Hearing Technology's Leading Edge with Starkey's Livio Edge AI, Livio AI & Livio
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- [Luis] And that will bring us up to the top of the hour. We're ready to begin our session here today at Audiology Online. My name is Dr. Luis Camacho, I am a senior audiologist with the education and training department at Starkey. And I will be your host for today's session. Today we are introducing the brand new premium level, Livio Edge AI Healthable technology. And we're specifically going to be getting into a full overview if you will of how Starkey is truly at technology's leading edge. We'll be giving you all the information on the new Edge AI device, it's features, it's first-in-the-industry features. The advantages that this product is going to offer your patients. We'll also get into updates to the Livio AI product family, some exciting new accessories, updates to the Thrive mobile app and another industry first with our brand new Thrive Care application. So lots and lots to talk about as we get through today's content. I also want to thank everyone who is online here at Audiology Online. We at Starkey do really appreciate you taking some time to log into AO and learn all there is to know about what we're doing to help you and your patients, provide the best hearing health and the best hearing possible and best overall health and wellness possible as well. So we do appreciate you taking time and joining us here at Audiology Online.

Now before we get into the content for today's session, first of all I wanna run through a few housekeeping items. If you're having any difficulties interacting with the AO classroom, please stay logged in and contact Audiology Online at 1-800-753-2160. Common cause for technical problems is if you are running too many other software or applications simultaneously, so you may wanna take a moment to close out everything else and stay logged in just here to the AO classroom. But again, if you continue to have technical issues, contact Audiology Online at 1-800-753-2160. Today's session is available for one CEU credit. To earn the credit you must stay logged on for the full session, this will be a 60 minute session. You must also successfully complete a short quiz following today's presentation. If you log back into your AO account after the end of the session, you should see this course listed in your pending courses area, that's

where you can access the quiz. It's a 10-question multiple choice quiz and you will have seven days in which to complete that quiz.

We also have three course objectives for today's session. At the end of the session, you should know what Healthable features are available. You should know what technology levels and styles are available for the Edge AI, AI and Livio devices. You should know what mobile apps and 2.4 gigahertz Wireless Accessories are available for the current Starkey product line.

If there are any questions throughout the session, feel free to ask them via the chat box. And also we do have a PDF handout of today's presentation available for download. You should see in the lower left hand corner of the screen, the file share area. Simply click on the title and then you'll see the Download Files button become active. Click on that and you'll be prompted to download.

And now everything that we do at Starkey is driven really by just a two real driving forces. One is our mantra that to hear better is to live better. So everything that we do is focused in on first and foremost providing the best hearing possible for your patients. The other driving force really comes from our chief technical officer, Dr. Achin Bhowmik. Dr. Bhowmik and I'm just gonna read this quote says "we continue to evolve our products "from traditional hearing aids to smart devices "that augment human senses, enhance health "and wellness, amplify human intelligence "and enable superhuman abilities." Now that's a pretty strong and bold statement. But we do stand behind that we truly believe that we at Starkey are pushing forward what the concept of a hearing aid is, we really think now is the time, to really look to the future and offer to our patients 'cause they're really the driving force behind this offer to our patients. The best technology in hearing but the best Healthabale products as well. Let's offer them a multi-purpose smart device that will give them the best hearing, but also

support their overall health and wellness goals and be something that really is attainable and desirable to wear.

And we started this process a little about two years ago, when we in introduced the industry's first and still only Healthable Hearing Platform with the Livio AI device. This was built upon what we call our Thrive platform. Some significant components of the supply at Thrive platform are the dual radio system, our proprietary multi-core twin compression architecture, and very, very importantly, the first integration of inertial sensors and really truly harnessing artificial intelligence and machine learning into hearing health technology. In that same vein, we continue to push forward offering the best in terms of connectivity and radio technology to your patients. And this of course, includes direct streaming from Apple iOS devices, as well as growing number of Android OS devices.

We are really at the forefront of utilizing and harnessing the new Android streaming for hearing aid protocol. All of our 2.4 GigaHertz Livio, Livio AI and Edge AI devices are fully compatible for direct streaming from the Google Pixel 3 and 4 product families, the Samsung Galaxy S10 and S10 Note families, as well as now, the Samsung Galaxy S8 and S8 Note families running Android 10 OS. And we really expect the family of compatible Android products for direct streaming to grow rapidly over the coming year. So we really want to make sure we are providing the best connectivity possible for your patients. And again, when we introduced Livio AI, this was the first integration of embedded sensor technology into hearing devices, and specifically embedding accelerometer and gyroscope technology. So we really have the ability to very, very accurately identify motion and body position and movement and many factors and characteristics that allow us to gather quite a bit of information from the patient and utilize that information in some very interesting ways. We couple that sensor technology with the power of artificial intelligence to do a number of things. From a sound quality perspective, we're going to very, very accurately classify the acoustic

environment that your patient is in and use that information to provide the best performance of our adaptive algorithms.

We're also of course going to be able to track physical activity, whether it's steps or exercise, this type of information, we can very accurately detect a fall. So if your patient has fallen, we have the ability to detect that and actually inform a loved one of that occurrence, and we can harness cloud computing for things like live language translation directly into the patient's hearing devices. So this is the current Livio AI ecosystem. This is what we've been building up to over the last couple of years. With our receiver in the canal products, our BTE products, our lithium-ion rechargeable RIC devices, a range of very easy to use and beneficial 2.4 gigahertz accessories and our Thrive mobile app for communication with the devices displaying the healthable data that's gathered, allowing the patient to personalize and customize their listening experience through their smart device.

So that brings us up today. Today we are incredibly excited to introduce a brand new premium level product that we're calling Livio Edge AI. And we're really are at the forefront of technology in utilizing computing, artificial intelligence and all of the power that we have at our disposal with the Thrive ecosystem. And I'm going to play a quick video here, just to kinda show you, you know, why we're excited, kinda kick off the rest of this presentation. That video I think really does encapsulate why we're so excited with this product launch and you got a little sneak peek at some of the topics that we'll be touching on as we move through the rest of the presentation today. At Starkey, we do really build everything that we offer to your patients around three specific pillars. Hearing performance, Healthable technology and intelligent assistant, and so I kind of stated up front hearing performance is always going to be job number one at Starkey. Yes, we are redefining what a hearing aid can be and what it should be considered, but its primary goal first and foremost above everything, will be to offer the best hearing possible to your patients. So we can guarantee that we're offering you the best hearing

aids in the industry, around our Hearing Reality adaptive algorithms, our remote programming, our wireless connectivity, rechargeable technology, all of the things that you want and your patients want from hearing aids are available from the technology that we offer you at Starkey.

The second component of this is Healthable technology. And again, with the integration of the sensors with the utilization of the artificial intelligence, we are the only manufacturer that is offering this type of Healthable tracking of body activity, of brain activity, fall detection, utilizing technology to have different ways to promote a healthy lifestyle and of course, health and safety with the fall detection. And then lastly, our intelligent assistant. We really believe that the hearing aid should be your patients gateway to information, give them new and unique ways to interact with their devices like our tap control, give them the ability to travel and use their hearing aids as their language translation component. Be able to access and tap into the information that's available to them from the internet and cloud information. And you're gonna see some new tools that we have around this intelligent assistance.

So these three core components make up what we are doing at Starkey to really approach your patient and help you approach your patient a full person, if you will, all components of their health, of their wellness, of their lifestyle that you can address and primarily do that through the best hearing, but offer these new and unique features as well. Now part of the introduction of Livio Edge AI is further enhancing sound quality through what we're calling Hearing Reality Pro. Now with all of our devices, we have our Hearing Reality features. These are adaptive features from directional microphones, wind reduction, expansion, machine noise, speech in loud noise, et cetera. We're utilizing the power of artificial intelligence and machine learning to constantly offer your patients adaptive sound quality. This is really the core of AI for sound quality. Instant classification of the listening situation, and providing adaptive sound quality based upon how you, the clinician, have programmed those hearing aids

for your patient. Whether that's their normal memory, their restaurant memory, et cetera. Now you can't be with your patients all the time.

So what we're offering now exclusively with Livio Edge AI and Hearing Reality Pro is instantaneous access to more aggressive, utilization of the Hearing Reality features in what we're calling Edge Mode. So you've maybe programmed your patients hearing aids to have a normal or everyday memory. You set those algorithms based on typical listening situations for your patient, but they go into an environment where it's a little bit more noisy where they need a little bit more comfort. With a simple, double tap on their Livio Edge AI devices, we will instantly now offer them a more aggressive setting, a new set of rules that are instantly applied for that unique listening situation. A good kind of comparison, if you're familiar with the Tesla electric car. Tesla has in some of their cars, what they call the Ludicrous Mode. So normally you're driving a Tesla, it's perfectly fine in kind of typical driving situations, but every now and then you need or the driver wants access to all of the power of the Tesla. And with a push of a button, they can go into Ludicrous Mode and kind of unleash all of the resources of those electric motors.

That's kind of a similar way that Edge Mode is working. With Edge Mode the power of the environmental detection and sound classification, that's all happening continuously behind the scenes. And it's waiting and ready for when the patient decides, I wanna try something different. I wanna try something with more aggressiveness to focus in on comfort, it might be to focus in on clarity, it might be to try and maximize both, depending on the listening situation, and give that person kind of a brand new, kinda locked in set of rules for those algorithms for that particular moment and that particular listening situation. So with Edge Mode, as I mentioned, there's this ongoing analysis happening behind the scenes. So again, they're wearing their hearing aids, they're in their normal memory, the adaptive features are working, they're changing continuously adjusting for that listening situation. But maybe they get into an environment where

they need something more aggressive, for that moment, for that time period that they're going to be sitting in that restaurant or vacuuming in their house or driving in the car. With a quick double tap or push of a button on their hearing aids, they can get this instantaneous adjustment to provide a unique sound quality for them, while they're in that moment.

And then when they leave that environment, they simply double tap their hearing aids again, they go back to the primary memory that they were in before, and they go back to their adaptive procedure, the way that we typically think of the hearing aid. What we found in the clinical trials is that in many cases, this offers the best sound quality or the possibility for the best sound quality for your patients in that moment where they feel they need it. It also can take away the guesswork in some ways of customizing memories. A lot of us are in the habit of creating a restaurant memory or a crowd memory, and, we're we're taking recommendations from the software, we're making adjustments based on the patient's feedback. But again, you can't be there to change those algorithms in the moment when the patient goes into the restaurant. And maybe that restaurant's memory is still a little too loud or maybe it's a little too soft, or maybe it's not offering the tonal quality that they want. With Edge Mode, they can quickly see what's the power, what can be harnessed behind the scenes, to offer them a new sound quality for that moment. And many patients in the focus group in the clinical trials found that they didn't need other memories anymore.

Because Edge Mode essentially replaced those other memories and was available on demand. They engaged it and disengaged it as they went into different situations where you might typically offer a restaurant memory or crowd memory or an auditorium memory, et cetera. Very easy to use, and really, there's nothing in terms of programming to put into place. The way you enable Edge Mode is in your user control configuration, you can assign now Edge Mode, and this is exclusive with Livio Edge AI so you'll only see this when you're programming Edge AI devices. You can position

Edge Mode into either the double tap function or the short press function on their user control. And that way they can access it either way, whichever way they decide they want you to configure the user control. So again, when they move into a situation where they feel well, maybe I want a slightly different sound quality, maybe I wanna see if I can get a little bit more comfort or more clarity, this might be inside, outside, quiet noise, it really could be tried in any environment.

And that ongoing analysis, again, it is waiting in the background, it is already prepared to put into place this new set of rules for the algorithms as soon as they engage the feature. Now, we've been asked, well, why wouldn't the person just keep it in Edge Mode all the time? That's not the ideal use of this feature. You know, most of the time in many, many cases, the adaptive functionality is gonna be best, as the patient moves from their kitchen to their living room, to their office at work, but when they do get into a situation where they want a little bit more aggressiveness, again, whether it's clarity or comfort, then they can engage Edge Mode. Get this, non adaptive filter, if you will, it's gonna put into place a set of sound quality rules and lock those in place for that listening situation. And then when the patient moves out of that environment, they're gonna want to disengage it 'cause it won't be appropriate. Edge Mode for allowed restaurant will not be appropriate for talking to a person one-on-one in their office. That's where you want to reengage the normal memory or the adaptive functionality. So what I'm gonna do here is actually play some audio files. So I'm going to play a recording through the hearing aid in a large kind of sports arena environment first in the primary memory for that environment without Edge Mode. So this is just as the hearing aids might typically be programmed for that listening situation.

- [Commentator] Are you kidding me? There's no way that's a clip.

- [Luis] So now let's listen to that exact same scenario with Edge Mode on, now I see the slide still says off but this is actually with Edge Mode on, so let's take a listen to this.

- [Commentator] He's gone, he's gonna take it.

- [Commentator] No, not a clip. Come on ref, are you kidding me, are you kidding me? There's no way that's a clip, they gotta review that.

- [Luis] And I know, you know, that sometimes it's difficult to hear the differences in these audio files when you're listening here online, whether it's through your computer speakers or through headphones, whatever mode you're using to interact with us here at Audiology Online, but hopefully you heard the differences between those two audio files, with Edge Mode on, a little sharpening of the speech, a little dampening down of the crowd noise. And again, this is just one example of this tool. Again, this could be used in a quiet one-on-one conversation, a noisy restaurant, in the car, listening to music, anything where the patient's, kind of internally is saying, I wonder if I could get a little bit better sound quality, they can try Edge Mode, if they like it, leave it in Edge Mode until they move and change environments.

If they don't like it, if it's not really providing any benefit, disengage it go back to their primary memory. It is the power of that artificial intelligence, that sound classification, again, kind of running in the background, ready to provide a new set of rules on demand and this is totally independent from their smartphone, from the Thrive mobile app. This is all driven through the power of the hearing aid itself and the integration of AI in the hearing aid itself. So they could be disconnected from their smartphone, they could go for a walk with their dog and not take their phone with them. They still have

access to Edge Mode in their Livio Edge AI devices with the quick double tap or push on their user control. So that's Edge Mode, let's move on and talk about the Thrive mobile app. And when it comes to Thrive, we've listened to your feedback, to your patients feedback. And have really made a concerted effort to try and make this the most intuitive app in the hearing industry possible. We've, kind of kept the same general Look, if you will. But as you can see here, the Thrive score is made slightly smaller, not so prominent when you're working with Edge AI or AI devices. You do have access to the body and brain scores right here from the home screen now. So they don't necessarily have to navigate to another screen to see basic Thrive score information.

The hearing aid control information is more prominent, little easier to see, therefore a little easier to adjust with the sliders. And I think most importantly, the memory accessibility is very obvious now. The current memory is highlighted in blue, simple tap on that memory bar, and you will then get an expanded menu for all the memories that they have available to them. They no longer have to go into a separate memory, I'm sorry, a separate menu to get into their memory options. And then we've created a very user-friendly icon based navigation bar, where you can move from the home screen, to customization, to Healthable data, to accessory control and then settings and getting into some of the more advanced features of the app there from this navigation bar. And we will be having a full-hour course on the updated Thrive mobile app available here at Audiology Online in the coming days. So be on the lookout for that, where we'll dive into a lot more details of the app in terms of not just what's new, but also general navigation, et cetera. One of the other things that we're really focused in on at Starkey is providing new and unique ways for your patients to interact with their devices. You know, we're in many cases now dealing with patients, obviously, maybe with dexterity issues, visual impairment, sensitivity issues with their fingers. We're also now more used to when it comes to devices in our life, dealing with actually voice interaction so over the last couple of years again, with the development of Livio AI, we introduced our

tap control. We introduced things like auto on/off with the AI devices. This carries forth with Livio Edge AI, putting reminders into the Thrive mobile app. And we are extremely excited about now introducing the industry's first and only voice commands with Livio Edge AI.

Again, many people are used to using their voice to control a variety of things. Whether this is their voice assistant at home, you know, things like Alexa, things like Siri, things like Google voice commands in cars these days. All of this is very, very common. And let's now give this capability to the Livio Edge AI devices. So how this works, the patient simply does a quick double tap on their devices. And then or on one of their devices, it doesn't have to be both it could be with the right or the left, as soon as that double tap is recognized by the hearing aids, the patient will get an indicator, they'll hear an indicator in their hearing aids, letting them know that the hearing aids are ready to listen for the voice command. And the patient can now make adjustments to their hearing aids through verbal commands. For instance, they could say, increase my volume, decrease my volume, change to memory three or change to my music memory. And this is picked up by the microphones of the hearing aids, and then the adjustments are made based upon-- You can do the same function or the same action to set a reminder. I could double tap on my Edge AI devices and say, remind me to take my blood pressure medicine tomorrow morning at 9 a.m. that will be put into Thrive. Tomorrow morning at 9 a.m. I will hear an indicator or a reminder through my hearing aid saying, "Take your blood pressure medication." You can also access help files in Thrive. Maybe I had forgotten how to adjust my tinnitus stimulus. I can double tap here that indicator and then say, "How do I adjust my tentative stimulus?" The help file will open up in Thrive. I can if I'm logged into my Google account through Thrive, I can double tap on my hearing aids and ask it basically anything. What's the weather going to be tomorrow? Where's the closest gas station?

That information gets streamed to the Edge AI devices. Again, this is all driven through the microphone of the hearing aid. I don't even have to have my phone unlocked, it can be asleep, it can be sitting on my desk, it can be in your purse. As long as the Thrive app is running in the background, and the hearing aids are connected to Thrive and the phone, all of these functions can be done without taking the phone out and opening up Thrive. It's a extremely, extremely useful tool. And again, exclusive for Edge AI devices. Now there is a number of health apps out there we really truly believe that Thrive can be the health hub for your patients, obviously using Edge AI and AI devices to gather their Healthable data, et cetera. But we also want to be very cognizant of the fact that caregivers and loved ones play an extremely important role in the whole healthcare journey. And of course, the hearing healthcare journey.

Here in the US, the population is aging rapidly, we're getting an older and older population. The vast majority of the elderly population want to remain in their own home. They want to, what's known as age in place, even if it means they need to get some assistance in to help them out. They don't wanna move out of their own homes. And the vast majority of older Americans, their caregiver is a family member. And when it comes to caregiving, this is kind of the classic demographic or the typical demographic for a caregiver. About 50 years old, still working, majority of them are female. Many of them are in what's known as the sandwich generation. They still have kids at home and they're now taking care of a loved one, it might be a parent or it might be a grandparent. And 50% of these caregivers are trying to do this long distance. You know, they're not right next door, they're doing it in another town, in another state. And that can be difficult. And also, there's quite a bit of emotional and physical impact on the caregiver. And the number one concern for the caregiver is, can they keep their loved one in their own home? And are they able to manage their loved ones medical care? Are they safe? Are they healthy, if you will? And that's where we're really excited to introduce the industry's only caregiver app, what we're calling Thrive Care. A way for the loved one to stay connected to the patient, to the person that's

wearing the Edge AI devices and be able to monitor them in terms of their Healthable and hearing a data.

So this is a way through cloud computing to be able to check in anytime they want to and see, are they wearing their hearing aids? Are their hearing aids charged? Are they healthy? Are they physically active? Are they socially engaged? And be able to take appropriate steps if not, and of course encourage the use of their devices by being able to look at what's going on in their daily activities, reach out to them and interact with them as needed, based upon the kind of information. So Thrive care is exclusively compatible, again with the new Livio Edge AI devices. And it is compatible with a variety of Apple and Android smart devices. For Apple, the minimum requirement is that it be running iOS 11 or newer. For Android, the minimum requirement is that it's running Android OS 7 or newer.

And if you meet those requirements, Thrive Care is compatible and can be used by the loved one. So when you look at these two powerful apps in conjunction you've got Thrive for the patient, their way to interact with their Healthable data, control their hearing aids interact with smart features, the Thrive assistant, et cetera. They can also now share that Healthable data and hearing aid data with their loved one, via Thrive Care so that the loved one and any number of loved ones, they can share this data with an unlimited number of people, and they can have that support that they need and they want as they move forward in their their lifestyle journey, their hearing health journey. And we do have as a full hour on Thrive Care, available here at Audiology Online already as a recorded course and it will be repeated as a live course in the coming weeks. So kind of in a nutshell, around Thrive care, tremendous benefit for the patient, tremendous benefit for the caregiver and tremendous benefit for you the provider, because you are integral in bringing up this conversation, encouraging the use of both the hearing aids, the apps, and the the caregiver component. And really in

the end, hopefully this is gonna help you keep hearing aids in people's ears and having them reap the benefits of the Livio Edge AI technology.

So that's Livio Edge AI, a lot of unique features, benefits, new premium product available to you now. But we also know that Healthable technology is desired by everybody. And just when you do your discovery, it's possible that not every patient needs the premium level product. You know, through your discovery process, you now have the ability to look at the unique needs of individual patients and recommend our AI technology for everybody. So you've got your Livio Edge AI, premium level 2400 product with all the new features we just spoke about. But you now also have Livio AI in four technology tiers.

So we start down at the 1000 level, where we have body tracking, tap control, self check, Hearing Care Anywhere, and auto on/off, and then you can see we build upon that Foundation, as we move up to the 1200 to include things like the brain tracking, cross system. We move up to the 1600, where we begin to introduce things like reminders, and then the 2000, where you've got, kind of a very, very strong AI product that includes transcribe, and all the other features that came before it. And then of course, you move to the premiere level with Livio Edge AI and everything it has to offer. So again, when you're going through your new discovery process, where you're focusing in on of course, hearing healthcare needs. What the patient wants and desires out of better communication, but also introducing topics like physical activity and concerns for falls and concerns of isolation. And all of the things that go into looking at your patients overall lifestyle. One, whatever information that discovery process provides you, you can offer now an AI or Edge AI product to everybody in your practice, anyone that comes into your doors, and is looking for hearing help, and overall health and wellness help, you have that with Livio AI for all and Livio Edge AI 2400. Another thing that people have been clamoring for and you might be one of them is custom AI and custom Edge AI and rechargeable custom devices, personalization,

power, everything that you wanna offer your patients that really sets you apart as a clinician, but also meets the desires of patients today who want, customization, they want something personalized to their unique lifestyle, their unique needs and desires.

You can do that with the brand new, custom rechargeable 2.4 gigahertz devices. So we are the first in the industry and the only in the industry to offer 2.4 gigahertz wireless connectivity in a lithium-ion rechargeable custom device. And I know over the last couple years as custom, I'm sorry as lithium-ion rechargeable devices have become more and more the norm in the industry, this has been the number one request from our customers, is when are you going to get us a rechargeable custom product with all the bells and whistles, if you will? With all the connectivity, with all the Healthable technology, with all the advanced sound quality features. When are we gonna be able to offer that to our patients in a rechargeable? And the answer is now, with the lithium ion 2.4 gigahertz rechargeable devices.

These are available in Livio Edge AI, all of the Livio AI technology levels, and the Livio hearing aid product line, which is available in the 1000 all the way up to the 2400 technology level. This offers 23 hours of battery time on a full charge, and that is including four hours of streaming. It only takes three and a half hours to charge the hearing aids. And again, this is running on our 2.4 gigahertz wireless technology which means it's compatible with all of our accessories and compatible for direct streaming, from those Apple iOS and Android OS devices as well. Again, this is running on our Thrive platform for Edge AI and AI, we're utilizing our embedded sensors and our artificial intelligence, available in full shell, half shell and canal aid, up to 70 gain, a variety of faceplate and shell colors, including the brand new black look. And then as I mentioned, Edge AI, AI and Livio product line. These are exclusively wireless in their programming. So there's no cords or anything that plugs in, exclusively wireless using your Starkey Wireless programmer or the universal NoahLink 2.4 gigahertz programmer

and a variety of user control configurations, and you can request no control, a digital VC, a push button or the dual, the default is the dual.

Some of this will of course depend on size considerations depending on the ear, the anatomy of the ear, the gain et cetera, but you do have all of these options. With the AI and Edge AI devices a power on/off is an option. And that's something that you can put into in selecting the user control configuration. Since there's no battery door, some patients might want the ability to manually power down other devices and you can do that through a push and hold with the push button. And the functionality in general is the same as the rechargeable RICs when you put them in the charger they'll power off by default, when you take them out of the charger they'll power on. You also have the option with Edge AI And AI devices to enable the auto on/off. So if the patient were to set them down on a stable surface, after 15 minutes, they will go into a very, very, very low power sleep Mode essentially be turned off to save the battery, and then when they pick them up, put them back in their ears, they'll automatically power back on.

So this is now your full Edge AI and AI product family. You have the receiver in the canal options, the lithium-ion receiver in the canal option, our BTE 13 and then the three different styles of the custom lithium-ion rechargeable 2.4 gigahertz devices. We of course have our continued or we continue with our existing 2.4 gigahertz accessories. These are all compatible with the new products, our remote control, the TV Streamer, the mini remote microphone, the remote microphone plus. And we are extremely excited to now be introducing a brand new accessory that we call the table microphone. This is an accessory that has gotten tremendous, tremendous responses with anyone that we've introduced it to. The sound quality is amazing. It really will provide enhanced communications in really a wide variety of listening situations. It utilizes eight-beam forming directional microphones. This can be paired to one set of Edge AI, AI or Livio devices, and it's streaming the sound quality directly to the hearing aids, and it's got three primary uses. It has an automatic mode, where essentially, you

would set it in the middle of a table, and it identifies each speaker as they speak, and directs the beam-forming microphone in for a polar plot to that voice and it will automatically shift from speaker to speaker.

You've got a manual mode where you can basically lock it in to one or two speakers and have it stay focused on them or the surround mode which is essentially omnidirectional microphones, so all eight of the mics are on, picking up speakers from all around them. This is really ideal for maybe small group situations where there isn't a lot of background noise but you want to enhance picking up everybody. There are some secondary use cases. It can be used as a remote microphone so there is a magnetic lanyard here that comes with it, you can hang it around someone's neck. It will pick up their voice and stream to the hearing aid user. You can plug it in to media as well via a 3.5 millimeter audio jack, so it could stream from a TV, from a computer, from a smart device. It also comes with a set of earbuds. So you can actually plug the earbuds into it and the audio would be sent to the earbuds. So might be used for an assistive listening device if you will.

So lots of functionality with it. It is a lithium-ion device, it has a 12 hour battery life, so it could stream for up to 12 hours continuously. It only takes two hours to recharge it and it has a transmission distance of up to about 50 feet or 15 meters. And here's a quick look at the anatomy. I'm not gonna go through every single one of these, but, you know, there's a power button on the back or on the bottom part of it. There is a pairing button, it does have integrated volume control. It's got the magnetic component on the back for the lanyard. It's actually quite easy to use. You simply power power on and off with a holding down of the button for one to two seconds. And then you visually also get an indication as to what the battery charge is. There are actually eight green LED or LED segments, each one basically designates a microphone for the beam-forming component, but also indicates the battery life. So if you've got eight full lights you know you've got at least eight hours. The first four hours we don't visually represent,

but once you start seeing these disappear, basically that's a countdown from eight to seven to six to five, et cetera. When you get down to two hours, you'll see two orange light segments.

When you get down to less than an hour, you'll see one red and that basically means it's time to recharge the device. And again, it only takes two hours to fully charge it. This can be paired to the hearing aids, either within Inspire, through the accessory screen, or outside of Inspire exactly the same way that we have pairing done with our other 2.4 gigahertz accessories. So I'm actually gonna show a quick video of the pairing process outside of Inspire. So you'll see here we're working with rechargeable RICs, we take them out of the charger to power them up and put them into the pairing mode. We're gonna turn on the table mic and you can see the lights come on letting you know it's charged. Turn it over, hold down the pairing button for two seconds. When you flip it back down, you'll see the lights blinking blue.

And for the right hearing aid and the left hearing aid, you'll see a solid green indicator. So now you can see the three segments went solid green on the right, they went solid green on the left. Now it's paired, and in this example, it stops in the automatic mode. And then the patient would have the ability to rotate or change through the different modalities they want to use with the microphone. So again, here's what it looks like in terms of pairing. You get the two green, is successful, two red is unsuccessful. If you get one red on either side, that means one of the aids wasn't successful. Anytime you get the red, just restart the pairing process. Power, cycle your hearing aids, hit the power or the pairing button on the table mic, maybe get them a little closer, a lot of time its proximity that solves the pairing process. Automatic mode, you simply tap the center button, it's a touch pad and then you'll see the light direct to the microphone that is active. And again, this is where it'll basically bounce between speakers automatically. The manual mode, you tap on the segment that you want locked in, and you can do this for one person, or you can do a dual mode, where you can tap and

hold briefly on a second segment, on a second microphone and lock in up to two individual speakers and it doesn't shift it stays locked in to those one or two.

Surround mode, you would simply tap the center button again until you see the full circle of microphone segments and then there you're in that omnidirectional mode, another tap in the center will put it back into automatic mode. Now when you connect it to the lanyard through the magnetic connection on the back, it will automatically go into an upward facing directional microphone mode. It has an accelerometer in it so it knows which way is up, and then will pick up that speaker's voice and stream it directly to the hearing aids. And then again, you can hardwire it in to an audio source using the micro USB to 3.5 audio jack to plug into the media source for streaming from that media to the hearing aids. And again, the feedback on this has just been tremendous. In our clinical trials, this is just one testimonial. "Oh my God just used the table microphone at dinner. "It was amazing! "I can't believe what I have been missing forever."

Again, the responses to this particular accessory have been tremendous, I think it's gonna be a great additional tool to have in your toolbox when offering your patients something to help enhance their listening in really any variety of listening situations, but obviously specifically noise. So this is now your full Livio Edge AI and Livio AI Thrive ecosystem. You have all of the RIC and BTE styles including lithium-ion, you've got the full array of 2.4 gigahertz accessories, including the new table mic, you've got the brand new 2.4 gigahertz wireless, custom rechargeables, the only ones in the industry. And you have two apps, the updated and improved Thrive mobile app for the patient and the industry's only caregiver app with Thrive Care. Now, if that weren't enough, I'm gonna wrap up with one last additional feature that's available for the Edge AI devices. And we have basically formed a close relationship with a company called OrCam. This is a third party company and a third party device. They focus in on providing assistive technology for those with visual impairments. And the OrCam essentially is a device

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that they can click and attach to the side of eyeglasses and has a series of front facing cameras, as well as a speaker.

So this is designed to be able to identify written text, barcodes, human faces, money, and essentially, auditorily through the speaker, read this information, identify this informations through a sound signal to the user. And now with Livio Edge AI, we are the only company is offering a device that can be paired via Bluetooth to the OrCam devices, so that audio signal is now streamed to the Edge AI devices and then they're hearing that information through their hearing aids. So for patients that have this level of visual impairment, and hearing loss, this really offers a huge benefit, because they're hearing that information through the programming of the hearing aid for their hearing loss. And of course, they're getting all the other benefits of the Edge AI devices. So we are not selling OrCam, we're not servicing OrCam. We're not doing any troubleshooting for OrCam, and really you shouldn't either. The goal here is just to know that Livio Edge AI, can be paired to the OrCam, and really all you need to know and all we're supporting is how to pair it.

And here we've got some, you know, kind of straightforward instructions. I'm not gonna go through every one of these line by line, but essentially, you power on the OrCam, there's a touch bar, you know, basically a touch control on the side of the OrCam and you swipe across that and you'll actually hear the instructions, it'll let you know, it's going into settings, menu, Bluetooth, pairing, and then you would basically, put the hearing aids into pairing mode by powering them off at on, and then the OrCam will actually identify verbally that they're paired by listing the name and the serial number of the Edge AI device that's paired. You will only pair one Edge AI product and it should really be the one on the side of the head that they're wearing the OrCam. Now to give you an idea of the power of this device, I'm gonna show you a quick little promotional video that OrCam put.

- [Narrator] Text reading. A large rose tree stood near the entrance of the garden. The roses growing on it were white, but there were three garden-- Face recognition. Jane. Money notes detection. $50. Product identification. Oatmeal squares cinnamon. Barcode. Sausalito cookies 7.2 ounce bag.

So that gives you the idea of kind of the power of that OrCam device and now we can exclusively pair Livia Edge AI to OrCam, again to provide assistance to the overall health and wellness of your patient, of course providing the best hearing possible but let's also focus in on the patient as a whole. Just a couple of other courses that we have coming soon or already available for you here at Audiology Online. We do as I mentioned have a full-hour course on Thrive Care. We have a full-hour course on the Thrive app with a little bit more details on the updated Thrive Assistant with voice commands. We've got a full-hour that focuses in on, half of it on the brand new Inspire 2020 and then the other half on the Starkey sound, that gets into a little bit more detail of Hearing Reality, Hearing Reality Pro and Edge Mode that we we're able to do today. So as we wrap up this time and I know I've gone a few minutes over the hour mark, I wanna thank you for joining us.

And hopefully you can see, again why we're so excited at Starkey around this launch and this continued evolution and pushing forward of what a hearing aid can be. We think now is the time for you as clinicians to come on board with offering unique solutions to your patients hearing, their health needs, their lifestyle needs, their communication and connectivity needs. And we know you can offer them those best products and features with Livio Edge AI and Livio AI for all. So and again, thank you everyone, for joining me here today. Hopefully, we'll see you at Audiology Online in the near future, have a great rest of your day. Thank you.