Teleaudiology: Advancing Access and Equity in Hearing Care Part 2: State of the States Presented in partnership with Salus University

Presenter: Aaron Roman, AuD Samantha Kleindienst Robler, AuD, PhD

- [Christie] It's my pleasure to welcome back for part two of this wonderful series. Every year we host several courses with Salus University and this year we are delighted to have Dr. Aaron Roman and Dr. Samantha Robler with us. If you'd like to learn more about either presenter, you can read about their bio on the course registration page, but that at this time, I'll hand the mic over to you, Dr. Roman.

- Alright, and welcome everyone. Again, as Christie said, my name is Dr. Aaron Roman. You can certainly call me Aaron for today's talk. And I have the pleasure of working and presenting alongside Sam today. So Sam, if you just wanna say hi quick.

- Hello, happy to be here.

- Alright, wonderful. So this is part two. As you may or may not know, this is part two of a two-part series about teleaudiology. Today we're gonna be focusing on a lot of the more nuance around the implementation, things that you need to know regarding state legislation, licensure, Medicare, Medicaid coverage, things of that nature, as well as sort of the practicality in implementing it. And you'll see some case studies and we'll be talking about that. Now, that said, because this is part two, I strongly recommend you check out part one as well after today's talk. You don't need to watch them in order, but part one gives you a lot of the background of what we're talking about.

It gives you some of the basics about what we're talking about specifically around teleaudiology. We'll also be referencing some of the things that we had said in the part one. So again, if you haven't checked it out, I highly recommend that you do, though it's not necessarily a necessity for watching this one. So let's get started and let's dive in. So you can read here all of this disclosures. I am an employee at Salus University and Salus University is putting on this talk. But other than that, I have no relevant disclosures. Sam, I don't know if you wanna speak on your end.

- Yep, I am employed by University of Arkansas for Medical Sciences and the Norton Sound Health Corporation in Nome, Alaska. I have no other disclosures.

- Alright, wonderful. And of course this is being presented by AudiologyOnline. So the learning outcome. So after today, you'll all hopefully be able to identify state and federal laws that apply to teleaudiology. You'll be able to compare and contrast teleaudiology from other models of clinical service provision, and you'll be able to describe challenges and potential solutions for the provision of teleaudiology services. So now for those of you who have seen the part one of the discussion, you know that the format of our talk is a little bit different than a lot of other webinars that you may have seen. And we try to take a more conversational approach. So throughout the talk, both myself and Sam will be acting sort of as audience surrogates and we will be asking each other questions to sort of keep the conversation clear, make sure that everyone's on the same page.

That said, if at any point you have a question that arises, feel free to throw it in the Q&A chat. We don't have to wait and you do not have to wait till the end. We wanna see your questions and we wanna see if we can answer them as they come in. Some of them we might be answering as we're talking, so don't worry about that. But we will try to answer every question that we get. So don't be afraid to use that Q&A and to ask whatever questions pop into your head as we're talking about it. Okay, so let's get started. So as I said today or as you may have seen, we're gonna be talking a little bit about state and federal laws and you know, it seems a bit of a civic suck here and in some capacity it is.

But as audiologists, it's really important that we get an understanding of how these laws impact our practice. And I feel that in talking to audiologists, a lot of us don't know exactly to the extent that what one body of government being the state government versus one body of government being the federal government have over

our general practice. So we're gonna dive in and we're gonna talk about some state and federal laws.

- But Aaron, like why do we need to discuss state and federal laws at all in teleaudiology? I mean, in my experience in Alaska, you know, it's a state that's had to be really proactive about telehealth service delivery. And you know, I've mostly worked in Indian Health Service hospitals, but like how is this important to me? Why do I need to know it when I'm thinking about teleaudiology?

- Right. So specifically regarding teleaudiology, teleaudiology is sort of its own different beast. And anyone who's been involved in sort of remote service delivery, you may be aware of this and if you're not, I want to, that's what a lot of today is gonna be talking about. But when it comes to teleaudiology, it's about managing the federal laws, which of course govern the entirety of the nation as well as the state laws and more specifically the state laws. So for example, when you are a practitioner, I live in Pennsylvania, as a practitioner in Pennsylvania, I'm beholden to the rules and regulations in Pennsylvania. Now during COVID, a lot of the rules regarding telepractice services, they relaxed and it was under a declaration of an emergency.

So what that allowed me to do it is it allowed me to see patients in New Jersey, in Delaware, in other neighboring states, specifically through remote service provision, meaning that I lived in Pennsylvania but I was able to serve those in other states that were adjacent to Pennsylvania. Now, during the emergency declarations, I was able to do that without having to do any sort of extra paperwork, any sort of extra considerations. But now that those declarations have elapsed, now there are extra requirements that we have to be aware of. So for example, I can't just say, "Oh, you live in New Jersey, I'm happy to see you now." I have to be licensed in New Jersey.

And so these are sort of the considerations that we have to be aware of. And those avenues of getting licensed are different as well as the way that state handles licensure as well as the way it handles regulation and how it defines teleaudiology. And so we're really gonna be talking about that. So let's actually jump in and kind of start talking about it. So here are just some general talks and like I said, in some capacity you might feel like this is a bit of a civics discussion. But it's something that when I was reviewing it for this talk and for some other papers that I've written, I always find it interesting. And granted I'm a bit of a nerd when it comes to legislation, but it's always some kind of cool to see like the differences.

So talking about the federal legislature, we are really talking about the Senate and the House of Representatives. So that is what we call a bicameral body. It consists of two entities: the Senate being one, the House of Representatives being the other. Per the US Constitution, there is a set number of representatives and a set number of senators, and these are full-time appointments. So you probably know your state senator or excuse me, the senator that represents your state at the federal level. You probably know the representative that represents your district at the federal level. But states are a little bit different. There's no set requirement for what a state government needs to look like. And that's sort of the principle of federalism.

So a state can either bicameral consisting of two houses, a house or sometimes they just call it a member or members, and then a senate. So two bodies there. There are some that, well, there's specifically one that's unicameral, meaning that they only have a senate. So all elected officials that represent a state in Nebraska are considered senators. The other thing that I found interesting is that states don't have a set number of representatives and they can change and determine that number of representatives. So the examples I give here, New Hampshire has 424 legislative seats, that is across representatives and senators, whereas Texas has 150. So what does that mean? Why do we as audiologists care about this? Well, if I live in Texas and I wanna talk to my

representative or my senator, that individual is representing a lot more people and is very likely a lot busier than someone like who may be representing those in New Hampshire.

And that's not to say that those in New Hampshire have an easier job. It's more that they represent fewer people so they will more likely be attuned to individual concerns, individual pieces of legislation, individual ideas that come about. Now, the other thing, and this is from the National Council of State Legislators, the states vary in the amount of time commitment required by their legislators. And the National Council of State Legislators, it is a wonderful resource and they divide these sorts of time commitments into green states, gray states and gold states. So if we look at this, we have, so I've outlined this, this is from the National Conference of State Legislators. So those who live in green states, when you elect a state representative or a state senator, that person is elected for a full-time commitment.

That means that that person often has a staff that's paid quite well, and that person themselves is probably making more money than compared to other legislators. What that tends to mean is that is this person's full-time job to work on pieces of legislation that better their constituents, which is us as audiologists, as well as the rest of the people they represent. Those in gray legislators have a hybrid time commitment, meaning that they are making substantially less money than those in green legislators. But their time commitment, the amount of time that they spend in sessions is going to be substantially less compared to those that's in green. So some of these meet annually, some of these meet just for one month a year.

So for a lot of these situations, this is not a sustainable salary as an individual. So they often hold jobs outside of being a representative or a senator. So they make some money, but it's not necessarily enough. And that can have some impact as a constituent as far as what advocacy looks like. And then we have gold. And so gold

legislators, these are part-time so they don't make enough money, essentially like it is defined that they don't make enough money, they make below the minimum wage to serve as a state representative. So what that would tend to mean is that these are people that they get like a stipend to be a representative of the state or a senator of the state.

And so they are really just going in for small pieces of time, usually to vote on pieces of legislation that arise and then they often hold other jobs. So the amount of time that a state representative or a state senator may commit is going to vary depending on state by state. And that's important for us to know.

- Aaron, wait, I'm curious like what does this mean for teleaudiology though?

- Yeah, so I guess what does this mean for audiology in general is an equal question, right? And it's really like if you are a practitioner in one of these states, it's really important to know what kind of time commitment to expect for your legislators. For example, if you say we need to work on our licensing laws and licensing laws have to go through the legislator in our state, you have to say, all right, one, will the state actually have the time to pass it in a reasonable amount of time? And if not, what is the amount of time expected to pass? So for example, I know some states that they only pass legislation every other year.

So they have a session every other year unless a special session is called. And so if that's the case, you have to start working on your licensure requirements two years before the expected passage date and understand that that's the amount of time it's going to take to pass. So to relate it to your question, Sam, about what does this mean specifically for teleaudiology. As I said before, COVID gave us a lot of flexibility with telepractice services, not just teleaudiology, but telehealth services. COVID allowed us to really expand what we can do. And there were a lot of emergency declarations in

place that allowed us to expand our practice and expand how we reach patients. But depending on if and when that declaration in your state lapsed, you now have to go through a legislative process to build that into your scope of practice, to build that into your licensure, into the regulations that allow you to practice.

And so for some of us, like if your emergency declaration lapsed last year and your state doesn't meet for a session until this year, you have already had to have had prepared legislation to allow for telepractice provision. So if you're watching this and you're like, "Well, I didn't do this and I didn't know to do this." You know, the good news is in most states we have state audiology academies and we have state speech and hearing associations that specifically monitor for us. But if we are missing something or if you are someone that does a lot of telepractice and you are not aware of that, that you're at quite a detriment. So it is really important that we're aware of like what are the expectations for our state legislators to understand how we can pass our laws.

Does that answer your question?

- Yeah, absolutely.

- Okay. So one of the cool things about state legislators, and you might notice I'm really kind talking about state legislators a lot and I'll be talking about that a bit more. But that's because for audiology, a lot of what we do is governed by the state, not the federal government. And that's kind of good news because one thing that I found is that state legislators are generally more likely to pass bills than federal legislator. So here's a study. Well, here's an analysis done by Quorum. And this for the record, if you do follow the news, Quorum is a site that analyzes bills, it analyzes a lot of data, it's very good. It has shifted to using ChatGPT as a primary way of doing that.

So this study or this analysis was done prior to that shift. So this was a manual analysis, but what we have found is that states demonstrate substantially higher passage rates for bills. And that is especially true when we have what's called a unified legislator. Unified legislator for definition purposes is a legislation in which both the House and the Senate are made up of the same political party. But you can see just comparing like the house assembly is another term for the House used in a lot of states, compared to the federal level, the average pass rate at the federal level is just over 1%, honestly, of bills that are introduced. Whereas bills passed in the house out of state is more around 13%.

At the Senate, just shy of 20% of bills that are introduced at state senate's pass, whereas it's still about 4% of those introduced in the federal senate. So you have a much higher chance of passing legislation regarding teleaudiology, telepractice provision, audiology service coverage, things of that nature through a state government, but then a federal government. And this is a trend that we tend to see sort of across both political lines and political initiatives. So a lot of the things that are taken up at the federal level that passed at the federal level have already passed in a lot of states for years before the federal government took any initiative to pass it. And so this is sort of a common trend, but one that we have to be aware of.

Okay. And so this is the summary of like why I'm talking about state governments and why we need to focus on this. We see a lot of federal actions in the news that gets a lot of headlines, that garners a lot of attention. But in reality, specifically for audiology, most of our issues that arise are state level issues. And that's because as practitioners, we are much more affected by what the state does and what the state requires than what the federal government requires. The major exception to that is of course, Medicare. But the body that works with Medicare, that's the centers of Medicare and Medicaid services, they often have an arm in the states as well.

So the states are really the propellant at the end of the day for most of our day-to-day practices. So here are just a few things that we might see at the state level that impact us as audiologists. So higher education funding, so funding for training for audiologists, that comes largely from the state. There's supplements from the from federal student loans and there are supplements from the federal government. However, a lot of this funding comes from the state to the extent that there was one statistic where it was about 19% more funded by state governments than federal governments as of 2016. Student loan repayments, so obviously you hear a lot about federal student loan repayment currently in the news, but there's a lot of state level initiatives and a lot of state level repayments, and that's going to affect the recruitment of audiologists and the retention of audiologists.

So that's absolutely something we need to know about. And this is really the crux of when we talk about teleaudiology, licensure rules and regulations are almost exclusively governed by state governments. And then finally, of course, Medicare, Medicaid, or specifically Medicaid services and other state run insurance programs, those are governed by the state. But that's also to say that private insurers have to abide by state laws. So different states might have different requirements for private insurers. So we have to be aware of all of these different moving pieces at the state level as well as federal initiatives as well.

- Yeah, Aaron, this is interesting because you know, oftentimes in teleaudiology, we're working in multiple states and so I almost think like, oh, well then that's like a federal issue, right? Because it's like multiple states. So you know, I'm just surprised a little bit to hear what you're saying.

- Yeah, well, I mean, and you're not wrong, right? Like you're crossing state lines. So is it a federal issue? I mean, in theory, yes, but unfortunately the way federalism works, each state sort of has its autonomy to define different aspects of its practice. So as

audiologists that are working across state lines, so you know, Sam, I know you work in Alaska and Hawaii and Arkansas, like you have hands in multiple states. You know, so as audiologists who have hands in multiple states, the federal government is not gonna create a standardized scope of practice or a standardized licensure requirement. So then what we have to do is we have to lean on the states to say, what does this state say?

So hypothetically in your case, you would need a license for Hawaii, you would need a license for Alaska, and you would need a license for Arkansas to practice in each of those states.

- I have all of those licenses and I keep folders for what I have to do to stay in compliance. It's crazy.

- And it is cool. And so like on that note, you kind of bring up a really good point. It's not enough just to be like, okay, I have an audiology license in Hawaii, so then it should just like, I'll just like tell Alaska, "Hey, here's my audiology license." Alaska might have different requirements for licensure. They might require you to take the Praxis, they might not. Arkansas, the same thing. So you have to be on top of right now, okay, what do I need for this state? What do I need for this state? What do I need for this state? When does this one expire? When does this one expire? When does this one expire? So while that sounds like it's a federal, like okay, I'm working across state lines, so I must be like I am part of the federal system.

That's not quite the case. There is an exception and the exception to that is the VA. And the VA is sort of its own beast because you're an employee of the federal government. So in a lot of situations with the VA as long as you have one active license, you could practice in different lines, but that is an exception rather than the rule.

- Gotcha. Makes sense.

- But that's a really good point. Alright, so let's actually talk about some laws that could impact teleaudiology. And again, I wanna emphasize if any questions arise, please feel free to use the Q&A. But looking at the different laws that could impact teleaudiology, I have it organized. So on the left side, these are your federal laws and on the right side, these are your state. And so you might see on the right, there's not a lot of specific laws called out, whereas on the left side there are, and that's because state laws will differ depending on what state you are in. So it's not that we have like, let's use that first example, HIPAA. We don't have a state HIPAA that's going to be applied to all, well we do have a state HIPAA that applies to all states.

But if one state implemented a HIPAA like language, not every state will follow that. So you have to sort of check your state to see what's up. So let's look at the federal ones first. So HIPAA is one that hopefully everyone is aware of and that is one that just makes sure that we ensure the privacy of patient's information. So that's important for teleaudiology because we have to be very careful about how and where we deliver services. So if you are delivering teleaudiology services in a coffee shop, that is most likely a violation of HIPAA, right? If you're reviewing information about a patient in a coffee shop, that is very likely a violation of HIPAA. HIPAA just it entitles patients under your care, specifically those receiving Medicare dollars, it requires you to maintain a level of privileged information with them.

And so there are all sorts of caveats, there's all sorts of rules. And one thing that's interesting is HIPAAs have a lot of problems defining different aspects of technology in healthcare. You see this a lot with arguments about the utilization of software like Zoom and things like that. So that's one that even though it's a federal law, there are still lots of gray areas and you're kind of see that throughout the talk. There's a lot of gray areas

where the language is there but the implementation may not be as nice as we hope. It's not as black and white as we hope. So HIPAA is the first one we should all be aware of. The second one, if you are not aware of this, is what's called the HITECH Act: Health Information Technology for Economic and Clinical Health Act.

This was enacted a few years ago, I think, well actually about a decade or two ago now. And this is the promotion of the use of an electronic medical record. So this was a law that came out that sort of promotes utilizing electronic health records. However, there's a piece of information that if there is a breach of data, health and human services has to be notified. Generally speaking that is if there's a breach of data and there is a substantial number of people affected by it. So it's not as clean to say like my computer got hacked and I have a patient's document on it. I have to notify HHS. That said, you still have to be aware of this law in the event of, let's say you have Epic on your computer, Epic, the EHR system or the EMR if you use that acronym.

If you use Epic and you had it open and your computer has a phishing software or a malware that someone can cut in and see not just your patients but a whole hospital's patients, that would be required. Your host site, so your hospital, your place of employment would have to notify HHS that that data has been breached. So that's a pretty severe action so we have to be aware of that. So if you are someone that is utilizing telehealth services, it's really important to think about what does my technology infrastructure look like in the event of a data breach? What systems am I using in the event of a data breach, and what do those systems say as far as patient privacy and hosting?

The next one is one that we should all be relatively familiar with, the ADA. And so specifically for teleaudiology, the ADA applies in that teleaudiology platforms have to be accessible to those with disabilities. The obvious one for us is hearing loss, right? And oftentimes you'll find that the use of a computer alone is not. So, you know, you

would have to make sure that you're using a software that could generate captions or have some sort of integration into your software so that it can be accessible via captioning. The other thing you have to think about is those with blindness and low vision, how will they access your services? Because as we're gonna talk about, some laws require what's called a multimodal approach to telepractice services, meaning that audio alone is not enough or visual alone is not enough.

You have to really have an audio and visual component to deliver services. So you have to make sure that your platform is ADA compliant. So for example, we're presenting over Zoom right now. Zoom has captioning involved in it. So for those with hearing loss, that can be quite beneficial. And honestly, I've actually used Zoom to deliver teleaudiology services. And Sam, I'm not sure if you have as well, but it's been somewhat beneficial.

- Oh yeah, absolutely. And I've done some creative things too where we put like external mic systems that can be plugged in with hearing accessories to increase that accessibility during that. So there is some creative opportunities there, but it is something we need to think about when we're, you know, picking technology solutions to deliver teleaudiology services.

- Absolutely. The next one I wanna talk about is one that you may not be familiar with and it's not directly related to teleaudiology services, but it's something we have to think about. So this is actually made, and this is something to watch because it's also being debated at the federal level in some way, shape or form presently. But it's essentially it was found so that websites that have data on pediatric or children, this could be, so for example, social media sites that allow those under 13 to have an account. If they have data on children, the child must get parental consent before this website can obtain information on them. So if that's the case, you have to be very

careful about what kind of platform am I using and is it COPPA compliant so that if it is collecting data on children and there's a breach, what do I need to report?

Now a lot of that is kind of shooed in now with the HITECH Act, but we still need to think about that as far as, okay, if I'm seeing pediatric patients via teleaudiology and my data is breached, do I have to alert different entities and am I at fault? Is my server, the website at fault if they collect data on children? And that's where there's a lot of gray area. But COPPA is this requirement, historically actually written again for social media companies and that's where you're seeing it being debated at the federal level, you're seeing debates about expanding that age. And so I would keep an eye on that if you are thinking about servicing pediatric patients.

And then the final one that is of course a federal mandate are Medicare regulations. Medicare is governed through the federal government. And so any regulations, any coverages, things along that line, that is deemed by federal entities. So these are all laws that are enacted that apply to states, all states equally. So if you are a practitioner, you should be aware of these laws. Now on the other end we have a discussion about what is going on at the state level. And these vary wildly depending on what state you're in and the language that they use. So for example, we might wanna look at state telemedicine laws. Some states have 'em, some don't. So for example, and I think this comes up later, some states say that you have to cover audiology services delivered via telepractice.

That is what the state says. They don't specify what those services are. So it could be that you have to cover hearing tests that are delivered via telepractice and you only have to cover hearing tests or it could be that you have to cover all audiology services. It's important to remember that as we're reading through these, the people that make these laws in general are not audiologists. There's a few potentially, but there's not that many audiologists that serve as state representatives and state senators. So their

knowledge comes secondhand from those who advocate for these changes. And so it's really important to think about like, okay, there's this gray area, why wasn't this covered? Well, because probably someone never thought of it.

So we have to think about that. State licensure laws, as you all probably know, and as we highlighted in Sam's example, they vary from state to state. Some states require audiologists to take a hearing aid dispensing test, some don't. Some tests or some states allow you to induce a cerumen removal and bill and get paid for it, some don't. Some allow you to treat tinnitus and some don't recommend that you treat tinnitus. So these are all things that you have to know in each state that you practice in or each state that you serve patients in. So those are going to impact your teleaudiology services as well. And then of course one of the big ones is Medicaid.

Medicaid is governed almost completely at the state level. So we have to be aware of that and that is how we understand how we're gonna get reimbursed for services. Okay.

- Yeah. Aaron, so can you translate this for us please? Like how does this, what does this mean for us when we are trying to deliver our teleaudiology services?

- It's a good question and like as you can see from the slide, one that I anticipated. But so you know, the big thing here that I would emphasize, and I kind of alluded to this already, it's not expected that every single audiologist knows every single law and regulation. It's really a complicated web, but it's important that we kind of get the core pieces of information so we know what questions do I need to ask and to whom can I ask them? So that's what the purpose of this section's actually set up for. So let's figure out some of the, like what are the core things I need to work on or look out for if I am interested in starting to provide teleaudiology services.

Or maybe you'll already provide teleaudiology services and you're like, "Am I breaking the law?" So this where we can kind of like start to look at that. Alright, so the first thing is like, let's check out what your service delivery looks like. So just as anything, and as I've been saying sort of ad nausea at this point, states vary dramatically in how they regulate teleaudiology or just telepractice in general, specifically teleaudiology. So in some capacity, it's written into state licensure or in regulations and a handful of states are written as guidelines. So it's like, hey, we recommend that you do teleaudiology, and it's nice and loose. There's a few policy statements as well. And so a policy statement is basically a note saying like keep on doing what you're doing.

So I think it was New York, it was either New York or California where they say like, teleaudiology is just like audiology. And that's sort of the extent of what they say, but there are some commonalities that you tend to see. So the laws that are done at the state that affect state teleaudiology services primarily pertain to the licensure requirement to practice. So what that means is some states will say like, okay, if you want to practice in my state, you want to do teleaudiology services. You are required to be licensed in my state. And if you are not, you have a grace window of X days. Now that X can vary dramatically. So I've seen, I think it's California that has a six month window that you can be in process.

And I think it's because it just takes very long to get a license in California. And in some states it's four days or four encounters supervised by an audiologist that is licensed in that state. So that is where a lot of those laws have commonality. It's like okay, if you want to practice in our state, you have to be licensed in it. And if you are not, you have a little window that you can see patients in this area but that's it. The other complication is that teleaudiology is defined differently in different states or it's not defined at all. So some people say telepractice via audiology or teleaudiology if you will, just, you can do it, no definition required.

So an example that I found was Idaho specifically, they say that telehealth does not include audio in isolation, meaning that a phone call would not be teleaudiology. You must have a visual video component. And that's sort of a call back to what we talked about last time when we talked about like, okay, if a patient calls about hearing aids and say like, "Hey, I have a problem with my hearing aid," and you try to troubleshoot it over the phone, is that a type of audiology or is that a type of teleaudiology, excuse me? And yes, while it is technically a type of teleaudiology in Idaho, in this case, it would not be a billable service that you could provide.

That doesn't mean you shouldn't provide it because as we talked about last week, and as I will reiterate, just because we can't get paid for it doesn't mean you shouldn't necessarily do it if it's in our scope of practice. But if a patient calls you and you work in Idaho or the patient lives in Idaho and you work in somewhere else and they say, "Hey, here's this problem with this hearing aid, what steps can I do to repair it?" And if you walk them through over the phone, you can't bill that to insurance providers as teleaudiology and the state doesn't recognize that as teleaudiology.

- Aaron, this is interesting. Can I jump in for a second?

- Yeah, of course.

- Yeah. So this is really interesting because in Alaska, you know, where we have depended upon telehealth for so long and in some cases sort of were pioneers back in the early 2000's, you know, we have a lot more reimbursement for services, particularly like asynchronous services of images, tympanometry, stuff like that. You know, I'm assuming in this case, you know, for Idaho that wouldn't necessarily be a covered service where it is in Alaska and something we depend upon. Is that true for what you're saying right here?

- It's a really good question and I think that's gonna be one of those gray areas because the law says as I'm reading this, and I wanna caveat this, I give this caveat every time I talk about anything state legislation. I'm not a lawyer, I'm an audiologist. That said, the law says telehealth does not include audio in isolation. It doesn't say anything about visual in isolation. And so one could argue that it's a consult, right? Like you are providing a consult and you could bill sort of that consult fee to insurers, the counseling and consultation fee, because what you're doing is reviewing information and making determinations based off of that. I would guess in Idaho when you were making determinations and counseling the patient on those determinations, you would want to do it with a video and audio medium instead of doing it over the phone to say that this aspect of the telehealth encounter was completed according to state regulations.

But I would say like if you had a tech do something and you review it, I think that part is sort of a gray area. That's a really good question.

- Gotcha. It's interesting because you know, just a couple of days ago, the state of Alaska put out modernized regulation around what telehealth is, how it's defined and how it can be reimbursed in the state. So I'm sort of, it's neat, I'm still digesting it and reading it. It's nice to see and I'm looking forward to hopefully seeing other states mirror what Alaska's doing there, just to put it out there.

- Well I think Alaska's like a perfectly cool example of like what teleaudiology can be because you're talking about reaching those who have limited access to services, right? And like I live in Pennsylvania which is part of the continuous 48 states, you know, and but like we have a similar situation where like in Pennsylvania we have two large cities on either pole of the state and the middle of the state and the rest of the state is relatively rural and somewhat hard to reach. And I say that like I worked in a hospital in the center of the state and people would've to drive three or four hours just

to get a hearing test. So when you do a 15 minute hearing test and everything's normal, like it's really hard to be like, hey this was worth your time.

So you know, like I think those are situations where teleaudiology definitely has a place. And you know, that's not just true for Alaska and Pennsylvania, it's true for pretty much any state. But I think the challenge becomes like how do you navigate the legislation around it? So like I can even think of an example I had yesterday in clinic. I work with auditory processing and I had a patient who lived in New Jersey, or lives in New Jersey rather, which is a state that's not Pennsylvania. And she had contacted me about getting an evaluation and she had been seen previously in other domains and she really wanted to have a conversation and a consultation via telehealth.

So I agreed and I said, "Yeah, sure." But because I'm not licensed in New Jersey, anything I said can't be considered service delivery is just more like here's my opinion and you should come in. And so she did come in but then she had questions about follow up and things along that line. And again, I couldn't do it in a way that is providing services. I could just say, "In my opinion, here's what has to come in and if you want to discuss this further, you really have to come across state lines and come see me because I'm not licensed in New Jersey." So this is a situation where I am not necessarily providing services. Until they come in, I could not do any sort of evaluation and any sort of formal consulting or counseling when they live across state lines in a state that I'm not counseled or a state that I'm not licensed in.

So these are things that I tend to see quite a lot 'cause I live in Philadelphia, which is near Delaware, near New Jersey. And so we have a lot of people that say, "Hey, I would love to come in or can I phone in or can I like Zoom in?" And it just doesn't work very well because of those borders so you have to be aware of those. So I think you made a great point about, you know, in Alaska, like how would this work? Or you

know, and it's just one of those where you just gotta talk to your state and say here's something that happened, what do you recommend?

- Right. Okay.

- So here's some more clarification about what I like really what I was just saying, what we were just talking about. So state's not involved in this ASLP-IC, which we're gonna be talking about, this interstate compact. They require licensure in both the provider's home state and the state in which services are being rendered. That said, that licensure requirement, you have to abide by all of the state's licensure requirements. So you know, if your state requires a dispensing test, you have to take the dispensing test. If your state does not but a state that you might wanna see patients in does, still have to take the dispensing test. So these are things that we absolutely have to consider.

And as I was saying, there's often a grace period, but that grace period can vary dramatically. As I said, I read like I think it was New Jersey where it was like you have three days or you can see patients for three times, but every time has to be supervised by an audiologist that is licensed in the state if you want to provide teleaudiology services and you are not licensed, whereas it was California, they had about a three to six month window that you can provide services while an application is pending. So you had to say, I've submitted my licensure application, it is pending, which is another requirement you tend to see. So it's a bit complicated and it takes a lot of consulting with your legislators or your licensure board because a lot of you might be like, "Well, I'm not calling my legislator about this.

" And honestly if you did, they might not know about it to be honest. But what you could do is call your licensing board. Your licensing board will know about this and if they don't, talk to your state academies or your state hearing associations or any state audiology centric group that could lead you to better answers. And I have a slide

coming up that just so you know, also the national professional groups, you know, AAA, ASHA, ADA, they all have resources as well that can help you in navigating this if you have to do this alone. But you notice here, I say state's not involved in this interstate compact. So let's just kind of talk about that.

And in full disclosure, I used to be the chairman or the chair of the state relations board for AAA so I worked with the compact very closely. But for those who haven't heard of it or who are hesitant towards it, this is not trying to sell you on it, just to make you aware of it. The audiology and speech language interstate compact is a compact that was just enacted starting in 2021, 2022. It's fairly new to the game. But what it allows you to do in essence is if you and another state are bound by this compact, you can practice across state lines as long as you maintain the requirements for both states with a privilege to practice in the other state instead of going through the full licensure.

So what that does is it expedites the process of allowing you to practice in that state. You are still bound to the laws of that state. So again, if state A requires a hearing test or requires a dispensing test and state B does not and you live in state B but practice in state A, you still need to take that dispensing test. But you can kind of expedite your application process by applying for a privilege to practice instead of going through the entire licensure. Currently 29 states have passed the legislation about the ASLP-IC and it's pending in five other states. And for those who are interested in it or who interested to see like, oh, I see my states on there and I wanna see like what does that mean?

Or if you are just kind of curious about it, you could scan this QR code and that will take you to the actual compact website.

- So Aaron, just to help me understand what you're saying here about the compact, you know, I live in a state where there's no current legislation pending or enacted. I practice in two states, one that has legislation enacted and one that's pending. So like

what does that mean for me? Like what's the current state of this compact? I'm kind of confused on like how this would apply to me right now?

- Okay, so you are I will say an exception. You're quite an exceptional caricature of like the audiologist that would come in here. But let's kind of break that down 'cause that's a good question. So first of all, what does that mean right now? It means nothing. So the compact is enacted but to my knowledge they have not yet started the compact, meaning that you can't actually like do anything with this compact yet. It is made up of people representing ASHA and AAA and ADA also the National Conference of State Legislators. So it's made up of a bunch of different bodies and it has a rotating chairperson through all of the organizations. So that's sort of its structural setup.

Okay? And then all states have a chair at the table. What it does not do is it does not supersede any state licensure. So you know, if you are licensed in Arkansas, which you are, and you wanted to practice in, let's say you wanted to expand your practice to a fourth state and you said I wanna practice in Virginia today. If you did that, you would have to still look up like what are the licensure requirements for Virginia? What do I still have to do to get licensure in Virginia? You don't have to go through necessarily the application. You wouldn't, once this is enacted hypothetically, have to go through the actual application process. You would go through a privilege to practice application process So it's a faster, more expedited process.

But then you could provide those services. So, you know, it's one of those things where it's more of in my opinion, and I would say I don't sit on the board and I just sort of worked. At my time, I just sort of worked with the language of the legislation. It's more of an idea at this point with the intent of eventually it will make working across state lines easier and reaching people across state lines easier for those who live on border states who want to work in teleaudiology. That's sort of my interpretation of it.

- Sure. So I think, you know, if I had to summarize what I'm hearing from you, you know, it's a great idea. It's under development. There's a lot we don't yet know about what this implementation's gonna look like of the compact, but at the end of the day it's like, this sort of has a really positive potential impact for teleaudiology and for extending access, right? Like, you know, specialty care shouldn't be hard to get for anybody and if going five minutes across state lines is easier than going three hours the other direction into the rural hub, it should be like really supportive of that is what I'm hearing from you.

- That's my understanding of sort of the core goal of the compact is like it's to make access, especially in those hard to access areas more viable. So that could be expanding it through teleaudiology, it could be expanding it through all sorts of things. Now, you know, the kind of things just to make sure that we talk about both sides of the argument, the things that I tend to hear right now are, like how much does it cost? And the answer when last I asked was they didn't know. They were looking at the infrastructure of like, how do they store a warehouse to make sure that everyone's in compliance? So what would happen is if you fall out of compliance in your home state, you wouldn't be able to practice in any state.

So think of like your home state as an anchor and all the extra states are just like strings. Whereas hypothetically, Sam, in your case, if you fill out compliance in Arkansas, you could still maintain, you could still practice in the other two states 'cause you have licensure in those. So it's like okay, how do we look at that? What does cost look like? And then some people say, "You know, I don't like the idea of someone from a neighboring state coming in and serving patients that I could be serving." But I would remind, like me kind of being an advocate in that case is like if those patients have to to travel three or four hours to get to you and they would only have to travel an hour across state lines, are we doing what's best for the patient in that case?

And so that would be where I would challenge you to say like, "Hey, this could be a really cool opportunity," as long as it's implemented correctly. So I think this is one of those things that's like for those watching, keep your eyes out, keep looking for it. Like keep your eyes on it just to see like how it evolves. But it's something that I am certainly monitoring as we talk more about teleaudiology in the future.

- Great.

- So what does all of this mean for clinical service provision? So what we'll be doing, and we have this kind of throughout the talk today, we have some examples that we wanna watch and what we're gonna try to do is try to think like, given what we've talked about thus far, what are some considerations that you as an audiologist might need to consider when thinking about this? So Sam, do you wanna introduce this first case that we're gonna be looking at?

- Yeah, absolutely. So this is an example of, you know, for demonstration purposes only, a clinic to clinic synchronous fitting, a hearing aid fitting. So go ahead and watch this and I'll talk a little bit after about what you're seeing.

- And just before we start, Sam, do you mind defining for those who may not have been at the part one, like what does clinic to clinic mean in this case?

- Oh, sure. Yeah, sure. Absolutely I can do that. So, you know, in teleaudiology we can do things in real time or synchronous, we can do them asynchronous or store and forward like take a picture, send or hybrid of that. And when we talk about real time, there's a couple different ways we can do that, especially now after the pandemic and we've moved more into people's homes, but there's this sort of spoken hub of like you have a regional center reaching out to a satellite location or a community building that's more local to where that patient is living. So that's that kind of clinic to clinic language

there. You might also be clinic to home where you're going direct to the patient into the home.

That's the most common things that you might hear regarding this. But that's what I mean by clinic to clinic. So this is an audiologist in a regional center connecting with a patient and a facilitator in a regional, or I'm sorry, a satellite or a local community hub.

- Okay, cool. Let's take a look.

- [Narrator] This is an example of synchronous or real time clinic to clinic or spoke and hub telehealth model. Here the patient and facilitator are at one site, most likely a smaller clinic located closer to where the patient lives and the audiologist is at another site, often a more regional or urban clinic or hospital setting.

- [Audiologist] Alright, let's get going. Ms. Yuti, can you look in Ms. Mabel's ears?

- Okay, I'm gonna take a quick look into your ears. We're gonna start with the left.

- [Audiologist] All clear?

- All clear, Dr. Duda.

- [Audiologist] Alright, fantastic. We're ready for probe tube placement.

- [Narrator] In this example, the patient is undergoing otoscopy, a hearing aid fitting and verification and counseling by a remote audiologist with assistance from a local facilitator. The audiologist uses video conferencing to see and communicate with the patient and the facilitator and remote desktop share applications to control the computer at the patient's site. The patient's site has all the equipment needed, while

the audiologist's site only typically requires a computer with video camera. Both sites need high speed internet for this type of synchronous telehealth, although asynchronous options can be used at times for situations with slower internet speeds such as video otoscopic images of ears and static images of real ear testing results.

- Okay.

- [TV] A carrot is a long reddish yellow vegetable which has several...

- All right. And so that's familiar to all of us, right? I mean we do fittings and in the last talk I went over like what are some of the latest in terms of what's happening in the world of amplification and implants and diagnostics from a technology perspective and mechanisms for training and supporting facilitators for doing this type of care. But what's really exciting about it is that if you wanna avoid having your patient travel so long, you can still provide them that service line up close. And so I think there's a lot of opportunity here and the tools are getting to a place where we can do this. And the evidence shows that we can do this the same as if we were to doing it in person, which is also very exciting.

But I know, Aaron you're gonna challenge me on this a little bit, aren't you?

- A little bit, yeah. So I'm looking at this and so like in your case, like was this in state line, within the state or across the state?

- Yeah. In this example, we are in the same state, but I don't know what that would mean if it was yeah, two different states or across state lines.

- Yeah, so if we were to think about this across state lines, there's a few considerations that you would have to do because you're essentially doing a first fit, right? And so

depending on sort of your business model, if you're going to charge the patient for the hearing aids at the first fit, which I know at the practice I work in, that is what we do. So what we'd have to do is make sure that we are licensed to dispense hearing aids because that is what you are doing, you are dispensing a hearing aid. So you'd have to be licensed to dispense hearing aids in the state that the patient is in, even though you are sitting in another state.

And so that means that you are bound to the requirements as far as reporting. So I know like for example in Pennsylvania we have certain forms that need to be completed specific for device first fittings or for dispensing of hearing aids. We talked about dispensing tests, but you would've to be aware of all of these different sort of moving parts. So like what are the reporting standards, what are the testing or the fitting standards, what are the billing requirements? Because you would be billing to that patient's insurance, which would hypothetically be within the state that they live in. So you would have to be licensed in that state at the present time. So I think that's a really cool example and something that I could definitely see both myself and like within instate and extrastate practicing, but there's definitely some considerations as well as far as like what would that mean from an implementation standpoint.

- Yeah, I gotcha. Makes sense to me.

- Okay, awesome. And so like, you know, I kind of mentioned this, but let's talk about like, can audiologists get reimbursed for teleaudiology services? A lot of this is...

- This is a big question. Everyone has question questions about this. This is it, Aaron.

- Right, like if I'm gonna do this, will I get paid? And the answer is like, eh, it depends. I wish I like as is true for pretty much anything when it comes to will I get paid. So as I said before, CMS is the Centers for Medicaid and Medicare Services. They encourage states to develop Medicaid specific guidelines for telepractice and that is all telepractice. They did that in about 2021, 2020. What that is, is like saying like, hey states, you should really do this. It is not a mandate to say that states have to do it. So since that time, a lot of states passed laws, but as I said before, they cover services rendered via audiology, but they don't actually specify what must be covered.

So like they don't say specifically, you must cover everything for diagnostic and rehabilitative services, or you have to include electrophysiology services, which we talked about in last or the last talk we did. So that can vary as well. And then the other thing is like some private insurers, they don't have to abide by state laws. That's just an extra complication on top of everything. Some insurers have an exemption to Medicaid and state mandates. And then on top of that, in certain states, either Medicaid or private insurers required the utilization of modifiers in addition to your coding. So you have to specify that this was a service rendered by teleaudiology or telepractice. So all of that to say, to keep it simple, you gotta check and you have to check what, so if you work with multiple insurance providers, call them and ask what are your requirements for, what are like your CPT code requirements for billing?

What are the requirements or what will you cover via for services delivered remotely versus in person? And then do you have requirements for synchronous versus non synchronous? Like we have to kind of ask each insurer, I wish I could sit here and tell you every state required the same thing or anything like that. But in reality it just really depends. So you really gotta communicate with your licensing board and other entities like your insurance providers to see what is the requirement. So if this is something that you are thinking of implementing in the office, I would have your office staff start

reaching out to insurance providers to say what are the reporting requirements for teleaudiology services.

But to talk about Medicare, will we get billed by Medicare for these services? A lot of our patients use it. Can we do it? So the thing is, yes until essentially January, 2025. And that's because the appropriation act of 2023 expanded Medicare coverage for telehealth services. And so this was actually an expansion of the emergency declaration under COVID and so they expanded it up until 2025. What that does is it allows audiologists and it designates audiologists as providers of telehealth services, which historically we have not been designated that. It also allows for specialized services. So for example, per this act, beneficiaries in any area can receive telehealth services. Historically the record was that this is for individuals in rural areas, which in my opinion is kind of ridiculous because I used to work in an inner city clinic and we had huge amounts of no-show rates and it wasn't because of necessarily poor internet.

Oh, and it wasn't necessarily, or sorry, it wasn't necessarily because, you know, the patient lived terrifically far away, they weren't traveling three or four hours, it's because they relied on public transportation. And public transportation is unreliable in the city that I worked in and they couldn't afford to have a car. So like to have that designation in my opinion is kind of ridiculous. So they lifted that under this appropriation act. They also specified that this can be done at the home. So Sam, you mentioned that you can have clinic to clinic or clinic to home. This allows for clinic to home provision and for you to bill Medicare. And it also allows you to deliver these services not just on a computer, but you could also use a smartphone as long as you are using audio and video capability.

So this is sort of like that Idaho law that you can't do audio in isolation as long, but what it doesn't say to add some gray area is that the telehealth provision has to be done via audio and visual. The smartphone that you delivered on has to have that

capability. So it's just this gray area of like, okay, if I call someone and they have an iPhone, can I bill for this service? And I would say you know, check with the insurance providers. But in my opinion and through the reading of it, that is still one of those gray areas. So I did do a look and huge shout out, Anna Jilla is the chair of.

.. The name of the committee is escaping me actually at the moment.

- CRC.

- The Coding and Reimbursement Committee of the American Academy of Audiology. She is an expert in anything billing, so I would always defer to her, but she helped consolidate some of our codes that I'm showing you. So under Medicare until 2025, here's what we got going on. So we can bill essentially for most comprehensive testing services and that's sort of where most of our billing can come from. Some of the interesting ones that you know, maybe you wouldn't expect are things like evoked potentials and cochlear implant follow-ups. But we can do all of these and still bill Medicare again up until 2025. The question then becomes though what happens after 2025? And that's where advocacy is gonna be essential because upon 2025 we sort of lose our designation as providers of telepractice services unless the laws are changed.

So this is something where like a federal law can affect or just not advocacy can change this as well. It doesn't have to be a law specific to audiology. It can go just like this did in an appropriations act. And appropriations is essentially a billing act. It is an act that looks at financial billing. And so they said we're gonna keep on paying for things until 2025. So if that's the case, you know, we just need some more advocacy to make sure that this language is cemented into law post 2025. But that's something we certainly need to look out for.

- So Aaron, like this has been really helpful. I'm definitely understanding the landscape better, but you know, if I have those state specific questions or those payer questions or like billing questions, you know, for myself, my practice in my state, you know, where do I start? Like who do I go to? Where do I go to get my questions answered?

- Yeah. I mean that's a great question because as I said, like this is a lot to throw on you as a practitioner and be like, why don't you know all this? Of course you should know all this. That's not the case at all. You know, like in reality it really takes a village to raise an audiologist and to continue to be an audiologist. So I would say the first thing that you should do is familiarize yourself with your state academy, state speech hearing association, state audiology coalition, you know, there's all sorts of different groups for audiology. Familiarize yourself with that and see the resources that are available through them. Also make sure that you're familiar or have a contact with the state licensing board.

They will often be able to answer some of those gray area licensure questions that might help you. As I said, the national groups tend to have really nice resources. So again, I'm a big fan of QR codes in case you haven't noticed. Here are two resources that will take you to look at some of the guidelines. And I will say, you know, I already shouted out Anna Jilla for all her work with coding and reimbursement. But in both groups, you know, both are phenomenal resources. ASHA and AAA both served a huge service for me when developing today's talk, but also for me as a practitioner is these are two resources I frequent often. So this is done by a lot of work with a lot of volunteers.

And so I think it's also, you know, thanks to their hard work that we're able to do that. And so if this is something that is of interest to you, I would also encourage you to volunteer to help other audiologists through some of these avenues. So that's sort of my call to advocacy, which you're gonna hear a few more times. But I hope these sort

of serve as like foundational resources and then from there you can kind of jump to whatever's most appropriate. So really to summarize that point, talk to your state groups, talk to your licensing board and utilize the resources from your national organizations if you're a member, even if you're not a member.

Some are blocked behind member paywalls, some are not so just check those out.

- Great.

- Cool. So let's actually apply this to clinical practice. So, you know, we saw one case already. Let's take a look and apply this in a different way. This is gonna be a different case and just as we did before, let's kinda look at it and see what kind of questions can arise. So Sam, do you mind introducing this case?

- Yeah, sure. So this is an example of me living in Hawaii providing diagnostic ABR support for newborns as part of the a HRSA funded EHDI program in the Republic of the Marshall Islands. So we can just go ahead and watch it and then I can talk a little bit more about it or answer questions.

- Let's do it.

- [Narrator] In this example, a newborn baby is receiving a diagnostic ABR and counseling by a remote audiologist with assistance from a local facilitator. Nearly 2300 air miles separates the patient and provider sites.

- That looks good. And then Chinilla, do you have the electrodes coming off of the main box there?

- [Narrator] The audiologist uses video conferencing to see and communicate with mom and the facilitator. The audiologist can walk the facilitator through electrode application and cable arrangement to ensure correct setup.

- You got it already. Look at you, you're a step ahead.

- All righty.

- And then you just wanna make sure you aren't crossing those over the cables too much, the other cables too much that you just connected to the electrodes. Yeah, sort of kinda keep the box one area and the cables from the other side. Yep.

- [Chinilla] Okay.

- [Narrator] A remote desktop sharing application is used to control the ABR software to complete threshold testing. Once testing is completed, then counseling can be provided and recommendations discussed.

- I know in terms of the screening we just did for the newborn screen, did mom have any questions about the results or the testing?

- [Chinilla] No questions.

- Awesome. All right, cool.

- Alright, that was super interesting.

- Yeah, really quick demo. You know, we did that for demonstration purposes just so people could see how we might do it. I don't know Aaron, what questions does it raise

for you? I could talk a whole lot about it just 'cause it's my passion, but you know, what do you think the audience might wanna know?

- I mean the biggest question to me like thinking about it, it looked like you were sort of, so I guess like, I have two different questions. The first one is sort of like, and I know you covered this in our last talk, but it felt like you were like instructing the... What would be the term that you would use? The aid or the technician?

- Yeah, in this case, yeah, technician, screener, facilitator.

- The screener. So yeah, can you just for the audience and for those who may not have seen the first one, just kind of walk through what this looks like from an ABR standpoint?

- Yeah, I mean I think to ensure that we can successfully do diagnostic ABRs like we do, the facilitator or the technician or the screener is a hundred percent key to that. And I say that from like both a rapport building and relationship and communication standpoint to, you know, they really serve as a local advocate often for patients. So for us this works really well because the facilitators that we work with for the diagnostic ABR do all of the inpatient baby screenings and the outpatient screenings and then I'm dialing in for those diagnostics that continue to refer. So they're very familiar with the equipment, they're very familiar with working with the babies and so it's crucial. So they play a huge role.

We do a lot of training with them and you know, so they've gone to a place where, you know, they kind of know what to expect. But then I also am facilitating through their, okay, don't forget about like tell me what electrodes you put where, you know, just double checking everything as I look at impedances. You know, it's a mirror so it's kind of hard, left-right looks opposite. So you have to remember that. I'm always like, "Wait,

are you sure that's a left ear?" You know, that type of thing. But you know, we're working really closely like that and oftentimes as you saw in this video, they're doing it before I'm even walking them through it because they know it so well.

- Yeah, and you kind of answered my other question, which is just sort of more of a general like how did you do this? But like you kind of answered it with that.

- Yeah, you know, it's not as complicated as you might think if you haven't done it before. Really on my end, it's just what I'm doing with you now. It's a camera, it's a webcam, you know, there's many like desktop control solutions. We happen to use TeamViewer for these diagnostics. But you know, I'm dialed into their computer and you know, I'm controlling the ABR screen, I'm making sure everything looks good. I'm monitoring myogenic potential, but also watching mom and baby. I think the key that doesn't always get thought of from a technology perspective is you definitely need a second video feed often. So I need a monitor to control the software and see the software and be able to do that.

But then I need a second screen and then the camera to show myself. And then the same is true on RMI end, right, the distance site where the patient is. Like they need to have, we need to figure out where we're gonna put the screen so that they can see me and talk to me as the audiologist. And so that always takes a little bit of rearranging. We ended up moving to tablets so that that was more mobile. So we have a tablets with stands and that seems to work really well.

- That's awesome. And so I do see a question in the Q&A asking, did you find that it was helpful to have someone that is native to the person's language or someone that is local to facilitate communication? Because local to local communication seems like it's

super beneficial in situations such as newborn hearing screenings and anything like that.

- Yeah, a hundred percent. I mean I think from a trust perspective, you know, we work really closely together and so we have that, you know, myself, Chinilla the facilitator in this example, she's the EDHI coordinator on the ground in RMI. We work so well together, we have a tight team. But you know, she definitely translates not just language but nuances, she helps facilitate scheduling, you know, she does a lot of the early intervention services and so she helps me understand like what might work from a rehabilitative standpoint, right? Because you know, I'm not gonna know that all the time. And so we are very much a paired team in delivering care, and a hundred percent that was necessary to ensure we're set up for success, particularly when you're looking at serving a community that's culturally diverse from yourself.

- Absolutely. And like as someone who researches newborn hearing screening, I have a lot more questions but I did see on the slide deck, we have another newborn hearing screen coming up. So I'm gonna sit on that for now, but I have more coming up. Alright, so let's jump and talk about another case. So this is more of a case that I saw regarding where I previously worked. So I was previously employed and I worked in a speech program that did both speech pathology and audiology, but they were primarily a speech graduate program and I ran their clinic. So during COVID, during 2020, obviously we moved all clinical services online and that included aural rehabilitation. So one thing to note about this is that the clinic that I worked at was a free clinic so patients paid nothing to be a part of it.

And because I was part of a university, that was just like part of my job expectation, it wasn't part of like I didn't reap any money from that nor did the university reap any

money from this clinic. So that's sort of something to consider. But let's talk about Cindy. So this was an interstate discussion, meaning that they were with, or intrastate, excuse me, they were within my state. But Cindy is a 58 year old female that was born with severe to profound sensory neural hearing loss due to a genetic disease or due to a disease that was present at birth but manifested around the age of three. So around the age of three, she lost a lot of her hearing but it degraded over time.

She lived in central PA and I lived in Philadelphia, so that's southeastern Pennsylvania, so about a three hour drive. And she was implanted in 2019 and it was sort of a bimodal situation so she had a hearing aid in one ear and cochlear implanted the other. And so she wanted to come to our clinic for aural rehab services. And so the way aural rehab worked is that we had myself, an audiologist, work with a team of speech pathologists and their students to determine and develop an aural rehab curriculum. So the curriculum we developed was aural rehabilitation for one hour, twice weekly over a series of eight weeks. So we got to see her sort of every week several times.

And so speech pathology played a huge role in that. And I do wanna kind of promote that because I know we talked about that in the first part with ENT. But one of the cool things that I found with telepractice is that it allows you to very easily do interdisciplinary practice. And you know, it was very easy to like pull me up and pull the speech pathologist up and we would have meetings about the patient, but I was also able to sit in and I sat in on every session of hers. So I was able to monitor it and kind of critique the development of the plans to be like, "I don't know how this is beneficial to her communication or let's build that up.

" So it really allowed me to lend my audiology expertise to the therapy side of hearing because aural rehab is part of the scope of practice of course for both audiologists and speech pathologists. But in my experience, a lot of speech pathologists, they have maybe one or two classes where they talk about aural rehab. So they don't really focus

on it all that much. So allowed me who focuses on it consistently to really lend my expertise so it was really beneficial. So here are the goals that they developed or we developed in conjunction with Cindy. So repeating words presented in silence without lip reading, identifying words that differ by a single phoneme. For those who have any sort of speech language training, minimal pairs is the term for that.

And then repeat back sentences of five to 10 words in length with background noise. And we did this all over Zoom. So just to give you some idea of how this was implemented, repeating words in silence without lip reading, that was very easy to implement. We had a list of words and we would simply turn off our camera and we would read them. And so that way there was no chance that she could lip read. It's very similar to like when you do a mask, when you do WRS. So we just turned off our camera and we would say words and we would score her for correctness. And then depending on that, we would walk through different sounds, different word combinations, things along those lines.

That was a very simple task and that was done with or without what we call a visual component. So we would turn off our camera or turn it on depending on her performance. And as far as background noise, that was a pretty easy manipulation on Zoom. At that time, the big challenge when Zoom first like became a big part of the pandemic and a part of services, it had automatic noise suppression so it was very difficult to kind of override that. But once we were able to override that, we were able to insert various levels of background noise or distortion and have her repeat back sentences. So just to see sort of how she did and we have goals one, two, and three, I have them outlined above just so you can see them.

From the beginning of our therapy to the end, she improved by about 20% in all domains. So this is someone with a cochlear implant that we did see measurable growth via teleaudiology services in conjunction with speech pathology. So this was a

really fun exercise for me as an audiologist and it really allowed me to see sort of the benefit of telepractice because here's something where like if this was done in person twice a week, she would have to drive three hours to see me for one hour of a session and then drive home. It's not really worth her time and it's hard for me to justify why she would do that. But when we can allocate the time for her, I was able to like increase her comprehension for at least this period of time and do it in such a way that she could sit on her couch and it wouldn't, as long as she had good stable connection and good access to the sounds that we were listening to, we were able to do this reliably and consistently.

And these scores remained consistent. I will say, 'cause this is a patient that I had known for several or several years after the initial measurements here. We've seen her consistently at 80% and tried to push her even higher and with more complex tasks. So it was a really cool learning experience. Now that said, some things to consider, right? So here are just some general considerations. The first thing is, sorry, it's a 1.5 hour each way, not a three hour. That's total. But first of all, as I said, it was a free clinic so payments were like not a consideration for me, nor was it a consideration for her. So it was great, but it also may not be realistic to everyone's practice because practices need some level of revenue generation and this may not be the way to do it.

And it also required consultation with an SLP and an SLP program. But what it did do is it allowed us to easily collaborate with the SLP and it allowed the patient to easily access the services. It saved her from driving three hours twice a week to our clinical site. It also limited the risk of exposure. This was during like the peak of the COVID isolation period. So this was done like at one point, we were doing services where the clinicians were at home as was the patient. And so as long as we had an appropriate background in place, it was something that could be done easily for all members involved. The other thing was because we were dealing with internet connectivity in central PA which is a relatively rural area, we had to worry about difficulty with internet.

So you would always have to kind of take into account when making measurements, is this an internet problem or is this a patient hearing problem? And you would sort of have to diagnose that. So it's not a perfect solution by any means, but certainly an effective one.

- Aaron, before you move on, can you just address that whole like free clinic sustainability, you know, reimbursable services? You know, I don't wanna say people not doing teleaudiology because we don't know if it's reimbursable or it's not currently reimbursable. Like how do we approach this?

- Yeah, that's a great question and one I wish I had like a super great answer. But my kind of soapbox is like just because we can't get paid for it doesn't mean that you shouldn't do it, right? And so in a lot of cases for audiology, like the powers that be that argue with Medicare, right, to say we need to have X service covered, we have to show that that service is effective if we provide it. So in some capacity you providing services that is within our scope of practice that we aren't getting currently paid for makes for a good argument that we do need to get paid for that. And I know there's some legislation at the federal level to push things of that nature, but the more evidence that we have, the better that is.

But the other thing is, you know, thinking about your outlook, right? At the end of the day, the thing that I focus on the most is like, what is going to be best for the patient? So if I see a patient just for a cochlear implant, I say, "Okay, have a great day. Farewell, or go see SLP." And I send 'em to an SLP and the SLP is like, "I don't know what I'm doing with this cochlear implant. I've never seen a cochlear implant." That's not benefiting the SLP, it's not benefiting me and it's not benefiting the patient. So allowing me to do this made sure that I stayed in that continuum of care and I got to see that the

patient that I insured rather, that the patient could develop appropriately and was doing things that was reasonable.

So it's one of those where like, yes, in theory, like an SLP can bill for them. Should we send all our cochlear implants to SLPs? At the moment if they would benefit from aural rehab, great. But the reality is a lot of them don't necessarily know what to do with it when we get them. So allowing us to easily collaborate allowed a more guided approach to newer technology and to nuanced needs of a patient and that was super beneficial so I really enjoyed that. But that's my opinion on it.

- I love that Aaron, and in fact I think there's a lot of us are trying to publish a little bit more on what the interdisciplinary collaboration can look like and its benefits. And so anyone who's interested, like we'll have our contact information at the end. You should reach out to us and we can kind of help steer you to more information.

- Yeah, absolutely. And I think interdisciplinary practice is like, it's the future of teleaudiology as well. Like it's something that we can really build into it. Alright, I think Sam, this is that newborn hearing screening that I'm excited about. So why don't you give us a little bit of a background with this?

- Yeah, sure.

- Go ahead.

- Yeah, absolutely. I'd be happy to do it. So this is an example where, you know, in rural Alaska, you know, we were dealing with a lost to follow up is a huge issue for us. So this is a state, just if anyone's heard me talk about it, this will be old news for you. But for those that haven't, you know, Alaska's a massive state, 80% of our population isn't connected to a hospital via road system and we've sort of had to be on the forefront of

what does it look like to get care into the most rural parts of our state. And so as you can imagine, newborn hearing screening follow-up for us can be challenging if we're not catching the family before they leave either the tertiary hospital in Anchorage where babies are born or a regional hospital in Nome where they're born, which is up here, this northwest quadrant, you know, or potentially if they're born in their home community.

So we partnered with the state to pilot a program that said how can we utilize telehealth technology and workflows to potentially address this lost to follow up problem in newborn hearing screening? And there's a lot to say about how we implemented this program and I'd be happy to talk to people about that in more detail offline. But the highlights are that, you know, we needed to really be able to have enough technology to best look at, you know, infection related hearing loss. We have a lot of high disease rates in terms of otitis media and so we need to make sure we had otoscopy, we need to have tympanometry, we needed to have OAEs for sure, right?

Especially with the latest joint commission guidelines. So we wanna make sure that was available on our technology and we worked with lots of teams of people to integrate that into our existing telehealth infrastructure and put that in our communities with the highest need, whether by size, by prevalence of need or location, what equipment they currently had available. And I just wanted to highlight a couple of cases that came out of implementing that equipment and partnering with our state to put that telehealth equipment into place. And one of 'em is this a five week old male at the time, he was born in Nome and he referred the inpatient newborn hearing screening on the left ear at birth past the right ear.

Otherwise his history is unremarkable, born full term, no complications and no history other than he had a couple of siblings with recurring ear infections. So appointment one, what we typically try to do before we had telehealth in place for some outpatient

follow-up, we would fly patients into the regional hub for an automated ABR. With the new joint commission guideline where we could do OAEs after, that opened up the opportunities for us with telehealth. We contacted the family, they were like, "Listen, I've got two other kids at home and you know, it's caribou season, like this is really hard for us to travel, it's a whole day to come in." I said, "Okay listen, we've got a new program, why don't we have you come into the clinic?

" So we did a hybrid appointment. So I dialed into the cart, I worked with Community Health Aide which is like a local community health worker. She collected otoscopic images, tympanometry with a thousand hertz and DPOAEs. And at that time there was some evidence for infection related hearing loss. You can see the images on the right here. We had some eustachian tube function and some effusion. I use that telehealth interdisciplinary exchange to get that down to ENT. We got it treated right away. And then that second appointment, I discussed with the family in real time saying that we could do another one of these in person, but I do think it's probably time to bring you in to do an ABR for more full diagnostic testing in the regional hub.

And they were fine with that. Caribou season was over. So I at that point flew them in, so this was an in-person audiology appointment for a diagnostic ABR. At the time we weren't doing ABRs via telehealth. And what we found was that there was a profound sensorineural hearing loss on the left, normal hearing on the right. So then council family, make some plans. I use telehealth to talk to ENT about it. We used the telehealth to care coordinate. ENT exam, genetics, ophthalmology, all in one. So family flew down for a subsequent appointment in Anchorage for all of that testing, so another flight for some more in-person care. And then on their way back through we did a fitting.

So we tried to like really sync that up. And then the subsequent hearing aid follow-ups and early intervention services were all done via telehealth. So I just wanna give a quick

example of where I see this program being really successful. And it didn't mean every aspect of it was converted to telehealth health. I have another case of just great data, great images. We're able to treat, get this child identified and managed for care and down to surgery quickly using telehealth and interdisciplinary between the Community Health Aid, audiology, and ENT. And then I will turn it back over to you, Aaron, to make sure. You can do some follow up on that, but I wanna make sure, I see us running a long, I know we're low on time.

- I have lots of things but I think that's amazing. And so if maybe part three one day will just be like newborn hearing screening and telehealth. But yeah, so let's get to sort of the summaries from today. So basically in summary, if you could take nothing else from today and I hope you take quite a bit from today, but if you take nothing else, rules and regulations are complicated and they vary from state to state. So they're complicated within the state and they're complicated as we go between states. It is not anticipated that one audiologist is supposed to know every single minutiae and that's why we have all the resources available to us. But however, just the awareness of where to start asking questions or for what to start asking questions about will help you administer not only just teleaudiology services but just audiology in general.

But there are countrywide initiatives to help with teleaudiology and other remote service provision. And the big thing is, in case you haven't kind of heard me say this several times, it's like advocacy is super important and it's really important if we want to continue to provide these services. So like on that note, like advocating is important and I wanted to spend the next like minute burning through just to make sure that like I can make sure to let you know how to be an effective advocate. And an advocate does not have to be going to Washington DC and pounding on doors to say, "Let me bill for things." Even though if you want to, all the more power to you.

But here are just things to know that in my research about advocacy in healthcare specifically. So there are three barriers to effective advocacy that have been identified amongst healthcare providers. So the first one is this interest in the efforts. I would say that most of the people on this call probably don't meet that requirement 'cause you are on a call more or less talking about legislation and advocacy efforts and clinical service provision efforts. The second one is uncertainty about what the outcomes are. A lot of people that say I don't wanna advocate, well, what if they don't pass? Well, they won't pass if you don't try. And so that's sort of the piece of information I have there.

And the third one is people say, "I just don't have the knowledge, I don't feel confident about that." And that's where it's really important to lean on the resources of those who may. And so you know, Sam and I, we have our information available to you, reach out to us because even if we don't know things and trust us, there's many things that we don't know. We know people that know things much better than us. And so I am more than happy to pass on your question to someone who might be able to answer it or help you find a resource to answer any questions that you have. And then on top of that, here's that hierarchy of advocacy.

You know, a lot of people think, again, the pounding on the doors and saying please pass this legislation and certainly that's one of them. But it could be as simple as like understanding the issues at hand, which is the point of today's talk, just to get you at this baseline advocacy pyramid. So I hope that now you understand what some of the areas are. So if you wanted to be an advocate, you can start from there. And then from there you can email representatives, state and federal, you can meet with them, you can go to meetings about this. And this could be through department of ed, department of health, department of human services, whatever the case may be, and listen in on those.

Those are public meetings. Build relationship with the policy makers and the people behind the wheel and then in the highest level would be testifying. So these are levels of advocacy that are all out there for us. But I hope that this is sort of an introductory guide to advocate for the changes that we outlined in today's talk if they appeal to you. And with that said, there are just some references that we utilized. A special shout out then to Dr. Lara Coco who has worked with Sam a lot and made a lot of those great videos. And then of course as said, like please reach out to us. We love talking to people. We love, you know, helping any way we can.

And if you do have any questions, we have one whole minute to answer them. So please throw them in and we can try our best to do it.

- Aaron, we got a request to do a newborn hearing screening telehealth talk, so we'll have to try.

- Oh, I could talk about newborn hearing screening for hours. So please, I'm more than happy to do that.

- All right, we'll make note of that, Elizabeth. And then we had a comment just that the talk was appreciated.

- Oh, very nice compliment.

- Yes, we'll always end with a compliment, but we're here for any last minute questions and our emails, please take our emails down or grab 'em in your handout. I've had several people reach out already from the last week that I'm gonna be meeting to offer some guidance on their questions. But we're very open to facilitating with what we can

and know and like you said, Aaron, we don't know a lot too, so we can at least put you in the right direction.

- Absolutely. Alright, and I think that concludes our talk.

- Yeah, thank you so much everybody.