City of Orange • HLAA Chapter Meeting

MED-EL

If you are affected by partial deafness or high-frequency hearing loss you may find that hearing aids alone are not enough to improve your hearing.

Saturday, April 1, 2017

10:00 a.m. - 12:00 noon

"This text is being provided in a rough draft format. Communication Access Realtime Translation [CART] is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the meeting."

MARLA: Hello.

Everybody hear me?

Okay. I'm going to close this door.

My name is Marla. I am in front of the screen right now. I'm the chairperson for this chapter. We welcome you today to this meeting.

This is our first meeting in this location.

We abruptly left UCI. The last thing they charged everybody for parking. We are supposed to have 2 hours validation free parking.

So I said that's it. They're done. We're moving. We were very fortunate to find this place. This center, family center. They offered us this room to use once a month.

We do have a rental fee, though for this place. We didn't have a rental fee at UCI. It cost us $40 a month.

I'm going to ask if everyone could contribute at least $2 per meeting toward the rental cost. We'd appreciate that.

You can get that to Bob. He'll handle that for you.

I want to let you know -- I was going to say turn your T coils on. Our looper hasn't arrived. We won't have a looped room today.

Oh, well, he's here. I'm not sure if we're going to get set up.

We do have CART. What you can't hear, you can see up here on the screen. Our CART provider Saba Mc Kinley. She is providing us with our CART.

Whatever you can't hear, you can look up here and read.

[APPLAUDING]

MARLA: There's another change we've made, and that is we're no longer providing coffee. So if you want coffee, bring your own coffee. Either go through McDonald's star bucks. Bring it from home.

We will provide coffee for special occasions like Christmas party, things like that.

That's another change we have now.

Do we have anybody here for the first time today?

Oh, great.

What I'd like to do is I'd like Bob to give the other microphone to Mylene. Could you pass the microphone to each of the new people. Let them introduce themselves.

If they want to say something about their hearing loss.

You want to turn the light on for now, Toni.

The switch is right there on the wall.

Great.

AUDIENCE MEMBER: Hi. I'm the mother of Mylene. This is our first time to come here. I'm happy to see you all. We just came from the

Philippines last week.
This is my husband.
MARLA: Welcome. Welcome.
AUDIENCE MEMBER: Hi. Good morning. We just came from fill means. This is our first time here.
We're glad you have this in this building.
Thank you.
MARLA: You're welcome.
AUDIENCE MEMBER: Good morning, my name is mike. I've been wearing hearing aids for 17, 18 years. Needed them long before that.
MARLA: Okay.
AUDIENCE MEMBER: Anyway, here I am, Dr. Brad from the V A sent me here. Fine out what is going on.
MARLA: How did you hear about us?

AUDIENCE MEMBER: Long Beach V A, Dr. Brad. Okay. All right.
Okay.
Bring that around here.
AUDIENCE MEMBER: Good morning, I'm Marcia. I've been hard of hearing since birth. I wear two hearing aids. I'm interested in a cochlear implant. That's why I'm at the meeting today.
MARLA: All right.
AUDIENCE MEMBER: I'm Phil. I'm her husband. I'm been wearing hearing aids for about 10 years and doing okay with them.
MARLA: Okay. Great.
AUDIENCE MEMBER: I'm Ron. In the early 80's I had an option and loss hearing in one ear completely. Lately, my good ear is not doing so good. So I'm looking for new ways and new information.
MARLA: Okay. You came to the right place.
I want to thank everybody who has offered to help at the meetings.
I want to say a particular thanks to Robin. Robin has designed these information sheets. It is a glance at everything for us here.
I hope you all got one. If you didn't, let Bob know. I think he has extras.
Thank you, Robin.
She also does press releases for our nettings.
I'm very appreciative to Robin.
I want to thank Mylene. She send with registration and greetings. Thank you very much for that.
We're going to -- I passed around a sheet, a sign-up sheet. If you'd like to help out at any of the meetings, there's areas of places to help in each month. You can put your name in whatever area you'd like to help in.
If you don't decide now, that's fine. You can email me. Let me know.
I appreciate any help you can give. This chapter really is going to be more successful as we act as a team and work together.
I want to thank Robin, too, because she provided the refreshments today.
I was thinking if we have like a round Robin, when I pass that sheet around, different people, different months can take turns. That way nobody feels they have to do it every month. It gives everybody a chance to participate.
At our last meeting --
One other thing regarding refreshments, if you do sign-up for refreshments, save your receipts. Give them to me. The chapter will reimburse. Spend no more than $25 for them.
At our last meeting, I told you two dates to put on your calendar. Can anybody tell me that the two dates are?
AUDIENCE MEMBER: June 10th is one. Walk4Hearing.

MARLA: What's the other one?
AUDIENCE MEMBER: App 8th.
MARLA: No. App 8april next Saturday. Walk4Hearing kickoff. If you haven't RSVP, do so by Monday. Limited seating.
You can meet others.
We do have a team, a chapter team. It's called team Orange Crush.
So far there's only 3 members. So I would encourage you to go online to Walk4Hearing.org. Select the Long Beach walk. Select Orange Crush team and sign up and join.
If you -- you don't have to walk. You could just, you know, be there and be a part of your team.
Most importantly, you can collect donations for the team.
This is the only fund raiser right now this chapter does.
We get 40% of whatever we raise back to the chapter. Last year we got $1340. That's very important. Because that goes to help towards our CART. CART is $150 a month.
We now have rent $40 a month. We have our refreshments. We have all

of our other costs toward promotional materials and things like that.
It really is important.
It's a great way of spreading awareness for hearing loss. This happens on a national level from HLAA. They hold walks throughout the country.
Our walk is June 10th. The kickoff is april8th. It will be a great event.
Now, help yourself to refreshments, whatever is up here.
We usually do have materials. Our materials person is coming late. I have some materials up there. I have applications for joining HLAA. I hope ever one of you got one of these magazines, the hearing loss magazine. This is the most recent one.
There's some information in there. We have the welcome letter. I up dated that for our new location. Keep this handy. It's a way for you to contact any member of the planning committee.
It has our Yahoo group. What do you call it? Whatever it is, where you can -- it the Yahoo group. If you have a Yahoo email, you can be in our group and you can get access to all of our transcripts from the meetings.
If you do not have a Yahoo email, and you're not incline to create one, let Rachel know and she can email you a copy of the transcript.
They are available in our Yahoo group online.
You also got a getting to know you sheet. We want to get to know you. We want to celebrate things with you.
For example, we want to know when is your birthday?
Does anybody have a wedding anniversary this h Monday.
Anybody have a birthday this month?
AUDIENCE MEMBER: You do.
MARLA: Bob has a birthday this month.
TONI BARRIENT: Excuse me. . Excuse me. So Marla has a birthday on Monday, so she's being shy. And we have a card for you that everybody has signed.
And I have a wrapped gift. It's not a birthday gift, but it is something special that I wanted to wait and give it to her at this time.
So I'm going to let you open this up. There you go.
It's not a bottle of wine.
MARLA: Ohhh. You want me to open it?
Is it okay?
TONI BARRIENT: There's some history in this gift.
MARLA: Oh, candy.

TONI BARRIENT: That's just a little extra something.
MARLA: All right.
Oh.
TONI BARRIENT: There's a couple of people in this room that will recognize this, because it's engraved on here. It says OCS HHH. So this was the gavel that was used when I was president of the Orange County chapter. It's the original ribbon. And it's engraved.
Actually, Gail, do you recognize this?
AUDIENCE MEMBER: Oh, wow! Yes.
TONI BARRIENT: They were advise president of the Orange County chapter which is no longer operating, but this is the chapter that took its place.
We did use this for business meetings and to start meeting. So the meeting will now begin.
There you go.
[APPLAUDING]
MARLA: That's very nice. Wow! All right.
It happens to all of us. We age. Anyway, thank you very much.
There's a couple of other things regarding the Walk4Hearing -- I'm going to take too much time.

We're thinking about maybe having a team T shirt. We're thinking about it. It's not a done deal.
Jacqueline came up with a couple of designs for logos for T-shirts.
I'm going to pass this around. I want to see how many people -- which one you like.
Underneath each one, just put a little mark. I'm going to count up how many marks we have and see which one gets the go-ahead.
I'm going to start passing that around.
And our next meeting on May 6, we're going to have our very own professional advisor Dr. Brad. We'll have Q & A with Dr. Brad. If you have any questions about hearing loss or hearing aids, cochlear implant, all that jazz, bring your questions. He's going to give us a lot of insight into a lot of different areas.
In June, we will have Megan from Advanced Bionics. She will talk about latest technology with Phonak hearing aid and Q90 processor. She will be talking about oral rehabilitation. It's not just for people with cochlear implants. It's very important. I'm still doing rehab with my left one. This is in to 3 years. It's a progress in the works.
It does continue to get better.
Even people with hearing aids, if you are new to hearing aids, sometimes it could be a challenge to be able to listen to the voice and what you're hearing.
Oral rehabilitation is going to be one of the key topics.
In July we will be dark. No meeting in July.
Now, I'd like to, before I introduce our guest, I want to make sure you look at your magazine. Look at the last page, the back. You're going to see an advertise men from MED-EL. This is what our speaker Lyra is going to be talking about.
She's going to be talking about the EAS system. It's a combination of the two technologies, a cochlear implant for high frequency and acoustic amplification for low frequency.
It's a very interesting concept.
We always like to bring new technology to everybody.
You may not be thinking about getting a cochlear implant. You may be thinking about getting a cochlear implant. You may have a hearing loss that falls into the area that this would be good for.
So without further ado, I'd like to introduce Lyra Repplinger from

MED-EL.

LYRA REPPLINGER: Thank you.

I know these slides are hard to see. Before we turn off the lights, does anybody want water or treats?

Come on up. Come on. Don't be shy. I don't want you to feel like you're Greek coming in my way.

I continue want to deprive you of your treats as well.

I'm just going to hook up my computer to make sure that I don't lose any power in the middle of this presentation.

Okay. Perfect.

I think I'm going to stand to the side. I'll be kind of doing a little cha-cha back and forth so you can see the slide.

My name is Lyra. I am an out reach manager for MED-EL corporation.

How many of you guys have heard of MED-EL?

Raise your hands.

Yes. Most because it's a cochlear implant company, right.

What I want to tell you today about MED-EL that may be a lot of the people in the United States don't know, is that we are actually a hearing implant company. There are products that MED-EL has throughout the entire world that really target all kinds of different hearing losses.

Now to be a cochlear implant candidate, your hearing has to be very, very severe or profound.

But then there is a lot of other gray areas of hearing loss.

Outside of the United States, MED-EL has solutions for those hearing losses. And just lately, we have got in FDA approval for this specific type of device, which is called the EAS. That's what we will be talking about today.

So a little bit about me so that you know that I'm -- I'm legit. I'm part of the hearing loss world.

I was a teacher of the deaf for many years, about 15 years total. I was teaching a lot of babies and toddlers how to use their cochlear implants and how to speak with their cochlear implants.

So the thing that Marla said about oral rehabilitation, that's the listening therapy, what's interesting about that is that no matter what age you are, you go through those same levels of auditory listening skills.

So what i found in my experience is that I can take the things, the knowledge that I had about early listeners and babies and transfer them over to early listeners in adults with cochlear implants.

I echo her statement that that is such a huge piece to the commitment to get the technology.

I'm excited that you guys will be getting some support in that as well.

On your left is all of the places that I've worked. I've worked in St. Lewis, the Chicago land area.

I currently live in Colorado. I skipped a snow storm to be here. I'm really sad about that, as you can see.

On the right are the beautiful people that I leave at home when I get to have a hotel room by myself.

It's a juggle. I'm sure all of you can relate with juggling many things in our lives.

So today's agenda is going to be this, we're going do a brief history on MED-EL's cochlear implants and hearing technology.

We're going to talk about the technology that makes MED-EL unique, and then that leads into why we are able to create something so unique that we can combine the cochlear implant piece and then also hearing aid technology.

Of course we're going talk about MRI compatibility.

How many of you guys know about MRI's and cochlear implants?

Yes, do they go together?

AUDIENCE MEMBER: No.

LYRA REPPLINGER: They didn't used to. They do to you because of MED-EL. It's some really exciting news.

And I'm echoing what Marla said that you may not need a cochlear implants, but because you're part of this dynamic group of people that are really creating awareness about hearing loss, people -- you will be a source of information for people in the community.

You may not need an EAS or a cochlear implant, but somebody else might. You'll know the newest technology. I commend you for making such a commitment to that.

Of course we're going to talk about the MED-EL support system that is available to you.

So this slides is a little bit hard to see, but what you can see --

I'm not going to ask somebody in the back to read.

What you will see is a lot of pictures of different kinds of technology. That started in 1975. In 1975, an amazing, smart lady named Ingeborg Hochmair developed the very first multi-channel cochlear implant. She hand soldered the actual implant itself.

It was implanted into the first person in Vienna who got a cochlear implant.

It's interesting.

That lady Ingorbord is still the CEO and the president of MED-EL.

If you think about having this baby that you created and never really letting it go, and seeing the lifetime of it, MED-EL is the only privately held cochlear implant company. That means since it's not a public entity, she says what, she says when, she says who.

And a lot of the things that she has poured into MED-EL is researched based, which is incredible for the hearing loss community.

As you see these pictures, you see really funky looking cochlear implants back in the day, meaning 2005.

Cochlear implants looked like this weird gun-shape, not very aesthetic, so to speak.

Paragraph if you jump to the future, you will see -- I have samples, our newest technology is Rondo single unit processor. That means nothing sits on the ear.

Has anyone seen that before?

I will show you guys.

And then most recently the Sonnet and the EAS system.

This is a Testament to how far we've come.

Many of you who have been wearing hearing aids for many, many years know the hearing aids are getting smaller and smaller with more power and more digital tendencies.

AUDIENCE MEMBER: More money.

MARLA:

LYRA REPPLINGER: Yes. Right.

Here is the portfolio of our external processors.

The one thing I want to say about cochlear implants, and the biggest difference it is with hearing aids is that this external piece, three years from now, they're probably going to all look different. There will always be an upgrade.

If you are a cochlear implant candidate, I understand that this piece is very important.

You're looking at what sits on your ear. You're making sure that it's

the right color and the right shape.

But I challenge you to think about the surgical piece, that internal piece that the surgeon goes in, puts the actual implant and electrode in, and then seals it up. That's the piece that's going to stay with you for the lifetime.

I really challenge you. We're going to take a look at those internal pieces.

I think we have some pretty beautiful external technologies as well.

So let's talk about EAS. EAS stands for electro acoustic stimulation.

Electro is the cochlear implant piece. Acoustic, acoustic means sound. So sound, as you hear it is the hearing aid piece.

Who is wearing a hearing aid right now?

Raise your hands.

So when sound hits your hearing aid microphone, it amplifies. It makes things louder.

There is a threshold with your hearing that if there are certain sounds that you can't hear, you can keep making it louder and louder and louder, it just never is going to be clearer.

So that's why we want both those two worlds.

So I love this slide, because it says when you're stuck in the middle.

So there are people out there right now that are -- they don't qualify for a cochlear implant, and they're wearing hearing aids.

Somebody had said, I do okay with it. Was that you, Phil, I do okay, right?

Listen, you may do better than okay.

There's probably millions of you saying, I do okay. It's not great, and that's where MED-EL stepped up and said, can we do better than okay?

So I want you to think about these questions:

If you -- on the left side, you can have a conversation with a friend,

but you struggle to understand the same friend on the phone.

Maybe you could be an EAS candidate, right.

You do get some benefit with that hearing aid, but in a harder listen situation, which is the phone, right, can we give an amen for that phone. It's very difficult to hear on the phone.

The other piece, you can enjoy a concert. You enjoy music, but you can't really distinguish between the different instruments. Maybe you want to.

So you May may be an EAS candidate for that.

Here's a couple more things to think about.

You hear the background noise in the restaurant. You hear background noise in the restaurant, but you cannot enjoy a conversation with those sitting at your table.

Very, very difficult listening --

Yes. I think it's me too, right.

You enjoy what you hear, but you know you could be hearing so much more.

Especially for those of us who have had a progressive loss, having that memory of what hearing used to sound like, you're always going to have a measure of greatness, I guess, normalcy, so to speak.

Please let me know if you have any questions.

I mean, you don't have to wait until the end.

We can address some of those questions here.

So --

AUDIENCE MEMBER: You mentioned the ability to hear the various parts of instruments in a band was the guitar and the drum her. How about the words to the song?

LYRA REPPLINGER: That say great question.

That piece, regarding the lyrics has a lot to do with your former ability to hear the music.

So, again, we talked about that progressive hearing loss. What did you hear before, were you able to hear the lyrics before? No. You never were.

So then the starting point for you in the expectation for you is going to be different. Yep.

So you may be hearing a few words, our may be hearing the lyrics better if you have some support, maybe seeing the words on a screen and then it kind of connects in your brain, oh, that's what that phrase looks like.

The more training you do, when we talked about oral rehabilitation, the more training you do, the better your brain gets at it.

That's for sure.

So let me just read this slide to you.

When you're diagnosed with hearing loss, finding the solution that works best for you can be a challenge.

Okay. You probably have to find the right doctor. You want to find the right clinic. You want to find this group of people that can help you understand your hearing loss better.

Hearing aids amplify sounds and work well in certain situations, but not all.

A cochlear implant is a surgically implanted device recommended for people with profound hearing loss who cannot benefit from hearing aids.

So there's kind of these two camps. You've got this camp of I hearing aids and that's what I am a candidate for. And then there's this camp of cochlear implant, that's what I was a candidate for. Now there's something in the middle that can be a good solution.

You have another option.

So I apologize that it's white implants on a white background, but this is what marketing has given me.

This is what the Sonnet EAS processor looks like.

This piece looks like a cochlear implant. There's many part of it that look like a cochlear implant. There's this -- the actual implant. You have to have a surgery in order to have an EAS.

There's the piece that is the coil. That communicates with the internal device.

And then, you know, the behind the ear piece of a cochlear implant has always replicated a hearing aid, because it sits nicely behind the ear.

Typically with a cochlear implant, you would no longer need an ear mold. With an EAS, you do. So you'll see that piece of that ear mold.

I know you guys are familiar with an audiogram. This is the Canada see criteria for EAS.

You'll see where the red is. That red is where they have some hearing that dips all the way down to where their hearing loss is.

It's definitely a slope. Think of an Olympic skier going down. That's what you're looking at.

You're looking at someone -- there could be some of you in the room that has an audiogram that looks like this.

You can hear within some of those lower frequency, but those high frequencies really, really drop off.

It's 18 years an older. I say that because I know that there are some pediatrics that have this hearing loss. It's not an indication for them at this time. It's not FDA approved for kids at this time.

Let's take a look. I love this image, because then you can really see how this EAS system works.

You have the internal piece, and you have the external piece.

So let's start with the internal.

Anything that you see in the red is going to be the cochlear implant part, the electro part of the electro acoustic system.

So you've got your actual implant. You've got the electrode, but what I want you to pay attention no this electrode, yes this is going to fire off those signals in the high frequency.

As it gets close tore the inner parts of the cochlea, we call that the apex, as it gets closer to the apex, it's a little bit shorter.

This internal piece right here of your cochlea, that tiny, tiny area is responsible for those low frequency sounds that you hear.

We don't want -- we want to be able to preserve that. We don't want electro stimulation in that area. That's why this electrode is just a tiny bit shorter.

Your hair cells will still be moving. As the hearing aid component works, it's going to amplify and hit those hearing cells, those nerve cells.

So, then, let's look at the outer piece.

This ear mold is definitely a hearing aid component.

We need that ear mold to push through the sound, and then up on top you see where the processor sits. It's half, half red, half blue.

So part of the actual implant -- cochlear processor, part of the processor is the cochlear implant. And part of the processor is a hearing aid.

It's amazing.

Yes?

MARLA: I have a question.

This would basically would not be for somebody with a profound or for severe. It's got to be more moderate?

LYRA REPPLINGER: It's pro found in some areas, like that one --

They have pro found hearing loss within some frequencies, and then it's more like a moderate to severe slope, sloping is.

MARLA: You have to have residual.

LYRA REPPLINGER: Absolutely.

So it's pretty cool that that has happened.

And they have this just a breakdown of the blue, the acoustic pieces

and then the electric pieces.

The first part is the microphone. The microphone, in the audio processor detects sounds and amplifies it. They're low frequency sounds.

As they put it through that ear mold, you're not going to be getting that feedback that you typically got -- that you would typically get because it's not pushing out the high frequency sounds.

The high frequency sounds were the -- was the reason why you would be getting that feedback to begin with, the whistling and the feedback.

And then the acoustic component amplify these sounds. They travel through the ear mold. It stimulates that middle part of the cochlea.

From a cochlear implant standpoint, the external microphone picks up the sounds, transmit it the cochlear implant and then it makes like an electrical stimulation of what sound is.

So how can we do this? How?

This was my big question because the minute you put a foreign object into your cochlea, you're already putting it at risk, right.

So that's really something that people consider.

I've heard many, even cochlear implant candidates saying I just -- I want to keep what I have.

Have you guys heard that from? I want to keep what I have. I don't want to go through surgery, but the thing I have to tell you about MED-EL cochlear implant, the electrode ray that gets put through the actual piece

of the cochlea is unique.

It is what they call more of a floppy array.

If you think about a piece of spaghetti, which one is softer? It depends on who is cooking it. I am married to a chef. He does not allow me to boil water. However, the cooked spaghetti. Think about that, think about a cooked spaghetti, navigating through. It's very tender. That is what the philosophy of MED-EL's electrode portfolio is like.

You'll notice that all of them are straight arrays. This is very different from what else is out in the market.

MED-EL's philosophy is that a straight flexible array will be able to navigate it's way through the cochlea with less damage than a pre-curled array.

Whether the surgeon puts this through the cochlea, it goes through the lateral wall, the outside wall.

Think about --

You guys ever driven through a parking deck where you have to go like circle through, right. It's the scariest moment of my life. I just know I'm going to get a ding. I try to go on the outside as much as possible, that outside wall.

That's what I liken it too.

Your cochlea is like a snail-shape. It's got those two walls. You want to be on the outer side. Guess what's sitting on the inside part of that wall? Your hearing nerves.

Do we want to be signature on top of those hearing nerves? I don't. I want it. Especially when I talk to people who say, but, I really -- I'm afraid of losing what I already have.

These -- this electrode portfolio is created so that the surgeon -- soft surgical procedure would enhance being able to preserve those structures.

I want you to pay close attention to what's called the flex 24. Flex 24 is the EAS cochlear implant that is used.

Flex 28 and standard is if you are a true blue cochlear implant candidate, most likely your surgeon is going to use one of those two. Flex 28 or the standard array. There's a little bit longer. It's going to get to that middle part of your cochlea.

There's information that you want in there.

So what happened? What happened?

Of course we got FDA approval. We could not get FDA approval on this

without having what's called a clinical trial.

Around the nation some doctors found candidates and they helped us with our clinical trial.

They were able to do the surgery. They were able to activate. They were able to ask those recipient what they thought of the EAS.

So let's look.

97% of studied participants demonstrated benefit from EAS. 97% demonstrated benefit from having both the electric and the acoustic stimulation.

You are like what happened to the other percentages? That small group of people, which is I think, 2, they -- remember we talked about the surgery and how any time you put a foreign object in there, there's a chance that some of those hearing structures could get damaged? They did. They dropped their hearing from that apical piece. They weren't able to benefit from the electrode and acoustic.

But we'll talk about them in a little bit.

97% of studied participants were able to use the acoustic component.

That means they were able to use the hearing aid part. That's pretty awesome.

92% reported improvement in their ability to hear in noisy environments. Remember how we talked about those noisy environments? The restaurant? A party?

And 90% reported that communication was less difficult overall.

90% reported that communication was less difficulty over all.

Now the researcher in me wants to ask this 90% how much rehabilitation they did. How much practice did they do?

Because that is a big piece of it as well.

It's still a great percentage. It's still nice and high.

Okay. How many of you guys have heard of the hybrid system?

Raise your hands. Maybe a few.

So our competitors came to the market earlier with this idea of a hybrid system. Part implant, part hearing aid.

Does that sound familiar? Yes.

What I want you to know that because the differences in their electrode portfolio and all of those things, it really isn't saying that it's coke vs. Pep see. I liken it to more coke vs. Dr. Pep per. They look the same, but the taste is very different.

This study shows that the EAS and the hybrid is actually very different because the results are very, very different.

Because of that electrode portfolio, because of that long electrode floppy array that really does help preserve those hearing structures, there was 97% out of the gate success.

They continued to have resaid wall hearing with the MED-EL system.

They were able to be fit with that acoustic portion. They were able to use that hearing aid portion.

They just said that they had more of a benefit, more of a benefit, quality of life was overall better.

So this is what we are telling audiologists and surgeons about.

What else? What else is kind much cool regarding this E ark S system?

Well, there's a wireless technology that comes with the kit. So you would get a Bluetooth Quatro with the kit.

The actual piece itself, the external Sonnet EAS, the processor is water resistant. It's water resistant. Sweat, getting caught in the rain, you won't have to worry about that.

There's also a cover that you can put over it if you did want to go in the ocean or go swimming that would make it completely waterproof.

There's MRI safety, which we are going to talk a little bit about. I told you more about that waterproofing.

Any questions so far?

Yes?

AUDIENCE MEMBER: If this is for a moderate hearing loss and God ford by the hearing becomes worse, does it transfer over to a cochlear implant?

LYRA REPPLINGER: It's like a planted you in the audience.

I love it. It's like a planted her in the audience.

Yes. It does.

If this becomes a situation where they could not use that residual hearing, even though MED-EL used a shorter array, it's still longer than the rest of them.

It is still covering a lot of that cochlea.

The audiologist would just program it into a cochlear implant.

So that's what happened with those two that weren't able to use the acoustic piece. They were able to use the piece -- the cochlear implant piece. Yes.

Thank you for that.

Because you're right, that is a risk. That's a risk that people go into, but because of that longer electrode array, they're able to take

access to that.

Yes?

AUDIENCE MEMBER: What is the cost for this device?

LYRA REPPLINGER: Oh, that is a really good question. I don't know the hard and fast facts regarding the costs. I know it's coded as a cochlear implant. It's many insurance are able to pay for it, and I believe public health also pays for it if you're a candidate.

So I don't know as far as like the actual cost. I'm not sure of that. I can try and get you that information, but I do know that it varies.

Yes?

AUDIENCE MEMBER: I have a question.

If somebody's going for an evaluation, will the audiologist suggest this? When I went, she thought I might benefit from like a type of hybrid or something, then she realized my hearing was not -- just really needed the regular cochlear implant.

I do have a cochlear America. I know a lot about the different companies as well.

Also, how will the audiologist suggest to the person getting evaluated by the hearing audiogram?

My boyfriend Randy is getting an evaluation by one of my audiologists. We don't know what to expect.

LYRA REPPLINGER: That's a great question.

I think that --

You know, there's many places you can get a hearing evaluation, and they are not created equal.

Depending on your hearing loss, going to Costco and getting evaluated vs. Going to UCI are two totally different things.

It sounds like --

She's like yes, it is different.

It sounds like you are at the right place because you yourself have a cochlear implant. So you're with a team that has a surgeon. You're with a team that probably is right on the pulls of all of the new technology.

I would go ahead and ask your audiologist, hey, I've heard about MED-EL's EAS.

I liken it to, when you watch TV these days, there are ads about pharmaceuticals, where they say ask your doctor about Allegra. They didn't used to tell us that.

Now that you know what's out there, ask your doctor about MED-EL EAS. If they don't know, they can contact us and we will train them.

You guys are lucky, this is an area where they are very well-trained. They are in contact with all three manufacturers, and so they are at the pulse of new technology.

MARLA: I think any time you are going to die consideration of anything like this, you're best to go to a CI center and be evaluated by an

audiologist there.

They're well in tuned to all the different manufacturers, specifically to your hearing loss.

They'll be able to make a good recommendation.

My question here is, what type of batteries power this? Are they rechargeable?

LYRA REPPLINGER: Great question. Great question.

Both.

They are air sing batteries. We have a rechargeable options that come with all the kits.

All the kits come with air zinc batteries.

When your supply of air zinc batteries.

There will be four rechargeable battery, oh, gosh -- we say an

average.

If you're using the longer one, we're saying an average of 10 hours. We're is seeing some fluctuation in that data, depending on if they're using assistive listening device with it and things like that.

Yes?

AUDIENCE MEMBER: I have a question. From a person who has never had normal hearing and whether they get the type of surgery or regular cochlear implant, how successful is it?

Like in my case, you know, I've heard some people say they just hear sounds and not speech.

Considering the person never had normal hearing, how successful is it in the long run?

LYRA REPPLINGER: Um, I liken that success, again, to practice and frequent audiological visits.

When I used to work for cochlear implant team, broke my heart to see people get activated and leave and we would never see them again.

Who's been activated?

Raise your hand if you of a cochlear implant and you've been through an activation?

Toni, how many times in that first year did you see your audiologist?

How many?

TONI BARRIENT: In the very beginning, the first couple of weeks, there were three or four visits that were really critical, because I was adapting very quickly and needed to have changes in my programs to meet that rapid adapting.

And then I was going every six months. Now I go once a year.

I really have not had to go outside of that schedule.

I just consider very successful.

I lost my hearing when I was 20. That's when it started for me. It was progressive. It wasn't until much later that, you know, I got into a profound hearing loss situation.

I wasn't always deaf, but I know people, I know many people who have a MED-EL that have always had a hearing loss and have done very well.

Rehabilitation practice, you know, if you have -- if you have knee surgery, you go to physical therapy and you do certain exercise. You wouldn't think of just, you know, going home and doing whatever you do.

So the same thing with cochlear implant surgery. There is in rehabilitation. It's listening, focusing and parroting back what you hear. You see your own score to see how well you are doing and you practice that. That will really help improve the rehabilitation time.

I think that people who have had long-standing hearing loss, probably need to do more of that -- would benefit from more rehabilitation.

LYRA REPPLINGER: Agreed.

That's definitely part of your question.

I also think that you will no doubt hear sounds that you have not heard before. You will have an electrode array in your hearing structure that will fire off what sounds are.

It's really about training your brain to say, yes, it's that sound.

So what I've heard from adults is, they'll realize, like, when I turn the page of this book, there's a sound that I hear. It's like, yep, pages have sound when you turn them.

If you've never heard that before, it's about training your brain to recognize that.

Yes?

AUDIENCE MEMBER: Maybe I didn't hear you right, but did you say medicare covers?

LYRA REPPLINGER: There are some public health that covers, uh-huh.

AUDIENCE MEMBER: Medicare?

LYRA REPPLINGER: Medicare. In certain states that I've been through -- I'm not sure about all of the different state programs, but I have heard of it being covered.

All of it comes --

A lot of your clinics will be able to answer more of those questions. And then from MED-EL side we have a reimbursement position on our side that could also help you navigate your way through that as well.

AUDIENCE MEMBER: This is the first time I heard medicare cover any hearing devices.

LYRA REPPLINGER: It's a surgical procedure. It's a surgical procedure, so it would probably need to have a medical of necessity. So, yep.

AUDIENCE MEMBER: I want to go back to the question. By the way, the clinic will help you, anyone big time to get you, especially on medicare. It didn't cost me a cent. They care a lot about getting help with that.

But I want to go back to the EAS. Is it called ease or EAS?

LYRA REPPLINGER: EAS. You were right.

AUDIENCE MEMBER: Because that's very different. I know a lot about the cochlear implant process.

Did you say that there were four batteries? And part two, of my question was, how many more mappings do you need with the EAS?

Do you think people need more programming because it's two separate ways of hearing?

I want to go along with the four batteries. I only have one battery.

Clarify that, and also how many mappings?

I went to quite a few my first few weeks actually.

LYRA REPPLINGER: Yes. So from the mapping standpoint, were and fining that it's the same. It's the same as a cochlear implant. It's the same as a cochlear implant.

Because that hearing aid component is going to stay the same. They're just going to turn that on, and then that electric piece, making sure that they are programming it appropriately will be very, very similar, if not completely the same as a cochlear implant.

From the battery standpoint, the battery holds two zinc batteries.

When I talked about four batteries, I was referring to the kit containing four rechargeable batteries.

But you would only be using one rechargeable battery at one time and two zinc air batteries.

AUDIENCE MEMBER: You just said two zinc air batteries, but then you said --

So can you explain that.

There's two zinc.

AUDIENCE MEMBER: Let me look at that.

LYRA REPPLINGER: You can choose between rechargeable batteries. You can use them tall day long, our can choose to have zinc batteries.

AUDIENCE MEMBER: That's a mold.

LYRA REPPLINGER: You can pass that around so that everybody can see it.

AUDIENCE MEMBER: Yes. We will do that. This is interesting.

LYRA REPPLINGER: Those are great questions.

Toni has a question in the back.

TONI BARRIENT: Do I understand this correctly?

If anybody has gone to have an evaluation for a cochlear implant and they say no, you don't have enough hearing loss, now with the EAS, you may go back and say, would I qualify for the EAS, because you don't have to have as profound a hearing loss; is that correct in.

LYRA REPPLINGER: Correct. Yes, thank you, Toni.

If in the past you have ever gone to get a cochlear implant evaluation and they say, I'm sorry. Your hearing is not bad enough to get a cochlear implant, let's just keep giving you these hearing aids that just make everything louder but not necessarily clearer, this is an option that could be right for you.

So let me just name drop a couple of doctors and clinics.

UCI has worked with us, and they've had some very, I think they've had candidates and recipients.

The Shohet group, and I believe they are in new port beach and Long Beach, Dr. Shohet.

They have also been trained in the EAS system.

Okay. Great.

So let me end today with a little bit about MRI technology. I had said before, what do you guys know about cochlear implant and MRI's, and they said you can't get it?

You're right. Back in the day you couldn't. You would have to kind of forget that diagnostic because you're everyday life of being able to hear was more important.

So in this room, how many of us have had an MRI?

Raise your hand.

Yeah. Right.

40 did it for me. I was like no MRI, 40 came, MRI, here we go.

It really is something that many people will need, or at least from a diagnostic standpoint, it's becoming the standard.

So when you have a cochlear implant electrode array, that cochlear implant please from MED-EL, we have got in an approval to have an MRI with the magnet in place.

Prior to that, if you were to get an FDA-approved MRI, you would have to sign a consent --

Either sign a consent saying, you know, the risks, I get it, you know, and just go through the MRI, or they would take the magnet out, which is a little bit of a surgery, you have to take the magnet out and put the magnet back in.

Prior to that, that's what would happen.

With MED-EL, and all of our -- I showed you all of the electrode portfolio, it's standard, you would be able to get an MRI with that.

It is at a 3.0 these La.

How does this. .

It all happens because of the specialized magnet that is encased in the cochlear implant.

For those of you who don't know the inner workings of a cochlear implant, let me just show you.

This is the piece that goes -- that is part of the surgery.

This round piece right there, that is a magnet. That's a magnet.

You need that magnet because this piece right here is a magnet. That's how they communicate to each other.

So what do we though about magnets? Magnets, they're magnetic and they pull towards another magnetic force.

This is very special magnet is a magnet that is encased in titanium, the polarity are side to side. Most polarity are up and down, north and south pole.

When you have a magnetic field, it will pull up.

With this special magnet, the polarity are side to side. In the presence of a magnetic field, it just rotates. It rotates to align with the magnetic field. There's no pulling. There's no flipping. There's no torquing. There's no demagnetization.

That is something we've been able to come to the market with.

People who have needed frequent MRI's now they can get a cochlear implant.

Yes?

AUDIENCE MEMBER: I'm curious. I'm not looking to have it done right now. I find this interesting. Maybe I will later on.

Any of your competitors right now, can you get an MRI with their implant?

LYRA REPPLINGER: That's a great question.

Right now, the MRI, I believe --

There's one competitor.

It was Ron's fault.

There's one competitor that claims to have a 1.5 Tesla MRI, but -- with a 1.5Tesla look like, there was no change in their magnet. It's something that they are able to offer now.

So --

Yes?

MARLA: I'm sorry. I have to say something here.

I have Advanced Bionics.

Yeah. You can still have an MRI. Yes, you can have a head wrap or you can have the magnet removed surgically and put back I in.

To me, an MRI is not a big selling point, only because having work in medical for many years, it's not the only type of procedure that you can have. There are others that you can have. You don't necessarily really have to have an MRI. So, you know, it really wasn't that big of a selling point for me.

LYRA REPPLINGER: It's just one of those things that make having three cochlear implant manufacturers special, because we're always going to come to the market with different technologies.

10 years ago, nobody cared about waterproofing. Everyone was take your implant off and jump in the water. And then one manufacture came with fully submersible waterproofing, and everybody was that's the one I want.

That's part of it that becomes feature based. I think that has just been -- that's always going to be the case. That's going to be what is advantageous with having a choice.

I agree. Don't you agree?

Yes.

Let's talk about --

How do we get this data? Why is it important?

This is just a list of MRI complications. This is something that is out on the Internet through the FDA. You can even get this -- this isn't something that was dock toward by any one of these manufacturers. This is just out there.

This is what MED-EL found as far as their philosophy of being able to give this choice, this specific choice to their candidates.

And it's no discomfort, no complications when getting an MRI through MED-EL, 0%.

It was through a number of years.

Yes.

This is more impactful. I think this is the most impactful, especially with pediatrics.

Kids are being diagnosed within two weeks of birth, within a month of birth. They're leaving the hospital with a questionable hearing loss?

Do you all know that?

There is a new born screening plan date, every baby born in a hospital gets a check. They've a pass, no problem or refer. Which means follow-up.

There could be something, or it could be.

Paragraph they just need to retest. These babies that are being retested probably at about one month old, they know if they have for sure some sort of hearing loss. Paragraph when a parent is looking at their baby not being able to freeway direct if they're going to need an MRI for other things, we have babies that have other special needs, this is something that plays heavily into consideration.

The last thing I want to say is, just regarding supporting, not only MED-EL recipients but also the community. We're very, very fortunate to be invited to this group. Great dynamic group that is wanting to get more information.

Keep a lookout for some of our needs meet-ups. In very numerous locations.

We're going to have things that are more of an open house forum, where if you want to know more about being a candidate and really taking a look at -- a closer look at the parts of a cochlear implant, it's harder to do that in a group. Is that right?

In a group, you want to socialize, but in a 1-on-1 setting. My next 1-on-1 setting is April, next Friday. I will be back here, I will be back in this area. Which is a Friday.

I have a few more spots available. Like I said, I keep that very small and very short.

So that I can get your questions answered, and, yeah, that's it.

Be looking out for more of these meetups. It's going to be a bigger gathering like this as well.

Any other questions?

I have some business cards here, thank you guys for having me.

Yes.

AUDIENCE MEMBER: I just want to tell -- I was deaf in this ear for almost 40 years, and I did get the implant. It took me longer than most people because the ear wasn't stimulated with a hearing aid. This was.

I can tell you after three years, I'm just hearing so well. I feel like I got my life back again.

I socialize.

Last night we were at a place that was so noisy, and Randy couldn't communicate. I was communicating like my old social self again.

When I lost my hearing progressively, I stayed in the house. I did not want to be with people. It's just too stressful not being able to hear, even with my speech reading skills. It just was so traumatic to be with people with so much stress on me.

Anybody that's thinking about it, I just say go for it. Really, people kept saying that to me, and I said until it gets real bad, I'm not getting surgery. I don't want to risk it.

It got bad enough. You know when you are ready.

Do your homework. Go to different meetings, something like this.

Let me ask a quick question about, is MED-EL the only ones that make the EAS? Number two is, I don't like a hearing aid anymore. I have very little hearing in this ear, only for music, because I like -- I get a stereo on my T-coil, it makes the music stereo. I just hear the music.

For me, like you said, I don't get any words. I don't like the mold. The mold caused infections.

So I love the fact that there is nothing in my ear. So something like this EAS might not -- for me, I may not want it. I just don't want it, and you can take that off if you want and still have that implant part, right.

LYRA REPPLINGER: Absolutely. You may not be an EAS candidate. That's the truth. You may not be the candidate.

Your question is was MED-EL the only one with EAS? Yes. I will say that we are the only ones that have the electrode acoustic stimulation that has the philosophy of having a long electrode array to be able to penetrate the -- a larger length of the cochlea.

There is a competitor that has the hybrid technology when they talked about, where their philosophy is the same of electric and also acoustic.

Just how to do it is different. The philosophies are different. That's all.

Yep.

So this is something --

This is a solution that is coming your way, part implant, part hearing aid.

Yes?

AUDIENCE MEMBER: Does it work with T-coil?

LYRA REPPLINGER: Yes. That's a great question, yes. We have T-coil. Yes. It has T-coil.

And the way you would navigate the T-coil is through the remote control of the implant. There's an M for microphone, a T for T-coil and a MT. You would be able to use microphone and tell coil, or just telecoil.

MARLA: So you have to use a remote to access your programs?

LYRA REPPLINGER: Correct. Yes. So you would use a remote to access your programs.

What we are finding is that because of the processing strategy with being able to get into -- longer into the cochlea, it automatically adjusts, there's an automatic sound management that happens that mimics natural hearing.

If you go into someplace that's noisy, it follows into the speech. It actually zones into more of the speech sounds.

We're finding that many -- very few of our users are going in and out, going one program over the other.

Sometimes they bring it with them in going to the in movies and they've a T-coil or a loop that they want to use, but it's not something that you would be changing programs on, on a regular basis.

It's more natural --

Yes?

AUDIENCE MEMBER: I have two hearing aids, therefore would I have two of the EAS also?

LYRA REPPLINGER: If you're a candidate on both ears, there is a -- you would be able to have a by lateral EAS.

Thanks, you guys.

It was wonderful to meet all of you.

I see a familiar face in the back there, Ms. Delores. You better come give me a hug.

[APPLAUDING]

MARLA: Thank you. Can we get the lights up, please.

I want to thank Lyra for coming all the way from Colorado.

I have something for you, Lyra as a thank you from our chapter.

I have a certificate of appreciation for coming and doing this presentation.

I have a gift also for you.

LYRA REPPLINGER: Wow! Let's take a picture.

[APPLAUDING]

LYRA REPPLINGER: Thank you.

MARLA: You got a mug that has our logo on it.

LYRA REPPLINGER: Great.

MARLA: If you have a cup of coffee, you can say look. There's a gift card in there too. You do a lot of travelling. There's a lot of different places.

LYRA REPPLINGER: So unnecessary, but thank you. That means a lot.

[APPLAUDING]

MARLA: We do appreciate you coming. We do.

I want to mention a couple of things here as a remainor.
We do have some treats up here. Help yourself.

We have some time left actually. We don't have to be clear of this room until 11:30.
Another group does come and use this room.
Interestingly enough, the next group that does come and have their meeting here, there's a tinnitus support group.
That's very interesting.
I would like to meet them and see what they're about.
We do have a social event.
AUDIENCE MEMBER: What is that tinnitus? When? Today?
MARLA: Their meeting start preparing at 12:00. They start at 12:30. At 12:30 on Saturdays in this room they're here.
I probably can get more information. In the front area, reception area of the center, there's a board that lists all the different groups that have their meeting here and lists their names. I'm not sure it gives the telephone numbers. I will see what I can find out and make that valuable to you.
We are --
Great. We are going to have a social time after this meeting at the flame broiler for lunch.
It's -- town and country road is over here.
When you turn on town and country, turn left. You go to the second light. Turn left into the town and country center, shopping center there.
The flame broiler is in there.
If you would like to come and join some of us for lunch, please do.
Anybody have any questions or comments they want to make?
We're going to have our 50/50 drawing.
Bob, come on up here.
Get your tickets out and ready. If.
AUDIENCE MEMBER: I have a question. You said 1-on-1 meeting. I would like to get more information on that. That's the reason I am here from the V A. It's for this gray area, cochlear implant thing.
LYRA REPPLINGER: Perfect. Yep. I've got some cards here, and then I will take your information.
I'll take your information. It's great that we have a little bit of time. I'm around here until 11:30. We'll make an appointment.
AUDIENCE MEMBER: Thank you.
AUDIENCE MEMBER: Today we got $45 for the raffle.
Splitting it half would be $23 for the winner and we get $22. I may say for the rental, we got $15. If anybody would like to contribute $2 or more for the rental of the use of this room, this is the first time in all the years I've been involved we've paid rent. It's kind of reasonable. If we had to pay $6 over there at the parking structure. That's easy for us.
MARLA: Okay. Get ready.
Okay. The last three numbers, last three numbers. 0-8-8. 0-8-8.
[APPLAUDING]
MARLA: Congratulations.
AUDIENCE MEMBER: Thank you.
LYRA REPPLINGER: See. You never know. It might be your lucky day.
Okay.
Any other questions or comments?
Remember, we will be having a transcript of this meeting. Saba will send it over to us.
I'm going to ask Saba if you could email a copy to me and to Rachel. Rachel will get a posting.
If you are interested in having a copy, just get in contact with us,

either myself or Rachel.

TONI BARRIENT: I think what we can do is have a special page on the website and people can download the transcript from our website. We could do that.

MARLA: All right. Very good. Cool.

Okay. Yes, Mylene?

AUDIENCE MEMBER: We still have the sign-up for different jobs for each meeting, the sign-up sheets in the back. We need greeters.

Thank you.

MARLA: Great. Thank you very much.

Gail, we're going to have to come up with another place for our materials. I thought we would put it down the middle.

I have a small little table that I could bring and set up just for the materials.

I'll look into that and do that.

Let's take a few minutes and socialize.

If you want to have some water, whatever cookies or whatever, help yourself.

Now, next meeting is going to be on the first Saturday of May. It's with Dr. Brad.

AUDIENCE MEMBER: If anybody does want any literature, I have some newsletter, hearing loss journals, the tips for hearing loss I passed around, information about the Walk4Hearing. I put some on the table.

If you'd like some copy of the hearing loss national journal, I have several. Come to me.

MARLA: I would like to know how did you like the parking situation today?

[APPLAUDING]

MARLA: A little bit better than the parking structure.

I understand that trying to get out of the parking structure took a long time.

AUDIENCE MEMBER: I took forever to get out of that parking structure. I didn't mind paying, but I hated waiting and waiting and waiting.

MARLA: That's what I heard.

This is nice because being a Saturday, you don't have -- this parking lot is really full during the week. But on Saturday we have more than enough space. This is nice. I'm happy about that.

Great.

(End of meeting)