REALTIME FILE

EHDI

INTERNATIONAL D&E ROOM

CREATING A UNIVERSITY-HOSPITAL PARTNERSHIP TO PREPARE EARLY INTERVENTION PROFESSIONALS TO WORK WITH CHILDREN WITH COCHLEAR IMPLANTS AND THEIR FAMILIES

MARCH 5, 2019, 1:30 P.M.

REMOTE CART/CAPTIONING PROVIDED BY:

ALTERNATIVE COMMUNICATION SERVICES, LLC

 [www.CaptionFamily.com](http://www.captionfamily.com/)

\*\*\*

This is being provided in a rough-draft format. Remote CART, Communication Access Realtime Translation, is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the proceedings.

\*\*\*

 >> Good afternoon, everyone, thanks for joining us today. Sorry they took the lunch away if that's what you were here for. Tried to snag the last Snickerdoodle.

 The three of us will be presenting to you something that evolved through the grant training program. I'm Maribeth Lartz from Illinois State University. There's also Tracy Meehan from Illinois State University and Nancy Young. The program we're going to talk about is federally funded through the US Department of Education. It was five years long. It's now over and we've finished and we're moving on, but this is our last hurrah to describe some of the interesting things that came out of it. It was an OSEP grant, so we thank the Department of Education. We want to look at the needs we had in Illinois, and I'm sure they mirror needs that you had in all of your states as well and how we programmed around birth to three services in Illinois. Looking at the increase, not only in Illinois but everywhere, in the identification of infants with hearing loss, and then what that means to prepare professionals who are now going to be working more closely than ever with families. Then we're going to talk a little bit about the credentialing and the organizations, national organizations, and their standards and competencies that they have put forth that we use to guide the development of the curriculum for the project. Then we're going to talk about the unique collaboration that we have with this particular partnership and how we did that, and then we're going to ask people here to identify potential partners that you might be able to access or share your things with that might strengthen the EHDI program in your state.

 So here's the model, and I will give the disclaimer that it's the longest acronym in US history, but it actually stands for AIM to be Ahead. It's looking at -- the grant was funded to be interdisciplinary, so we train speech language pathologists, audiologists, and teachers for the Deaf and it was also focused on the development of listening and spoken language skills.

 Why did we need it in Illinois and why do people probably every state need an AIM grant program? In our state, which might be the same as your state, most teachers, SLPs, and audiologists did not have any specific course work related to birth to three as a part of their program. In the state of Illinois, the birth to three credential is a separate credential. So for teachers of the Deaf, for example, the teaching licensure only goes from preschool through 21 years of age. So there is no content that is related specifically to birth to three, and yet in order to be a developmental therapist hearing, which is what we call our professional that serves birth to three in Illinois, you have to have a teacher of a Deaf degree. You have to have a Deaf education degree. So yet if we're saying that in the Deaf education programming there was no requirement for anything related to infants and toddlers and yet you're the people who are going to serve the infants and toddlers, so there's a disconnect between the training of the majority of the people enrolled in our programs had and what they're expected to do. And that's the same whether you're an SLP, for example, in Illinois, all you need to need to work with Deaf and hard of hearing children as an SLP is just to have your license, period. You don't ever have to have worked with, you know, a child as part of a clinical and -- I mean, there's requirements, but it's basically you have to have a license. So you can see that oftentimes there's a disconnect. So that's one of the reasons that I'm sure that we were funded is we were able to outline the growing numbers of children and the lack of systematic training that the professional that that are supposed to serve this group.

 Then the third thing that we were looking at is the increase in parents who were choosing listening and spoken language outcomes for their children, and they wanted to be able to work with professionals who knew how to do that and how to work with them to make those outcomes a reality.

 And then also, there was an increase, as I know Dr. Young will talk about, in the number of children, infants, who are going to be implanted and have been implanted in the past several years. So that was the real reason behind why we needed AIM. So once we -- we got the grant and then we decided, oh, great, what are we going to do now? We said we were going to do this. So we began to look at three primary bodies to get information on the infrastructure and the ground work for the competencies and standards. One of the first things we looked at was the Joint Commission and what they expect and recommend for providers working with children, infants, especially, who have been identified with hearing loss. And so we looked at that group and what they recommended. We looked at the Council for Exceptional Children has a very large subdivision and division of early childhood. So we looked at the competencies and the recommended practices under DEC so we could make sure that we were aligning with the early intervention to early childhood development standards, and then we also looked at the A.G. Bell Academic and we looked at the domains that were linked and that you follow to become credentialed in that area.

 So we took the three of those and made like a giant 500-page matrix and tried to see where all the combinations were and we feel we meet the need. The Joint Commission, one of the things they said was that EI providers may not have sufficient preservice course work and/or practicum experiences that address the needs of children who are Deaf and hearing from birth to age three and their families. As a result, they may lack the core knowledge and skills to work with this population effectively, which is exactly what we found. So we want to put all the recommended standards, practices, and competencies together from JCH, from early childhood, and from Deaf and hard of hearing to come up with the design of the program.

 Once we had all the competencies and skills aligned that we needed to teach as each cohort, and we had four cohorts over the life of the five-year grant come through and graduate and complete the practicum and all of that in the course work to go through. So one of the things they had to do was take a pre and a post survey. The presurvey happened the first day they started the program, a survey of all knowledge and skills we had compiled based on these organizations, and then they had to rate themselves on that and whether or not they thought that was an important knowledge or skill to be able to evidence in future practice. So we had that pre, and from the pre, when we realized how low many of the students ranked themselves by their own self-perception on what they knew about certain knowledge and skill sets that we've presented to them, and that's how we decided to put together the courses. And we had four separate courses, and then a year-long practicum. And I'm excited to say that we've got some instructors in the audience. Wendy has been teaching. We have some graduates from AIM. So we've got a lot of people. It really does take a village to do a project that's this large. They remember, I'm sure, taking the surveys. We were always surveying. We do have the pre-survey data and the post-survey data.

 Okay. So once we did all the surveys and looking at all of that, what fell out between the surveys that we saw from our own students who were going to be involved and what the field is saying, these primary areas are things we had to look at. So I'm going to start with the best standards and practices and principles of early intervention.

 So state comes up with the principles of early intervention and then, you know, we've just taken best practice things from people, from organizations, so we wanted to address all of that. Then we wanted to address the cochlear implant. What is that, how does it work, who can get it, all those things, and what you have to do to become a successful user, especially if you're an infant or a toddler, how do you work with the family to make sure that's happening? What do you do with the medical professionals? So that was another huge part of the design of the program. Because we were hearing this firsthand from people saying, I don't know what I'm doing in these areas. And we did want to stay true, like I said, to the early intervention and early childhood tenets. I mean, we need to follow that. We want to follow typical development. We want to know typical development and social-emotional needs of infants and toddlers and their families. So we wanted all that.

 And then the other thing that was a glaring red flag was that across the board, not only from the students that were taking the surveys, but also, again, in the field, was this need for understanding of auditory development and all that entails. So not just the steps of the auditory hierarchy and can you repeat those from memory, but how can you apply that and look for that and assess that in infants and toddlers? We needed to talk about the impact of auditory deprivation, and then we needed to talk about what role does the implant and the hearing aid have on that, and just all of that. But these were the three primary areas that came, not only from the practitioners themselves, the students who were all, by the way, practicing professionals in either Deaf education teachers, speech-language pathologists or audiologists that were coming back for additional training. So they were telling us themselves, we don't know what we're doing in this area. And then we were also, again, seeing this in the field. So we really wanted to wed this all together to come up with a perfect program.

 My last slide, again, we were looking at the JCIH recommendations, the Division of Early Childhood, and the A.G. Bell for the list of those certifications. So we looked at those, put them together. And I know you can't read this, but this is an example of how we aligned all the standards.

 So the first column is the DEC, Division of Early Childhood recommended practices. The second is the A.G. Bell Academy. It comes from the LSL mentoring categories and items. And the last column is the Joint Commission on Infant Hearing. So I'll pick one. The first one is under DEC, practitioners with family, identify skills to target to help children become adaptive, competent, socially connected and engaged.

 And then under A.G. Bell, we found these particular competencies. Practitioner uses wait time to get the child to talk, uses wait time for child's processing on input. Practitioner uses appropriate acoustic highlighting. So these were some specific strategies and skills they needed to know.

 And JCIH, all children who are Deaf and hard of hearing need EI providers who have the professional qualifications and knowledge and skills to help optimize the child's development and child and family well-being.

 So that's how we would put them together. We aligned them all. And from that, we did -- conducted assessments. So we had both performance assessments and also knowledge and skill assessments. So when they would go and do practica, the practicum supervisors and the skill mentors had forms to fill out that evaluated and assessed the progress the students were making towards these skills and objectives competencies that we had pulled from the national organizations.

 So we had the student's own assessment data on the students, the practicum supervisors, assessments of the student on the same levels. We had all the course work and each course was aligned with all the different competencies and standards. So each course had a separate set that had to be developed. So we felt like by the time they graduated, we had full assessment of how they were doing and how they had grown over time. Now, Tracy is going to show you how that came together into one big program.

 >> TRACY MEEHAN: I'm already exhausted, and I didn't even take the program. Just hearing about the competencies and skills. But this is just a visual for you to look at, while we talk about the EI professional. So a DHH professional who we're training. So we accepted speech-language pathologists, audiologists, and the OSEP was looking at a statewide coverage. So Illinois is long is narrow, and we didn't just train for Chicago and the suburbs. We trained in Carbondale, next to Kentucky, and where there were underserved areas. With a lack of quantity of providers and a lack of quality of providers. So those were specific OSEP goals.

 In addition to training a DHH or EI professional in all of these other practices. So a heavy task, but one that we took on willingly. At Illinois State University, at ISU, we felt very confident with the faculty and hired lecturers and labs on campus that we could fulfill most of those areas. But, of course, I'm leading up to the collaborative partnership, but we knew at that the family center practices, one of the basically evidence-based practices in early intervention, that we would meet those competencies. Typical childhood development. Again, most people that were in the course work that worked full time as a speech-language pathologist or teacher of the Deaf hadn't had birth to three. So it was a whole paradigm shift to move from their career comfort level to a birth to three paradigm where the skills were quite different. The impact hearing loss has an social-emotional development, very near and dear to all of us, of course, anyone in Deaf Ed, but how does that hearing loss impact to a family with a six-month-old and eight-month-old and what do we say and how do we work it and how do we work with the speech audiologist having those difficult conversations and what is the collaboration and what is the responsibility of the provider to do that?

 EI principles, the early communication milestones. We felt good that we had staff and we were going to be able to cover all of the competencies that Dr. Lartz discussed, and then this listening development, oral rehab. We had enrollment. We had class. We had educational audiologists teaching that class. Highly effective, highly skilled. But this was a lot of the new information for all of the students.

 So with the best 12-month program, we felt students needed more. So Dr. Lartz mentioned the classroom and the content, but we needed application, clinical application, so we began to reach out for this oral rehab piece, knowing that the professional in Illinois was going to be allowed to provide that service. That was part of the rules and regs. So we wanted to put out a product that was able to actually do that and provide oral rehab.

 So we started statewide collaborating, reaching out to partners that might have heard of Illinois State University or probably hadn't heard of AIM to be Ahead yet, and it was a process. Some were through contractual agreements through the grant to set up clinical partnerships. Some of them were to work on state agencies that provided the credential and hours that might be applied to our program that people could apply toward getting further training. The particular partnership we're going to be talking about to provide cochlear implants and so on. So the partnerships were vast and we realized at the university, there are no silos. We can all reach back in silos, but the students weren't going to be adequately trained the way we felt they should be.

 So we reached out today and invited Dr. Young to come present with us because we felt it was a particularly unique partnership. Anyone on that list could have helped us develop more fully maybe the social-emotional impact a hearing loss has on family. We partnered with a mental health facility and they could do observations there. So we're highlighting one today. We're a Children's Hospital where we felt to meet the competencies the students really needed additional experiences in key areas. And they did. So we set up a partnership over the years. The first couple of years directly, and by partnership, we all know anyone who has partnered with a state agency has a lot of forms, a lot of meetings, a lot of requirements, a lot of the students can do this, the students can't do that, us having the responsibility of assuring them, yes indeed, we'll take part in that. So all of the behind-the-scenes, so our students can go in and actually observe clinicians providing aural rehab, observe audiologists doing the initial stimulation of a cochlear implant on a 10-month-old, observing audiologists doing mappings along the way of a 36-year-old, a 28-year-old, and early intervention. So building competencies within themselves was one of the outcomes of those experiences.

 Networking with other professionals that they're going to be working with was a second outcome. And all of those kind of hidden benefits we could analyze and assess because after each experience that the student did, and I could ask that -- two of them or more here about the reflection papers that that were required to write post visitation. So the reflection papers were turned back into their instructors for processing and systematic analysis of are we moving you along this paradigm shift. Are we helping to you build competencies in areas where you might not have felt comfortable entering the program. And through those observations they were looking at themselves doing that work. Am I going to be able to do this? Will I be able to provide oral rehab service? Where else do I need to go to continue building my skills? So the reflection papers were very crucial, I felt, in individually helping those students through these experiences that they were given.

 Every year, Dr. Young herself would schedule a cochlear implant surgery with her and her scheduling team. This was before they offered it on a larger scale. It's still offered all the time, but I'm just talking about individually what she did for our program, and we would come in, the whole cohort would come to this facility in the Chicagoland area where you are now and we would observe Dr. Young perform a cochlear implant surgery via video conference, so we were in a large conference room and she was two doors down in the medical suite and she would come after the surgery and after the dialogue with the family and have a Q&A with the students personally. So not only were we receiving the benefit of the medical experience, but then we also had that personal connection with a family's ENT physician. So it was quite meaningful.

 We also had multiple people from Children's help us at guest speakers in the 15-credit hour course work and Dr. Young presented as our conference last year. So it's been an outstanding and collaborative partnership. With that, I'm going to turn it over to Dr. Young.

 >> NANCY YOUNG: Sorry. I like to give a little historical perspective. When I started, at Children's, it was a while ago, and I started there in a program, I actually implanted the first child to be implanted in the state of Illinois, and at that time, there were four therapists who provided hearing therapy, at least in the greater Chicago area. They were all in private practice. So I -- it was very interesting for me, because I really got to see the importance of this therapy in a very visceral way. And when we had children who were not able to access this type of therapy because what the time period I'm talking about, there was no early intervention system in Illinois. So that just did not exist. What happened when the children did not get therapy from an experienced provider and listening in spoken language, and there usually was quite a significant difference in outcome.

 And that was really -- it was very clear to me from early on how important listening therapy is. And, in fact, we started a program at Lurie Children's where two of our speech pathologists had information in this expertise, and it was difficult to find people with this expertise back in the day. That was going along nicely, but, of course, it's very challenging if these services are not available as your program grows, we have people that it's just not practical that they can come to your center for therapy, nor can you keep adding providers. This is the type of long-term therapy that needs to be available in the family's community and in their school.

 And then low and behold, Illinois developed an early intervention program, which in theory was wonderful, but what in fact was not so wonderful because you didn't need the skills we're talking about today to be a provider, so that presented quite a challenge. So I am very grateful to Dr. Lartz and to Tracy Meehan for developing this certificate program and for being such good collaborative partners. I think our center and our patients and patients across our state have definitely benefited. And one of the other nice benefits of having this collaboration was by having your people come in, that it was really wonderful for our staff to meet these providers one on one. Certainly, you know, we encourage two-way conversations. We encourage reaching out, and that's easier to do and to do effectively if you've already had an introduction that's face to face. So I think the program was really very beneficial to us.

 I'd like to acknowledge my implant team. We have grown to -- I've done over 1800 implantations since we started. We have quite a large team with seven audiologists who focus just on cochlear implant, and we have four speech pathologists who focus just on aural rehabilitation, and they are all certified by the A.G. Bell academy or working on their certification. We're also fortunate to have a deaf educator that many of you may know, Jen Haney, and staff, and in order to be more accessible, we have locations for both surgery and programming in the evaluation, three locations in the Chicago area.

 This slide was kindly provided to me by Tracy Meehan, and I think it's a great quote. That was actually written by me and my two co-authors, but I'm glad that she offered this slide to me, because it reminds me to comment on the needs of children who are more complex. That is an area of special interest. I think it's where many of us at Lurie Children's, where our heart is, to get the therapies they need afterward. It's important for us to keep in mind that when we see a child who is complex, especially those with motor issues, we tend to underestimate their ability, and we need to keep in mind that there is no accurate way to do a cognitive assessment and know what that child's potential really is, especially if they receive the help that they need. That if you deny service, an implant or therapy on the basis of, well, they're not going to benefit, you know, you'll be right, because it's a self-fulfilling prophesy. But that's not the business we're in the we're in the business of early intervention. It's about helping children to achieve their potential. So I think you have to be optimistic and you have to be willing to accept the fact that you're not going to hit a home run every time and celebrate your successes. And also, have a broad definition of success, because many of our children, they may never have spoken language. The parent will tell you in working with the child and in social interactions with the child that their hearing is their strength and it's made a world of difference.

 Let's talk about outcomes and age of implantation. So there's a wonderful paper I like to suggest everyone take a look at, published by Dettman, Australia has a much younger age of implantation for congenitally Deaf children than the United States, and this is the largest of infants implanted under 12 months and long-term outcomes, speech and language, prospectively, as school age, as they entered school and late primary school, and there was a significant benefit to having been implanted during infancy. And this was -- this paper, in large measure, was what inspired me to do a retrospective look at children granted at our center, since about 2007, when we had electronic records. To go before that nowadays is too difficult. So we looked at our young children implanted before they were three, included 37 implanted before 12 months, and we had quite a good follow-up of 7 and a half years on average, and the open set speech perception developed much earlier, we could measure it a year earlier in the infants, and that aural communication was achieved more significantly, but we saw a significant decline in their ability to be oral as their primary mode of communication if they were implanted after 24 months of age. There was an advantage before 12 months of age and we saw quite a drop after 24 months of age, especially if they had additional complicating conditions.

 This paper is fairly unique. If you look at nearly every outcomes paper in the field of implantation, they exclude other facts that would impede process, so kids with Down's, kids with CHARGE, would be excluded. We did not exclude any of these children. So we looked at the outcome regardless of their medical condition. We only excluded kids who -- who had a deficient nerve or didn't have an adequate insertion of electrodes, which was maybe six kids at most in the study.

 The other thing we looked at which was different than the Dettman study was we wanted to look at anesthetic risk as well as not just bad outcomes, but even the occurrence of anesthetic issues that are sort of harbingers or early warning signs that a problem could develop and needs to be addressed. And we compared that to the older kids and we also looked at surgical complications. And we found from that perspective, there was equally safe in our population.

 So from our standpoint at the implant center, what is it that we think is critical about having good listening and spoken language therapy? Well, we think it's important on multiple levels, and one of them I'd like to focus a little bit on is achieving early implantation. We think a partnership with a good therapist is really very critical. So let's talk about this type of therapy, both before and after implantation. What is it that we at the implant center are looking for? So before implantation, I think having a therapist that really understands auditory, what is an auditory skill in a child and how do we communicate that to a parent, what is a child hearing and not hearing and what is the significance of that, so this is critical to enable parents to actually see the hearing loss. And I think one of the biggest challenges we have is with -- especially parents where it's their first child and the child can't hear and they have no experience in this field. It is really invisible for these parents. I mean, that's why we have the newborn hearing screening, right? But even knowing, it's still invisible. It takes a lot of faith to believe this test called an ABR. I really think the therapist is what brings it to life. And the communication between the therapist and the people at the center, because that allows us this communication among otherwise and the people in the community taking care of these families helps us to understand where is it that the parents are having -- what are the barriers, what are the concerns need to be addressed.

 We also, as therapists, it's very critical to achieving consistent hearing aid use, develop a conditioned response to help with testing. After the implant, the same thing. Consistent device use, and of course, auditory and spoken language development. And early identification of potential implant candidates, what are some of the things that we want the therapist and we see the experienced outfits providing, helping the parents understanding, is their child really getting access to those soft, high-frequency sounds, is the child's language gap closing. And here's a real important one. Is there something changing with the child's hearing? I feel like good therapist is really kind of like having a -- an audiology evaluation in your home. The therapists are often the ones saying to the parents, there's something wrong here. Your child is not responding as previously or not developing skills the way we expect them to based on the audiologic data that is provided. You need to go back and get re-evaluated.

 And this is really critical. This has helped us to identify kids who had asymptomatic fluid in their ears so they're not fully benefitting from amplification, or there has been a major change in their hearing, and that is not uncommon with pediatric sensorineural hearing loss. So that issue was critical for us.

 And who is qualified? Well, our -- we're delighted when our -- when we have our therapists who have taken the AIM program because we know they know the basics. We think it's a critical first step. We love when we have therapists who are A.G. Bell certified. That's not to say there aren't amazing therapists out there who don't have the certificate, just as there are people who are natural healers and they may not be physicians, such as myself. Those people exist.

 And I think one of the things fascinating about listening and spoken language therapy, these type of therapies in general, there hasn't been a lot of research and what is it that is critical in terms of EI therapy? What is it that really needs to be taught to the parent? Because the parent is the one that is being expected to implement this in the home. There's a lot of different theories and, you know, fans of different approaches, but there hasn't been a lot of research. So I just want to make everyone aware of Meghan Roberts who is at Northwestern, and she is an expert at studying parent-child interactions when it comes to multiple populations of children. She now has NIH funding to further her studies on children with hearing loss, and this slide at the bottom has a reference to some pilot data from her RO3 and now she has an RO1, and I think this kind of information has the ability to really inform training in the future for early intervention therapists. Thank you.

 >> Thank you. So I just had a couple of quick pictures, tell a thousand words, but this was one of the winter cochlear implant surgery experiences at Lurie children's Outpatient facility in Westchester, Illinois, we would gather at 7:30, always provided coffee and breakfast by the facility. It just was very special, and the students felt special to be able to have the experience and ask questions in a -- you know, safe and comfortable arena. And just one of our cohorts to visually show how many people we had in a 12-month training program, certificate program. Finally, before we ask you a few questions, there's the long, thin state of Illinois, and we're always looking at impact and impact of outcomes and our ability to meet the OSEP-required objectives, and we had 49 people trained into early intervention. That's a big outcome, across the state, and we have filled many of the holes. Work is not done, but the grant is finished, so areas for you all to pick up and move forward.

 >> Okay. So now we get to the part where I just want to pose a question to you. I want to ask you, who is your Nancy Young in your state or in your area? Who is your Tracy Meehan in your area? Who can you work with and develop a partnership with to strengthen the EHDI program in your state? Because I will tell you, when we started, I was like, I can't work with a hospital. I can't even remember what the candidacy requirements are. And I've got my classes and I do this well and I do this, and I don't know how we get out there. And I think of it, and then I'm like, oh, that could never work. And then one day, we just called and it was amazing. It was like, okay, sure, that sounds great. Like, what? So then Tracy and I are like, what all are we going to do? This is what we need from then. This is what they need from us. And it kept growing and growing. Until now. We still see one another. And at the beginning, I never thought it was possible. Because I couldn't see past my university. And, you know, as I think of a university, I think, we work in schools. That's what we do. But there's so much more. And so I wondered if you already have some great partners, and I know some of you in the room, I know you're already doing great partnerships. But I wonder if there's another group or another person, another agency that you might not have thought of in doing your EHDI work and your born birth to three work. So I wondered if you would be willing to share a partnership that you have. We don't have a whole lot of time, but, you know, we actually have about ten minutes, and I'd love to hear about any new or unique partnerships or if you have questions for any of us or you have thoughts about future partnerships. I thought that would be interesting to share. So share away.

 >> Okay. I'll share. I'm Derrick Houston from Ohio. Ohio State. And so a year or so ago, we formed a group called the children's hearing and language development network resource of Ohio, so it spells out children without any vowels. And we had 63 stakeholders, so it was a combination of all kinds of, you know, teachers of the Deaf, SLPs, audiologists, ENTs, researchers like myself, basically come together and say, okay, there are things that are working in Ohio, but things that

are -- we see and we hear from our families as real barriers to early intervention and challenges. So let's figure it out. So we got together and just like the more we talked, the more we realized that it was a lot more complicated than we thought and we couldn't just figure it out. So then we fortunately got a grant to build a community collaborative. So it made our group kind of more official and then we embarked on a what we called the discovery phase where we conducted focus groups from five regions around Ohio, had separate ones for parents, and for professionals to get their input on what's working, what's not working in the state, and then a core committee of about 20 stakeholders representative of cross fields and regions, sort of categorized all the data into different priorities and -- and then from that, we ranked these priorities to come up with a couple of objectives for next steps.

 And one of the objectives that we're hoping for some funding to pursue is to improve parent -- access to parent to parent mentorship through the state because that's what came from this process as the top priority. So I think like what I like about our approach is that we really had a representative number of stakeholders who went through this process, and then what we're deciding to do next is really, you know, a group decision that we're then moving forward with and -- yeah, and then we'll see what happens from there.

 >> Great. Thank you so much.

 >> And how long will this go for, the group, based on funding?

 >> AUDIENCE MEMBER: We have no funding. (Away from mic). I get a lot of support from my department.

 >> Seeking external funding. A good tattoo. Who else has a partnership in another state? Outside of Ohio? No one?

 >> Anybody want a partnership? What would be your dream partnership? I just think it's important that we actually face like what's keeping us from doing what we know is the next best step to do? I feel like all of us probably have something. Like at lunch today, we were bandying about some ideas for things as I was listening, I thought, boy, that would be a next great grant or a next great project to think about, just as we came up with something over lunch.

 >> Can I ask a question of anyone in the audience, as well as Maribeth? So this project that Maribeth and Tracy described came about because of a lack of training of providers offering therapy for children who have cochlear implants. But the fundamental issue is, is that people are graduating from master's programs in audiology, speech pathology, and Deaf Ed where there's no real training in this area, other than maybe a lecture. Does anyone see that changing? Because that would really -- you know, we're playing catch-up afterwards, but that's really the core issue.

 >> AUDIENCE MEMBER: Hi, my name is Liz. I'm an audiologist. I don't know if I have the answer to that, but I can tell you my difficulty in attending graduate school, knowing I had to work with that population, and then just how hard that was as a student going and being fully prepared to work with adults. Like I spent all that money and all that time and all that effort and going, but there's still more, and there's still more, and I know there's more, and I had a sibling who is Deaf and I grew up attending all of her audiology appointments and I remember all the testing they did with her and all of that, so I got to see those things and I knew they existed, but they weren't more than a paragraph and a slide, you know, and a checker on a book somewhere for me. So I learned most of that during my externship, I did one and it was passed on to me. And looking from the program that I came from and knowing the professors that are there, that's not what they do. You truly have to hire someone who has lived it and done it and worked it and chosen to go back into teaching or someone who wanted to develop a pediatric year. And I'm from St. Louis. I know they're looking for the audiology track and I take students in my clinic, but it's been difficult for them to get the students to have pediatric experience, and it's pediatric experience, not necessarily birth to three. That's mostly what I do.

 I think it's going to be tough until you get the professors with the background. I think they're uncomfortable. I know who my professors were, and they weren't comfortable with that stuff. So I don't think they would be comfortable teaching it. One university program now I'm aware of is teaching a pediatric course as a summer program, and it's just like two weeks online and it's someone who didn't teach pediatrics. That's not acceptable to me. Just thoughts.

 >> In the back, Maribeth. Interesting point. We at Illinois State University, there is an (indistinguishable) program, and I think in the course of the five years, it was five, four, four or five people, just like you, who took all of our course work as their electives for their course work. So we were able to work together. But, again, no one in that department ever really thought they wanted to do that either until we broached the possibility that somebody, some student might be interested. And Maribeth and I started the program, or Maribeth started the program, and we're both educators. Well, we weren't going to be teaching a pediatric AR class, so we had to hire someone. And the speech class, we weren't going to be teaching that. It takes the interest first, and then you can bridge out. In the back. Please.

 >> AUDIENCE MEMBER: Real quick. (Indistinguishable) from Minnesota. And I think one of the challenges probably in all states, some of the rural areas, the teachers -- we're losing numbers. We're losing audiologists, ECIC teachers, the number of the people in the field is a challenge. And then a complexity of what we do, takes, draws from early childhood audiology, speech pathology, the hard of hearing cultural layer and all of that piece. And another challenge I hear from the professionals who are licensed and working, it takes so many hours to get through the master's, but there's more to learn. I think it's okay, you know, you have your ID or your master's, but there's something to learn and (indistinguishable). But online, it's hard for people who are practicing in the field to go to a site, so if there's options online, some of that information so you can come together for some things, but there are some things that people can do remotely, because that's where people are, sometimes, two hours away from the campus they serve, too. Just some thoughts.

 >> Thanks.

 >> AUDIENCE MEMBER: I have to say, I have the experience of going through a Deaf Ed program where I was certified, K through 12, which I wasn't qualified, still aren't, but went to Gallaudet's earlier education program, which is now closed, but those programs aren't really around. That training was counseling, which ended up being by and large like the most beneficial course, in addition to, you know, being able to explain an audiogram and understanding communication and language development. But they just aren't around. And part of that, I don't know if anyone knows (indistinguishable) Romando, but we had to spend over 30 hours with the same family. These families were all across the board and the choices making, and this is not teaching, this is not services, also is not baby-sitting, which we have to remind people, we're not here to take them to the library. We're here to join you going to the library. So it was just hanging with families. And those experiences, absolutely, still, are kind of like at the core of how I go about my job still today. So, yeah, I mean, I just -- I personally don't see those programs -- Deaf Ed programs are closing, and then programs never had course work, like you were saying, in some of these areas. So yeah, it's the same deal in Ohio, that you know, we have Deaf educators and audiologists who want this information, but there's not really a convenient or good place to go for it.

 >> We have time for one more, I think.

 >> AUDIENCE MEMBER: So to at least give my opinion to your answer, why we can't just move forward or what's preventing us from doing forward to doing the right thing, I don't think there's -- we're not always on agreement on what the right thing is. So I think getting on the same page and -- I'm not talking about like sign versus spoken language. Our experience with the children of Ohio, the early intervention people speak a different language. They don't speak the JCIH language. That's not a part of their core knowledge base. They're OSEP. At Ohio, they're really invested in routines, based early intervention. So the idea of it, it's a little bit of a challenge. We feel that people are interacting with the children need to have expertise in hearing where they're focused on the more basic parent capacity building issues and letting the parents decide if they want somebody with knowledge -- to come back and say, well, for them to make the decisions.

 So there's -- it's not as easy as just saying, oh, we all know what the right approach is, and so, how do we find a way for collaborators to make it happen, because there's already opinions on sort of basic issues and -- and just a quick question, the routine -- the coaches -- is that a part of your program too?

 >> Yeah, a separate family -- we do everything, and the practicum is all done with families that we have -- I think she's telling us we have to stop. We did. We have a whole separate class because we needed that to do the coaching and stuff. We needed that separately. Thank you all for coming. I hope you have a great rest of your day. Thank you!

 (End of session at 2:44 p.m. CT)