Sound Bites with Scott Murray

Presenter: Scott Murray

Welcome to Starkey Sound Bites. I'm Dave Fabry, Starkey's chief hearing health officer and host of this program. So at Starkey, we're thrilled to announce an exclusive arrangement that we have in this partnership with the world's leading cochlear implant technology company, Med El. And it pertains specifically to. To individuals who have a cochlear implant on one side and a hearing aid on the other.

And really being able to take advantage of wireless streaming to both devices and also hopefully mark the beginning of a collaboration in the future to really benefit individuals with bimodal. A cochlear implant on one side and a hearing aid on the other. And so today, I'm very pleased to have Scott Murray with us, who is the community manager for Med El and and also happens to be a cochlear implant user on one side and a hearing aid user on the other side. So thank you for joining us on the program. But if you're willing to talk a little bit, Scott, about your hearing journey, your experience, when were you identified with loss and the progression that led you to make the decision to get a cochlear implant?

And then also we'll take it, whatever direction it goes from there. But welcome to the program. I'm really delighted I get to work in the R and D group with Starkey and help develop or provide input, at least to the next generation of hearing aid. Technology and hearing aids have made up the majority of my passion in my career, which now is crazy. How many years?

We won't say 44. But cochlear implants have always been a close partner to that. Along my journey, I've always been tangentially or in some cases, intimately involved in working with cochlear implants and hearing aids. And my favorite part of the job, I still work with patients fortunate enough to have the privilege to update you to Omega AI technology for your right ear earlier today. So with that as by way of intro, thank you for joining us and to talk a little bit today about a whole host of things, I'm really excited to get right into the conversation.

Thank you. Yeah, it's a pleasure to be here, Dave. And you talked about a lot of different aspects of why I'm here. And I guess I'll start by saying just being in the Starkey ecosystem really feels special for me, being someone who's professionally and personally very intertwined in the hearing device and hearing loss world. So I won't get into too much detail about my hearing journey, but to give you the synopsis.

I was born with normal hearing, so hearing loss was not even a blip or a consideration for me or my parents or my family early on and did not have any indication of any issue until my teenage years when I started experiencing a combination of vertigo and hearing loss. And that kicked off kind of a long diagnostic journey, gradually worsening hearing. The vertigo continued episodically for a while and eventually burned itself out after a few years. But the hearing continued to be an issue, more so in my left ear. But I experienced gradual loss in both ears.

Went on an adventure of seeing many different hearing health specialists. For a while there, it was more about trying to find an answer than a solution, so to speak. I think I counted one time, and I actually saw nine different physicians for this issue all over the country. Never got a definitive answer. We got a lot of, you know, this looks and sounds like manures.

It looks and sounds like autoimmune, but we're not sure. People that have heard me tell my story have heard me say my quote that I got that was the most illuminating was a very renowned autologist who I will not mention, but that doctor said, we'll let you know on autopsy what's going on in there. And that was the closest I got to a diagnosis. Yeah, it's a diagnosis by exception. You're ruling out other things.

There is currently no genetic testing that can confirm men years or autoimmune. And so, yeah, unfortunately, that journey is not unique. It's not the first time I've heard that type. It's the first time I've heard that quote. But not that the story is not unfamiliar to me and that, as you said, looking really for a diagnosis more than a solution at first.

And that was the kind of the pivot point I needed to acceptance, I would say, and also to start talking about, okay, I need a hearing device, I need more help. And that eventually led to hearing aids. And started out with hearing aids, tried a CROs version for a while, and I had some success using a hearing aid in my better ear, which is my right ear, which is the ear that continues to this day to be aided. But after years of that, the. The degradation continued and it became apparent that I needed more help.

So that was what led me to consider the implant that I think I knew deep down that I needed. But there was a lot of resistance, as you know, it's a lot more involved process, the surgery, the journey. And that took me some time to accept and to be willing to try. But, you know, long Story not so short. Eventually, I arrived at doing the implantation.

A lot of success. Eventually, of course, not overnight. But here I am, a happy and successful bimodal user with the Med LCI on the left side and the Starkey now Omega, brand new on the right side. Happy about that? We are, too.

So, you know, I can tell you as an audiologist that it is one of the most challenging clinical cases to walk side by side with a patient. And I've had many patients that I've worked with transitioning from the use of amplification and then making that very difficult decision to say, when is it that I'm going to do better with an implant, and in our case with bimodal, than with hearing aids alone. And it really is a trusted bond that takes place between the otologist and the audiologist and the end user. Because if you try a Starkey hearing aid and heaven forbid you don't like it, you can return it for credit after a trial period, but there is no going back once you make that decision. And how old were you when you were implanted on the left side?

I was 30 years old. So I had gone probably a decade, or maybe not quite a decade, close to it when I had qualified for an implant until I actually got it. Yeah. Yeah. Well, I'm so glad.

And like you said, thank you for filling a little bit of the backstory. And to have been born with normal hearing and then have that progression later and then, as you said, not knowing exactly why. We all like to know the why behind our diagnosis in whatever health conditions we're getting into, that's frustrating, I'm sure. Challenging. And it had to be quite challenging to go from 18 to 30 in that situation.

But here we are in a much happier place. Here we are in a happier place. Yes. And I would say the success of the technology now, the amount that the technology can help someone like me in that hearing situation, makes it easier to kind of accept the not knowing or maybe not caring as much about what happened. A part of me will always wonder or care what's going on, but I can hear with my devices now, so it's easier to let it go.

That's the most important. So you've been with Med El for a little over two years? Two years. Couple months or so. That's right.

And in your role, explain a little bit about your role at Med El. Happy to. Yeah. So community manager for Med El Us, which is in large part what it sounds like. My role is to foster and grow and build the community of Med El users, family members, and to some extent, candidates that might be on the journey to getting a Med El implant.

And we do that in a variety of different programming ways, a variety of different events. We work in the partner space with advocacy organizations. That's your HLAAs, your AG BELs. So that's a part of my role as well, leading those partnerships. But, you know, if I was going to sum it up, fundamentally, it's making everyone in the Med El ecosystem, and now, you know, by connection to Starkey, that includes many Starkey patients as well, feel like they have a home, they have resources, they have support on their journey.

They're not alone. They're not a number on a spreadsheet. They're a member of our community, and we are committed, like you said, especially on the implant side. That thing's not going anywhere. It's in your head.

And you are married, so to speak. Speak to the company. And we're here for that. So that's what my role is all about. Yeah, basically.

I mean, it's a lifetime decision that you're making on the internal processor. And so it is so important, I think, in addition to having a trusted provider, whether it is that otolaryngologist, the audiologist, someone else that can provide them with input regarding where they are and whether it's progressing, but also the community is such a vital role to be able to tap into not only the established organizations like hla, as you said, AG Bell, but online communities, I'm sure, you know, really being visible in all of those. It gives you such a great insight into what our expectations these days from people who are facing this loss of their hearing and worry when they don't know what technologies are available. So I'm super delighted that we've gotten. I think maybe where I first met you was possibly at an HLAA meeting.

We might have crossed paths there and then here at Starkey as well. Yeah. And so let's talk a little bit about this partnership that has been forged. And in your case, that partnership is personal, as you said, because we were able to get Edge AI on you at first, and then now Omega AI just pretty fresh just in the last few hours here now. But talk a little bit about for those people who maybe are living in the hearing aid space now.

You have to remember that in many cases, when the provider develops this bond with their patient, they feel like it's their patient. And in many cases, one of the concerns is, you know, it should never be the case that there is a cochlear implant audiologist and hearing aid audiologist or a dispenser working only with hearing aid side of things. But in many cases when a person transitions from a hearing aid to

a cochlear implant, I feel like I'm losing a patient. How do you help bridge that in terms of the continuity to remain connected to that professional who helped them with the amplification? And then also would you talk a little bit about how the sound quality.

Why would someone choose to do bimodal rather than just wearing their implant on one side? So I guess I'll take the partnership aspect first and then talk about the experience a little more. But you alluded to this, Dave. There is so much crossover now. More and more people are maybe eligible for an implant on one side and not the other or still getting benefit like myself from amplification on one side.

And I am sure you've heard others at Med El speak about this before. We had a need here in the market space. We had customers coming to us saying, you know, we need this, we need this solution between Med El and an amplification company to get this bimodal streaming thing more smooth and easier to accomplish for our patients. And I think those questions and comments and feedback led our CEO John Speracio and the whole company to really pursue that and fortunately get us where we are here. But I can speak to that personally as well.

Bimodal streaming is obviously much easier now with Dual Sync and before it required an accessory or a middleman device or I had to wear something or I would just stream on one side only. And I'm fond of saying that's okay, that's doable, you can stream to one side, but you're missing out on a lot of the stereo listening, stereo streaming experience. So I think that need was there. We, our companies, in partnership with each other were able to deliver this awesome technology. And where we are now with that with Dual sync is it's easy to set up.

I just did this, we talked about this, but I just did this because I got a new Starkey hearing aid. It's a one time configuration and once you do that, the connection is rock solid. It's in the iPhone accessibility settings right there. It's stuck in there. So anytime I turn on my Bluetooth, the paired devices are there,

the streaming happens seamlessly and the sound quality to your question there, it's excellent.

I think there's always some trepidation probably on the professional side and the user side of what this bimodal streaming is going to sound like, is there going to be an echo or is it going to be muddled? And I'm happy to report it's none of that. It syncs, for lack of a better term, syncs well together. Sounds crisp, sounds clear. So when you put that together with the ease of setup and the stable connection, it's been fantastic.

Yeah, you talk about the delay and what causes an echo is really a mismatch, if you will, on the timing to the implanted side and the hearing aid side, because the implant, the processing is faster electrically than acoustically. And then you introduce hearing aid processing. But one of the things that I'm really proud of, the collaboration and the commitment from engineering teams from both sides was getting that synchronization locked in so that your experience hopefully is not unique to you. I mean, you talk to the community and others that are now experiencing the benefits of dual sync so that now the implant on the left ear in your case and the hearing aid are paired through the Med El app using that accessibility hearing devices. And for those on the starkey side, many of our listeners watchers are dispensers and audiologists.

So, you know, they're used to seeing the hearing aid pair on this. And with dual, you see an implant on one side and the hearing aid and the Omega AIs in this case on the other side. And so that pairing then exists and we have ambitious plans for the future. But then in terms of right now, we talk about streaming and increasingly streaming. I'll show my age.

I mentioned when we were on the walk over that I first met Dr. Hochmeyer in the 80s when I was at Mayo Clinic and she came over for one of the first products, the Vienna 3M implant. That was an extra cochlear device. It didn't go into the cochlear, it was on the extras outside. And at the time we would talk about, well, you know, with a familiar talker, with a family member using maybe 10 code words that

would signify come pick me up or I'll be home late or whatever, you can maybe communicate on the phone without visual reinforcement, with a familiar talker. Now, the fact, it kind of blows my mind talking a little bit about the fact that you're streaming on the implant side and on the hearing aid side in stereo and streaming content.

What sorts of things do you stream? I stream, you name it. Podcasts, YouTube videos, Apple TV, music, obviously Spotify regularly. And to your point about the, I guess the experience and the quality of that bimodal streaming, I'm in one way fortunate enough to be able to describe this to people. I remember I was born with normal hearing and I had that up until I was a mid teenager.

So I know what that sounds like, I know what my family's voices sound like, and I know what a lot of music sounds like. Sounds like. And then I had amplification, so I experienced all that stuff with amplification. And then I got a CI. So I've experienced a lot of the same sounds, the same voices, the same music, with three different kind of three different hearing systems.

And I am kind of amazed and thrilled to be able to sit here today and say, when I listen to, you know, a Bon Jovi song, like, I remember what that was supposed to sound like. And it still sounds like that now, so it's pretty amazing. Have you played with streaming only with your left ear or only with your right ear? And let's stick with Bon Jovi. So for that sort of pop music, strong bass line, guitar, vocals, in listening with either electric or acoustic only, and streaming versus the bimodal, talk a little bit about your perception of the differences.

So the short answer is there's not much of a perception of difference sometimes. And this is not something I do regularly. As you mentioned, I would only do this to kind of try it out, like to switch back and forth. But can I perceive a difference? Like if I deliberately stream something left side and then switch to right side?

Yes. Like for a moment there, when I switch it over, I can perceive, you know, the volume might feel a little bit different, the breadth of tones. For a minute there, my brain just does a little bit of a, like, hey, this is different. But within a matter of I don't know what it is second or milliseconds, it all just kind of clicks into place together. So it's not ever a situation where I'm streaming and I'm like, this sounds different on this side or that side.

Even if I try to perceive that difference between devices, it's subtle, if anything, and it's testimony to the fact that you really use by most the vast majority of the time. I know and have spoken with some implant users who will say, well, you know, some, I usually just use the implant and I use the hearing aid on occasion. But I think one thing that I'm seeing among the current generation of bimodal users is that with the benefit of that processing for streaming, in this case with dual sync, why wouldn't you use stimulation to both sides? Because this is still the best engine ever made for sorting that out. And it's so interesting how facile your brain is, is that, yes, you can momentarily tell the difference between this side and this side alone, but then it fuses it that quickly.

Absolutely. And of course, I also want to give credit to the technology itself. It's not just the fact that I'm used to this bimodal streaming. I know that I'm getting very natural sound from my CI and very well processed, well configured sound from my hearing aid. So, yes, I'm used to it.

I listen and stream bimodally all the time. But I also know I have really good technology in both ears, so that's a big part of it. Yep. And that's why I love this partnership. You know, we talked about streaming and dual sync with streaming, that big advantage.

But now, what about in the wild, in quiet and noisy and musical environments where you're not streaming, but coming in through the microphones and feeding into the implant and the hearing aid again with an electric signal on one side and acoustic on the other? Talk a little bit about the sound quality of that and even differences that you've noticed in this generation versus past generations of

hearing aids that you've worn. I would describe it actually very similar to what I just described with the streaming. It really feels like it seamlessly merges into one, one listening experience. And again, I think that's a credit to the success, performance wise of the CI and how good of technology I have in the hearing aid now.

I would say also in different situations, you know, and I'm sure a lot of listeners and watchers know hearing a noise and hearing in noisy, you know, restaurants and that sort of thing, that's. That's always a challenge. I am happy to say that as the. The technology has progressed and as my journey has progressed, that's gotten better. Is it still perfect?

Is it still natural hearing? Of course not. But the biggest difference, especially on the CI side, but now they're merged. It doesn't happen immediately. In the beginning of the CI journey, that's more of a challenge, sorting through the noisy environments, sorting through the complex environments.

But I have the hearing aid side to help me and support me with that. So. So it's kind of, I guess, a superpower. If one side is needing a little bit of help, it's getting it from the other side. They're complementary systems, in a way.

Yeah, this is your comfort food on the sound that you've been used to hearing. And then they do augment each other and add up. One plus one equals Three in this case, I think trinormal. Trinormal or bimodal is really. Yeah, the whole is greater than the sum of the parts.

You talk about speech and noise as being a difficult and it is, whether it's hearing aids or cochlear implants, it's always still the most challenging environment. Did you notice relatively short time with Omega AI right now on the right ear versus Edge AI? One important update from Edge to Omega is that we're using DNN as we did in both products. But in the transition from Edge AI to Omega AI, we're now using DNN models that are trained to improve, of course, audibility and sound quality for speech,

preserving spatial awareness and providing excellent speech understanding in noise. Now, we are the first in our industry to incorporate that directional microphone component in the DNN training.

With Omega AI we didn't have that With Edge AI you haven't had them a long time yet. But have you noticed any subtle differences in terms of that preserving of locating sound with Omega? And also have you been in any noisy, the cafeteria or anything where you've noticed any difference in terms of your ability to understand or tolerate noisy environments? Small sample size, of course, this is brand new for me, but I would say yes, at least in a very subtle way. I have noticed.

I'll give you an example, Dave. I was just in the center for Excellence and it gets a little bit noisy in there. It can when there are a lot of customers walking around. And Lauren, one of the staff members was talking to me about the plan for the rest of the afternoon and I was able to deal with that. Okay.

With noise going on even when I turned away and started to go into one of the offices and she had called me back, you know, would I have been able to do that as well before the Omega? I'm not sure, but I felt like that was a little bit of a boost. Like hey, there's a lot going on here. I just got this brand new device and I was able to navigate that. So for what that's worth, it does feel like there's a little bit more going on here.

Yeah, well, stay tuned. And as I said, this is a process so we'll be able to continue to update via telehealth on the acoustic side with more and more experience in environments that are more familiar to you on a day to day basis to make those comparisons. So another issue with regards to then the speech and noise element. Have you to this point used an accessory or a TV streamer for use with your implant and Your bimodal settings. I have I've used many accessories, remote mics, streaming devices, some of them as more of a regular thing and some of them more just to test them out.

But yeah, I've experienced quite a few of them. So what's your opinion on the use of accessories? Do you like them? Are they a hassle? Because you have to remember something else to charge and remember to bring along.

What are the pluses and minuses we do as I said, the majority of our listeners are professionals hearing care professionals but we also have patients or end users and I think this topic is of key keen interest to a lot of people who they themselves or their family members are going through a similar journey. Talk a little bit about the pluses and minuses of accessories. We talk a lot about this at Med El so I think this kind of complements our philosophy very nicely and I happen to agree with it personally. What we want and what we're aiming for in the closest to natural hearing implant experience is just to be able to have here and hear well. And I have used remote mics, I've used streaming devices.

I have gotten help from them many times. For example in a busy restaurant with my wife, I'll have her use a remote mic sometimes. I guess I'm happy to say that I don't have to lean on those necessarily an awful lot. So is it important to have there as an option? I think absolutely, absolutely.

For me personally I would say that as well I like to have the option but I guess I'm grateful to be able to hear very well with my devices as is and I think that's the aim here, right? It absolutely is the goal in my mind for most the vast majority of patients, end users don't want to intervene with their devices unless they have to. Maybe making an occasional volume adjustment or balance adjustment between between the two in specific situations but minimal intervention and I think similar carrying a separate accessory is something that you'll do if you have to but you making it as seamless and as the user experience as easy and removing friction from that is the key. And I think one of the last things and quickly I knew we'd run out of time because I just wanted I could pepper you with questions for the next hour. But.

But the last question and the thing I'm really excited about with Omega AI and Edge AI this is for those who are wearing Edge AI as well is the compatibility with AuraCast. And as you're plugged into the community we had a brief conversation. You said that There is excitement and enthusiasm among the implant user and bimodal community for the potential for oracast. For people not familiar with this, it's another way of maybe reducing or removing friction by enabling the implant and the hearing aid. Eventually.

Right now, the hearing aid is able to pick up with the firmware update to the hearing aids and to the latest version of the app can pick up AuraCast broadcast streams that might occur in the wild in an airport, place of worship, theater, movie theater, sports bar, where there may be multiple things on cameras to watch and listen to, or a lot of noise or commotion in the background to directly stream from a source to the Omega AIs in this case. But we're class two device. It's a little easier and more streamlined for this, but I'm really excited for you to be able to try that. But talk a little bit about the excitement, enthusiasm in the community for AuraCast and the why behind that. Why are people excited about the potential?

I think it's a huge need. I think people are so excited to have a more technologically forward and more advanced version of a T coil, for lack of a better way of putting it. You mentioned a lot of the applications. I think everything from airports to listening to music when you're at a convention. You know, I could list a million different ways that auracast could be used.

And that excites people because it will allow us to use our technology that we're wearing just like Anyone else, their AirPods or their wireless headphones or whatever it is, and we're all kind of part of this greater listening, you know, ecosystem. Having said that, the world maybe is not quite there yet. And I think on the. On the hearing device side, we're all kind of waiting and watching to see how that develops. Obviously, the Omega is there.

I know. I'm confident that I will be there with both sides because Meta will be there. We're there with the audio link right now. But I think that there are so many different ways that users will use that in everyday life that we're trying to use either a telecoil or another assistive listening device or system that's maybe not quite sufficient. So definitely a ton of excitement there.

Happy to see that both of the companies in this partnership are considering that, because that's where we're going and that's where users want to go. Yeah, and again, it's that seamless, frictionless kind of use of remote streaming systems when possible without the need for an accessory. And I think even that use case, you Gave of going into a restaurant with your wife where there's noise, there's even potential for ways to use transmitters in the environment in a restaurant or something that will help with that too. So I'm really excited for the future on that. And so we're at the end of our time.

I want to close though, by talking a little bit. We've talked about the benefits and the why behind bimodal use to professionals. What about a hearing aid user whose loss is progressing and they've tried. You know, the technology in hearing aids has improved dramatically and able to provide benefits to people that in the past would have been had no other option than a cochlear implant. But we've seen improvements.

But talk a little bit about someone in the patient's seat. Now put that hat on. And that part of the journey, the fear that comes with this, you know, you know, and they'll often hear in the online communities, can be a blessing and a curse from people saying, well, you know, everyone sounds like Donald Duck and for how long and what sorts of things would you advise someone who is sitting in that position like you were from, let's say, 18 to 30, where you were, you were struggling and weren't a candidate. But now considering that, and with Bimol, the first thing I would advise them to do is talk to a mentor. And this is a favorite part of my role that I didn't mention earlier, but at Med El, we have a mentor program for people on the journey.

They hear peers, mentors, to do exactly what you just described, which is give them an initial, hey, this is how this works. This is what my experience is like. You don't have to be scared. I think talking to someone who's been on the journey is a huge confidence builder. I also would say to those patients, in a more general sense, this isn't new stuff.

This isn't new technology. Med El has been doing this for 30 plus years. The surgeons know what they're doing. We have patients now, you know, 80, 90 plus years old. I think there is maybe, maybe a stigma or maybe that's a strong term, but a fear of this surgery and of this process.

And I'm here to say that it's not new. It's very well established. And at least on the Med El side of things, we have customized ways to make this fit and make this successful. So, you know, summing it up, it's don't be afraid. There are a lot of us out here that have gone through this, that have gotten a lot of success out of this.

Keep in mind what you're missing and what you stand to gain and jump into it and educate yourself. Yeah and you so well said. And you've made a strong case for someone who has residual hearing in the non implanted ear for the benefits of bimodal. And so for someone who maybe has some measurable hearing in the non implanted ear but has never really thought that they could still maybe try to wear a hearing aid on that side and what the benefits would be, what would you say to them? I guess for one I'm case in point.

But yes, that's many of us you can absolutely use the two types of devices in combination. It's not some weird conflicting systems situation. They can actually work together very nicely as we've demonstrated. And how do I get more information about the mentor program or about Med El is there? You could simply reach out to Med el customer service.

It's 1-888-MED-EL CI they can guide you to either myself or Consumer Engagement Manager or the right person for more information. But we didn't say this earlier today, but I know another part of this partnership that makes it so great is both of our company's commitment to the patient, to the end user. I know that Starkey is as committed to that as Med El is, so there is no shortage of employees at either company that will connect you with the resources you need. We're passionate about it. If you do have questions and you want to email us at soundbytestarkey.com, we'll get you to the right people too.

So thank you so much for this conversation, Scott. I really appreciate it and for your time today and for this partnership. It's been a pleasure working with you thus far. I look forward to crossing paths with you frequently in the future. And for our listeners and viewers.

Thank you for tuning in. If you enjoyed this, like it, share it with family members who might be on a similar journey or just simply want some more information. Information about bimodal hearing aid and cochlear implant use. Until next time, thank you for watching and listening and we'll look forward to seeing and hearing you again very soon.