that we serve.

So going onto utilization of child outcome data. We use this information to set goals. We really want to make sure on our IFSP that the goals that we are setting are driven by the data by the information we have. So the coordinator will review the reports with our CHIP parent facilitator, our interventionist, and determine together what kind of goals we need to set, what intervention strategies would really work most effectively for that child and that family. And there are times when the data we receive on these assessments lead to a conversation with the family about communication choices. And just looking at are we getting where we hope to get in the time that we have.

We also use this to provide objective data for that transition time to Part B. A lot of our children, as Allison mentioned, are doing quite well. So sometimes we are really looking at some gaps that may not be obvious at first blush, but they are things that need to be
addressed. So this kind of information when we can provide it to the school district is very helpful. And they value this information that we're sharing with them as this child moves into the eligibility determination. And also that initial IEP for services in Part B.

Going on with how we utilize this data. One of the things that I think is really powerful about this assessment data is what we can do with it in terms of empowering families and educating families. Because the families are so involved in this process, they place a lot of stock in the information that is shared. Because it's not the professional telling them so much about what they see because the family did participate in this evaluation in a very real way and answered so many of the questions.

So the families then have objective information. It also is something that we can use to really look at how they are observing their child and to help them and to affirm what they are observing. We can talk with the parents about the developmental milestones and also the videotape also provides us an example of what we need to do.

And then we look at it to identify additional needs and areas of concern where maybe we need to evaluate other things and perhaps refer the child for further evaluation. We are rapidly coming to the end of our time here. So I'm going to just recap this slide very, very quickly here.

The outcome data is put into a database at the university and then that information is used again as we look at our program outcomes for the whole program.

>> ALLISON SEDEY: So Jeff will put something up to type in any questions that may have arisen. I know we have a very short time for that. Both mine and Dinah's contact information will be available on the left of the screen and it was in the second slide today.

I'm going to let Jeff talk about the question and answer and while people are typing in questions, I'll finish up with the final slide.

>> Jeff: There is a question and answer box there. We'll have just a couple of minutes for questions and then we'll go ahead and if you have additional questions, we can, you can e-mail those to either one. The first question is will the PowerPoint be available? Would one of you care to answer that, please?

>> ALLISON SEDEY: Jeff, I'm not sure how it works logistically. We're certainly happy to make the PowerPoint available. Is that part of the recorded webinar? How does that work?

>> Jeff: It will be on as part of the recorded. But if you want it available just as a PowerPoint, we could also I think arrange that.

>> ALLISON SEDEY: Okay, yeah, no. We're happy to make it available.
DINAH BEAMS: We have a question here about how we came up with the nine regions in the state. For those of you familiar with Colorado, you know there's a lot of traveling over mountains and around curves to get to places. We aligned our regions with our Part C agencies, and also with the local health departments. So we really tried to follow the lead with some of our other major players that we work with in the EHDI system. So that's how we came up with the regions. What that means is along the front range, where the bulk of the population is, that's where most of our coordinators are. So the other coordinators are spread around the state.

Jeff: Good. And we have a question for one of you. How do you pay your facilitators for their C.E.s? Continuing education, I believe.

DINAH BEAMS: The facilitators, when they are doing the assessment, that is paid as one of their sessions. And so we partner with our Part C agencies to pay for that. And for the continuing ed, we do not directly pay for that. What we do, though, is as a program we offer a number of different trainings that are free to them and are very high-quality trainings. So we do cover that. But we do not pay them directly for the continuing ed. They are responsible for that.

Jeff: We have another question. Will you please identify some of the gaps for children transitioning that don't show up in the norm referenced assessments? And what assessments do you share with districts?

DINAH BEAMS: We share our complete assessment packet, all the results, that final report, with the districts when the child is transitioning. And then the districts review that information and add additional assessments that they may need to supplement what we're giving them. In terms of what gaps we have identified, some of the children look very, very good on paper with our traditional assessments. But through the video tape in particular and the analysis of it, we have been able to show the districts that the child may have a lot of words, but for example, they are not able to, they do not say in a 30-minute time period the same number of utterances, the same complexity of utterances that we would be expecting. And often it is quite a substantial lag. So that would be an example.

Jeff: Great. Thank you. Another question that we have here is what evidence-based resources are you using to support the quality of the early intervention services specific to the deaf and hard of hearing population?

DINAH BEAMS: Evidence-based resources. We are using, we've gone back to the document with JCIH and some of the other documents where they have really identified the components of what good early intervention looks like and we've tried to look at our program and how what of those components we have in place. What of those components we may need to shore up or get some additional things. So we've really looked at that document and other documents like that, but particularly that JCIH
>> Jeff: Great. Thank you. Well those are all of the questions that we have. And as Allison and Dinah mentioned earlier, their e-mail addresses are up there on the left side. If you have specific questions, you could send those to them directly. This concludes today's National Center for Hearing Assessment and Management Webinar. Thanks so much Allison and Dinah for your excellent presentation and the information. Just as a reminder, the recording of today's webinar will be available on infanthearing.org in a week. Thank you all for joining today and thank you Allison and Dinah.

>> Thank you so much to everybody!

(The webinar ended at 2:33 p.m. Eastern Time)