The Future of Clinical Care (Part 3): Products and Services

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- [Mary Beth] Hello, everyone, thank you for joining us. It's nice to see so many friends on the call. I hope everyone is healthy and safe today. My name is Mary Beth O'Sullivan. I'm the Professional Education Manager at Cochlear, and I'm joined by Natasha McDougald today. And we're excited to welcome you to part three of our three part virtual workshop, the future of clinical care. This three part series explores how evidence-based analysis can lead to solutions for some of our persistent clinical challenges. At Cochlear, our mission drives us to develop innovative solutions and we've shared some of the discussions going on at clinics around the country about how data has pointed to possible shifts and guidance for initial activation and follow up care. I encourage you to listen to those first two sessions which are available as recordings on audiology online here. Today we'll continue that discussion with introductions to our latest products and some of the services that Cochlear provides to support clinics and patients from a variety of angles so that the latest technology can be accessible to all.

Our learning objectives today include, describing three features of the Nucleus processor portfolio, naming an accessory or tool to counsel patients on maximizing performance and three support services that Cochlear offers to clinics and our patients. The journey for a patient, is usually about six months and then on to the lifetime of monitoring support. As an adult patient begins the journey, there are these key milestones over the first six months and that journey is shared with the clinician. So we wanna look at what that looks like and how we are supporting each step of the way. In the first month, the focus is on audibility and comfort, as well as device acceptance. And then between one and three months, typically we're focusing on map optimization and fine tuning to help with sound quality. And after three months, the patient is navigating the real world in day to day situations that are important to them. Eventually, we see performance plateau and that's usually by about six months when the map stabilizes. The goal of an appointment in initial activation is different than

follow up at three months or three years. So where do our products and services play a role? Technology has improved and expectations for lifetime journey of a Cochlear implant patient continue to amaze us all. As the global market leader, Cochlear is committed to continuing to lead the industry toward the future, we have technology for babies implanted this week, and we will continue to support them when those babies start college in the year 2038. This is all woven into the fiber of what drives us on a daily basis. It's not enough to just create a new product, at Cochlear when we develop products and services, we continually partner with clinics throughout development to ensure that they must improve awareness and access to CI technology, maintain patient outcomes and satisfaction, and reduce clinic burden, through innovative tools, services and products. And so with that, I'm gonna turn it over to my colleague Natasha McDougald, to introduce you to some of the very exciting products that are

- [Natasha] Thanks, Mary Beth, for that wonderful introduction. I'm so glad I could join you all today to learn about these exciting new innovations, and really how they support the lifetime clinical care of our patients. As a product manager for Cochlear, for sound processors and connectivity, we often base, primarily our innovation are on both what our clinicians request from us and also what do our patients want. So we're inspired by people and one of those key drivers for innovation is our recipients. And that to that end, our patients ask us, what do they ask us for? First of all, for whether a new recipient or a veteran sound processor recipient upgrading to new technology, our patients want to hear better than before. They want the ability to easily connect with the people and the world around them, whether in person or in this current environment virtually. They want reliable and durable sound processors that allow them to hear every day, based on an implant that is designed to be there for them for an entire lifetime. And in this fast-paced world, they want care and support, where and when they need it. At Cochlear, we understand that product and services are inspired by people and the continuous process of partnering with professionals and understanding these needs drives innovation. The Cochlear Nucleus Implant System is

inspired by the people who rely on their ability to hear every day and because of this we are committed, to delivering leading technology designed to maximize performance for every individual. We saw this a little bit earlier when we talked about, the evidence approach based to CI care. At this stage, let's explore a little bit more about how Cochlear's products and services can deliver and contribute to the first stage, audibility and device acceptance. We've had an evolution in our Nucleus sound processors. And first of all, how did we actually get here? To build an infrastructure that drives remote care and processors that support best hearing performance, Cochlear had to evolve two things, both connectivity within the sound processor, and the infrastructures to support the care with the sound processor, when and where patients wanted and needed it. It started off in 2013, with our first processor equipped with wireless connectivity, the Nucleus Six. With the foundation of dual microphones, this processor introduced adaptive microphone directionality and the employment of pre-processing algorithms to automatically optimize, the recipient's listening experience. Additionally, proven gains, in hearing performance in challenging, in distance, in listening environments, were driven by the True Wireless accessories offered, like the mini microphone and the TV streamer.

In 2016, we released our first off-the-ear sound processor. Offering for the first time, an off-the-ear sound processor with dual microphones, built-in access to wireless accessories, with hearing technologies, leveraging our standard dual microphones. And then in 2017, we launched the Nucleus Seven sound processor. Ensuring maximum hearing performance with a superior user experience, this processor empowered recipients to take control and connect with their loved ones and their world both in person and digitally. Combining these benefits with increased battery life and superior wearing comfort, users have reported and all around preference for the Nucleus Seven experience. In 2020, we are delighted to be able to offer to you, the Kanso Two sound processor, which is our first off-the-ear sound processor offering direct connectivity, in a fully rechargeable all in one profile, as well as extending our

Nucleus Seven, behind the ear sound processor to our eldest recipients, our Nucleus 22 implant recipients, who were implanted in 1985. So let's start with Nucleus Seven. The Nucleus Seven with proven hearing performance is the only Cochlear implant sound processor today, that uses built-in technology to stream directly from a compatible Apple or Android device without sacrificing size or weight by needing additional attachments to the sound processor. It also doesn't require intermediaries to communicate with those compatible smart devices. Essentially, hearing has never been so smart. The Nucleus sound processor is compatible with every implant that Cochlear has manufactured, including our very first commercial product, the Nucleus 22 implant. Released in 1985, think back to how long ago it was in 1985, the CI22M implant was the first commercially available multi-channel cochlear implant in the world. It is compatible with every implant system going forward.

What features does the Nucleus Seven offer for our recipients? It offers flexible wearing style and retention accessories to provide confidence in all situation. It provides an ultra slimline cable to wear comfortably under hats. For those patients who require both electric and acoustic stimulation, hybrid acoustic ear hook is available to provide that. It provides a range of magnet strengths, as well as coil lengths, to individually fit and be flexible for your patients. And finally, it of all offers, a wide range of retention accessories for ensuring processors stay secure on both the littlest ears, or while patients are experiencing extreme adventures, like surfing or rock climbing. Let's talk a little bit more about the Nucleus 22 implant. The nucleus 22 implant was our first commercial implant dating back to 1982 with commercial release in 1985. Globally, there are approximately 13,000 recipients with a Nucleus 22 implant. As you can well imagine, the chip and coil design is not quite the same as compared to current modern cochlear implant devices. Because of these differences, there are some special considerations to remember when supporting these recipients. The Nucleus 22 implants, supports only the speak sound encoding strategy which requires more detailed programming than newer implants that support a streamlined approach. The

radio frequency transmission of the data and power to the implant, also occurs not only in a different way, but also on a different transmission, 2.5 megahertz for the Nucleus 22, while modern implants transmit at 5.0 megahertz. The transmitting coil is therefore unique to Nucleus 22 and we indicate that by a green plug so that you can easily tell, that the correct coil is fit with the patient. It is available both, in the standard slimline cable coil combination for daily wear, as well as the aqua plus cable coil combination with the teal highlights and both are indicated by a green plug. Laurie Smith had a question about, what the I magnet and M magnet stand for, and what the difference is between them. For our prior generation devices, they are known as the CI600 series and earlier like the Freedom, they use a special type of magnet, not a special, a magnet that we're used to. When we launched our new profile plus implant, that had a special magnet equipped to move with MRI fields, it required a different style of magnet and that is what is indicated by the I magnet, it is compatible with our CI600 device. Now let's talk a little bit about the battery options that are available for the Nucleus Seven sound processor.

There are three battery options offered today for the Nucleus Seven sound processor, and there's our standard rechargeable, compact rechargeable, and a zinc-air battery rack. For Nucleus 22 implants, the standard rechargeable is recommended, given the higher power requirements of this implant. We will be providing standard in all of our Nucleus Seven for Nucleus 22 implant upgrade kits, three standard rechargeable batteries, to make sure those patients have an optimized listening experience. If your Nucleus 22 patient was currently using zinc-air batteries with a Nucleus Six, they will also be able to leverage the Nucleus Seven standard battery with two zinc-air batteries as per previous requirements. To summarize the remainder of our connectivity options, which will be new to our Nucleus 22 recipients but already enjoyed by our other implant recipients global across North America, is that the Nucleus Seven offers direct streaming from compatible Apple or Android devices, proven hearing technologies based upon dual microphones, like SmartSound iQ with SCAN for automatic

optimization of sound processor settings and mic directionality, as well as ForwardFocus, a new clinician enabled feature that allows patients to turn it on, to concentrate on the speaker in front of them. Let's switch directions onto our off-the-ear processor and talk a little bit more about an innovation with our first off-the-ear sound processor the Kanso, which was introduced in 2016. It provided patients with a smart, simple and discreet processor and it was designed to increase user comfort and convenience over behind the ear sound processors without compromising dual microphone or front-end processing features, which are critical for optimizing listening performance in noise. To access sounds in otherwise challenging situations, there are True Wireless accessories support of these Kanso sound processor using. It also offered comprehensive data logs to be able to maintain the insight you needed, to help your patients achieve their optimal hearing outcomes. When asking recipients and clinicians what they thought about the Kanso Two sound processor, we heard overwhelmingly positive ratings because of its overall hearing performance, ease of use and comfort. In a study, we saw that adult users rated the Kanso sound processor highly for helping with self-confidence.

In another study, parents and carers reported, their children showed greater interest in wearing the sound processor because it was easier to operate, manage and reposition relative to their conventional behind-the-ear device. These results confirm how important it is to offer a choice in advanced technology, both in off-the-ear and behind-the-ear options to best match a patient's needs. When asking initial, we also went on to ask what enhancements would people request with this device. And what we found was that the product enhancements that would be desirable for future off-the-ear sound processors were a couple of features that they felt could both improve the user experience. These included, rechargeable batteries, and this is a direct quote, as disposable batteries are fiddly, and sometimes placing them is challenging in battery holders. The second raised need, specifically by clinicians was the desire to check the quality of sound detected by the microphones of the sound

processor. This may not have been a perceived need by recipients, but we know this is important to you when confirming the quality of sound input, especially in patients that can't report for themselves. So taking that feedback into account, I'd like to introduce you to the new Cochlear Nucleus Kanso Two sound processor, smart has never been so simple. The Kanso Two sound processors, offers our latest connectivity features such as direct streaming from Apple and Android device, convenient control with the Nucleus Smart App, with our proven hearing technology of dual microphones, SCAN, SmartSound iQ, with clinician enabled features like ForwardFocus. All of this is contained in a small and light, all in one design, with a built-in rechargeable battery. Your patients have a diverse set of needs, but they all want their sound processor to be easy and seamless to use. Here are some of the features that Kanso sound processor, which we feel will help meet these requirements. And we're going to go through each of these in more detail in the coming slides. Giving your patients of comfort and freedom happens by keeping a sound processor light and small.

We've worked hard to ensure, that the Kanso Two sound processor, delivers advanced hearing performance, industry leading connectivity, and a built-in rechargeable battery without increasing the size. And here are some of the new Kanso Two sound processor features designed to ensure patients find it easy to use and manage with confidence. These include an easier start to the day, with an auto-on, pick up the Kanso Two sound processor and once it has detected the implant, your patient will be on air and ready to go. It gives more confidence around water, with the highest ingress protection rating for an off-the-ear sound processor, IP68, even without an accessory. For additional peace of mind, the Kanso Two Aqua Plus is available for prolonged water activities in fresh or salty water. Other smart innovations designed to increase ease of use include a convenient built-in rechargeable battery that eliminates the need to charge batteries. It is designed for up to 18 hours of hearing during the day. It comes with an easy and convenient way to simultaneously charge and dry the sound processor with the all in one home charger. And if they're away from home, for a long

period of time, and would like to charge their Kanso Two sound processor, they can stay on air and charge it at the same time with a portable charger. One of the most exciting features of the Kanso Two sound processor, is that there are absolutely no small buttons or switches to manage. We now have auto-on and button-free control instead. Simply by picking up the sound processor activates the auto-on functionality. When the Kanso sound processor, Kanso Two sound processor, detects an implant within five seconds, it will begin to flash green to indicate it is turned on and the delivery of the signal has started. If the implant was not detected within five seconds, the sound processor will remain off. The Kanso, just because it doesn't have buttons doesn't mean you can't control the Kanso Two sound processor. It detects tapping by monitoring for very small movements. Multiple taps perform different functions, for example, two taps turn the processor on and three taps turn the processor off. Tapping while placed on a hard surface does not allow for the detection of taps because the internal accelerometer detects small movements.

However, tapping may be completed both on and off the head. The Kanso Two is compatible with our Nucleus 24 series of implants and forward, which includes our CI600, CI500, CI24RE Freedom and the Nucleus 24 series including our double arrays and ABI. As a note I wanna call out, the Kanso Two sound processor is not compatible with our Nucleus 22 implants due to constraints around the size and coil type that we discussed earlier in the presentation. Designed for tamper resistance and easy access, the magnet is located on the underside of the Kanso Two sound processor. We have a new way of replacing magnets within this processor. A magnet removal tool specific to the Kanso Two sound processor, makes it easy to replace and securely locks the magnet in place. Earlier I had mentioned, that we sought feedback from clinicians and our recipients about our first generation Kanso sound processor. We received an overwhelming response of the need for a rechargeable battery. The Kanso Two's, let's talk a little bit further about that rechargeable battery. The Kanso Two sound processor features a powerful built-in rechargeable battery with up to 18 hours of daily battery life

for all day hearing. The Kanso Two sound processor battery, over a lifetime, can deliver 2000 charges discharge cycles, which equates to approximately three to five years depending on the usage of the device. After 2000 charging cycles, the minimum requirement is that the built-in rechargeable battery retains a minimum of 80% of its original capacity, for example, 80% or more. Guidance on when to replace the battery can be monitored by the battery health, by the patient in the Nucleus Smart App, or in our custom sound pro fitting software by the clinician. A Kanso Two received as part of a system, comes with a five year warranty, while a Kanso Two sound processor received as part of an upgrade, has a three year warranty. Battery management and replacement will be covered under warranty and Cochlear will have a battery management program for patients outside of warranty.

The home charger is our primary charging unit and offers a convenient way, for your patients to care for their sound processor, they can wirelessly charge it and dry the device, at the same time. Another way we've designed the Kanso sound processor to be used with ease, is by allowing the recipient to place the sound processor in the charger with the safety line and the software pad if required, still attached. While the sound processor is in the home charger, the communication between it and the paired device, such as a smartphone or remote control, is not supported. This is so phone calls are not routed to the sound processor while it is charging. And it is also not possible to monitor the battery charge status while it is inside the home charger, it's busy charging. The Kanso Two sound processor will be detected by the home charger, whether the sound processor is on or off. The portable charger supports on air use and provides additional charge, allowing your patients to charge their battery, if they are away from home. The portable charger itself is charged via USB and requires approximately three hours to fully charge. When the portable battery charger is used to charge the Kanso Two sound processor battery and the sound processor battery is flat, the time to charge the sound processor is approximately three to four hours when the sound processor is not being used. While the portable charger is being used,

meaning the patient is wearing it and hearing whilst charging, the time to charge the sound processor may vary due to your patient's map requirements. However, a cool feature is, while using the portable charger, your patient can view the battery charge status live in the Nucleus Smart App. Our safety lines have received a slight update making it easier to attach while keeping the strength and low profile appearance. Rather than looping through the safety line through a groove on the sound processor, and this was feedback from our clinicians and that sometimes it's pretty fiddly to put that together, we have now made it easy so that the safety line, snaps into the underside of the Kanso Two sound processor via the socket. The headband has also been redesigned. The Kanso Two headband is designed with the same quick dry material, used for the Nucleus Seven headband, which allows use, wet or dry and can be thrown in the washing machine for an easy wash. It includes a silicon strip that holds the processors firmly over the implants. And there are three colors available, in the extra small and small sizes, vanilla, gray and black, while the black headband comes in extra small, small, medium and large. With that, I'm gonna transfer over from sound processors back to Mary Beth to continue this evidence-based journey.

- [Mary Beth] Thank you Natasha. So, the second stage of this journey is, map optimization and fine tuning. We discussed mapping in some detail in our second session, so we are gonna focus now on device usage and optimization. We've already reviewed how we can assess if a patient is on the right pathway, based on these key milestones. And looking at data, this essential path has been proposed for the majority of adult patients. Of course, there will be those 20 to 30% that may not be on this path and meeting those key milestones, and those are patients that may need a different level of support. So what resources are available for this stage, early in the journey? One resource is the COSI, which is now built into our new software platform, Custom Sound Pro. If you are interested in a refresher, your Cochlear territory manager would be happy to review the COSI, for Cochlear implant patients in more detail. For well over 20 years, the COSI questionnaire has been a reliable tool for identifying specific goals

of interest to the patient and providing a way of measuring patient perception of success. This is an ideal counseling tool for helping empower the patient, provide tangible and reasonable goals and facilitate discussions about avenues to achieving those goals, which could include assistive listening devices, rehab or simply the importance of wearing the device daily. Other resources include usage data or data logging, easily seen on the new dashboard screen of Custom Sound Pro. For adults and children, this is a well established way of supporting counseling discussions related to progress. With the Nucleus Smart App, patients can check battery life, learn to choose paired accessories or find a missing processor. As we will see the app can be increasingly useful along the journey. The third stage of the patient journey is counseling the patient about their real world hearing and ensuring that they are aware of the tools they have at their disposal to help optimize their listening experience every day. The Kanso Twos and N-Seven sound processors, have onboard capability for direct streaming with Apple and Android, the Nucleus Smart App and True Wireless.

Released in 2017, with the Nucleus Seven sound processor, the Nucleus Smart App allowed recipients for the first time to not only conveniently control and monitor their sound processor from their smartphone, But also allowed them to locate a misplaced sound processor leveraging the phone's GPS functionality, and to set and achieve daily hearing goals with the hearing tracker. Empowering patients to set their own specific goals is now further supported in Custom Sound Pro. And the Nucleus Smart App now offers a little more for our Kanso Two sound processor users. This includes sound check, the ability to monitor the sound quality of the sound processor microphones. Viewing daily battery level as a percentage and lifetime battery health of the built-in rechargeable battery. Now we're at the stage, where we're looking to maximize our patient's performance with their device. What are some tools we can use to do that? As the patient approaches six months of device use, it's likely that the maps have stabilized and the focus can turn to the abundance of tools to choose from to support their own personal goals in maximizing performance in a variety of settings

in the real world. Hearing a noise is difficult for CI patients, an SSiQ with SCAN provides significant benefits for listening in noise with automaticity. So patients get great performance benefits in everyday situations. Using hearing tracker between visits, provides important visual cues about progress which can further enhance the listening journey. Some situations are really challenging, and some patients wish they could control their hearing to get even more hearing performance benefits in those situations, such as social situations with distracting babble, where the speaker is immediately in front of the listener, and ForwardFocus is designed, for people who want to take full control of their hearing to get maximum performance. Using enhanced directionality, ForwardFocus is designed to attenuate distracting noise from behind the listener, so they can more easily enjoy a face-to-face conversation. When we look at the results for evaluating the benefit of ForwardFocus in a controlled setting. The benefit of ForwardFocus is significant compared with the default noise setting which is SCAN, and using noise delivered from the rear half, a 2.1 dB SRT benefit is seen in the four speaker setup, and a 2.9 dB SRT improvement in the eight speaker setup. Because of the significance of the benefit, it can be important that people are able to enable and disable as needed for those specific settings.

So this is something you would counsel your patients on, depending on their comfort with, the ability to switch in and out of such a feature. Apple Watch users also have the added convenience of the Nucleus Smart App on the Apple Watch. The Nucleus Smart Apple Watch app, connects to the paired iPhone running the iOS Nucleus Smart App, and it does not connect directly with the N-Seven sound processor. Whether your patients prefer a sound processor that sits off the ear, such as the Kanso Two sound processor or one that sits behind the ear like the Nucleus Seven sound processor, you'll find a Cochlear option for your patient, each the smallest and lightest in its category. Both offer proven hearing performance technologies, designed to improve hearing outcomes in challenging listening situations, and offer recipients the opportunity to focus on what matters, and offering remote care capability. Both allow

patients to connect without compromise with attachments to the sound processor or intermediary device, with direct streaming bilaterally and bimodally from Apple and Android devices. Convenient control, monitoring and goal setting within the Nucleus Smart App, now extended to Apple Watch. Finally built-in access to True Wireless accessories for truly challenging listening over distance and noise. So here we are at lifetime monitoring and support. And Cochlear supports you and your patients for the lifetime. We have some long term options available for you, as well as some new things that have come out recently. So we wanna look at some of those tools for clinic support. And many of them we consider remote care tools that you might take advantage of. The simplest might be email and phone, something we all use every day. And we've also been thinking a long time about this at Cochlear and have worked hard to develop tools to support your current and future goals that you have for your clinic and your patients. Cochlear link remote programming and remote check are some of those support features that we offer. Cochlear link has been available for several years, and can reduce the burden on the clinic by sending replacement processors directly to patients without clinic intervention. In Cochlear link, the patient is automatically registered when their sound processor is attached to Custom Sound or Custom Sound Pro. And all of their maps are then saved in the cloud, and are accessible by Cochlear when needed.

If a recipient contacts Cochlear and is in need of a replacement processor, Cochlear can pull their most recent programs down from the cloud and process the replacement without any clinic intervention needed. The big benefit to this, is that we can complete the vast majority of replacements within 24 hours. Patients get back on the air faster, and there's less clinic involvement to process repairs. Added to this, is that we now have the ability to do electronic signatures for letters of medical necessity, using SignHear, for out of warranty repairs that have to be processed through insurance. All of this means lightning fast service for patients with less clinic time spent on administration. How the entire process works, is that after a clinician enrolls the

recipient, sorry, after a clinician enrolls a recipient via mycochlear.com professional portal. The patient logs into the Nucleus Smart App with their Cochlear account and completes the remote check activities from the convenience of their own home, via the Nucleus Smart App. Some of you may have attended some of the remote check trainings recently, so hopefully you are getting excited about this process and being able to offer this to your patients. Professionals can then log into mycochlear.com to access and review their patients remote check results. And if your patients results indicate that they need a face-to-face appointment, schedule an appointment with them. You can then use their remote check results to tailor the appointment to their specific needs. If you don't need to see them in person, you've saved them a trip to the clinic. You can then dedicate more time to seeing new patients, counseling patients who need an in-clinic visit or addressing other clinic tasks that demand your attention. Patient results are sent from the Nucleus Smart App to Cochlear's secure database. A clinician can then log into Cochlear's secure web based portal to access and review results. The benefits of remote check, are both for recipients and clinicians.

They include being able to complete the checks at home at a time that is suitable for them, will reduce cost and save time associated with clinic travel for reviews, and provide peace of mind and confidence for how they're progressing on their hearing journey. For you, it may help to reduce unnecessary visits for recipients who are doing well and that means that you have more appointment time available to see patients who have complex needs or may need candidacy assessments. Ultimately, it may also help to reduce the burden on patients, by offering a convenient time saving option of care for your patients. Recipient support services can also help lighten the load. Ready to wear with direct shipping is available when we program the device for an upgrade, based on the programs that they're already using. This again, alleviates the pressure on the clinic to try to get everyone in urgently when there's an upgrade available, because they can go ahead and start wearing the new device and work themselves into the clinic schedule as it's convenient for everyone. Upgrade reimbursement

support is provided by Cochlear, to go through insurance and make sure that patients have the support that they need, and can help liaison between the patient, the clinic and the insurance provider. SignHear for letters of medical necessity, is through DocuSign. So instead of having to follow someone around with a letter to physically sign it and fax it, or upload it, that can take sometimes weeks, to get in the right place at the right time for all of those signatures. And with SignHear, it's a matter of doing this on your smartphone, and the surgeon can sign that letter of medical necessity and it really expedites the process dramatically. Our pro care team is a large team of trained professionals here for you. So when you at the clinic have a question about an order or processing any kind of paperwork, our pro care team are professionals here to support that process. We now have recipient solutions managers as well. These are available to your patients for after implantation, if they would like to walk through the kit and have extra support, knowing what all of the products are in their box of accessories, and using the batteries and charging, if there's extra support needed, that you don't have time in the clinic to do, the recipient solutions managers are there to help.

Hear Always is a service that we've had for many, many years for service and repair. Patients can contact Cochlear directly and because of SignHear and Ready to Wear, we really can provide a thorough service to get patients on the air within 24 hours without burdening the clinic further. And of course Audiology On Call, is an excellent way for clinicians to have on the spot support, if something isn't working as expected or they are learning the tool and need some support, or can't remember exactly where the button is, Audiology On Call is an excellent way to get all of your questions answered right on the spot. Patient focused care means that we are covering all of these aspects of clinical care and partnering with you and listening to the patient needs to ensure that we are continuing to improve awareness and access to Cochlear implant technology, maintain patient outcomes and satisfaction, and reduce clinic burden through innovative tools, services and products. Throughout this three hour virtual

workshop, we've seen how evidence-based solutions require input from a variety of sources, partnership and development and feedback from you and from our patients. And we take that all very seriously. We hope you've learned a lot and that your time has been well spent. And we look forward to a future of partnering with you. And now we have a few times to take some additional questions or we can go through some of the questions on the quiz. So we had a couple questions along the way. Are there any additional questions about the Kanso Two or the N-Seven for Nucleus 22? We will have. Yeah?

- [Natasha] Mary Beth, I'll just address a couple questions for those who maybe didn't get a chance to look at their chat box. These came in and thank you so much Maria and Laurie, for asking the questions. Our first question was by Laurie Smith. And she wanted to know, what was the difference between the I magnet and the M magnets, and what did they stand for? What is the difference? And just to answer that question, in a written format is what I had put in there but to bring it back orally, the I or imaging magnets are indicated for use with our newest implant the Nucleus Profile Plus, which is designed for easier access to MRI. These magnets, the I magnets, are matched with the internal magnet, which rotates throughout during an MRI testing, allowing the patient to not have surgery, to be able to have an MRI done of their internal implant. These implants are indicated by the model numbers, CI600, as part of that series. For our prior generations of implants, everything before that series, the M magnet is indicated and this provides compatibility for the external coil magnet to the internal magnet, and includes our CI500 series, CI400 series, our Freedom series our CI24RE, our CI24s, as all the way back to our CI22Ms or N-22 series of implants from 1985. The next question I just wanted to cover off was from Maria. Maria had a question about the lifetime of Kansos, compared to on-the-ear processors. And the answer to that, is both our on and off-the-ear processors, are designed for the same multi-year use. Meaning durable for multi-years. Our upgrade policy is a three year warranty, while our new system policy is a five year warranty. We designed these sound processors to be

reliable and durable for that time period and beyond. And if you're interested in learning more about the durability of these sound processors, they meet the new AAMI standard, so that patients and clinicians can actually look at what that durability looks like over multi yearly uses. Melissa has a question which is, what is rated IP68 without additional accessories or covers? Anyone have an answer? That answer is the Kanso Two sound processor, is rated IP68 without any additional accessories or covers.

- [Mary Beth] Natasha, I wonder if you could tell us a little bit about the True Wireless system and how that's helpful maybe with the bimodal hearing.

- [Natasha] Great question Mary Beth. So one of the things that's wonderful about the Nucleus processor portfolio, it is designed to be used with both ears, whether that be bilaterally or bimodally, with a hearing aid in the contralateral side. The Tue Wireless accessories really help, combat the effects of both distance and noise. So you can think of them as bringing that sound directly to the recipient's cochlear implant sound processor. With our smart bimodal solution with ReSound, what is able to do, is we can directly stream from those wireless accessories to both ears at the same time, so recipients really get that sound in stereo. Its a great question. It looks like Karen has an additional question. Does the Kanso Two sound processor have a built-in telecoil? And secondly, can N-22 recipients, utilize the telecoil setting in the Nucleus Seven? Great question. So Karen, the Kanso Two sound processor does not have a built-in telecoil. However, with its access to the Mini Microphone Two Plus, which is optimized for room loop telecoil, then you do have an option for your patients who want to use the telecoil functionality. For Nucleus Seven patients, that processor, has built-in telecoil functionality that is optimized for telephone use. And yes, Nucleus, my understanding is Nucleus 22 recipients should be able to utilize the telecoil as well, as that is a feature setting with that magnetic induction.

- [Mary Beth] Maybe I could talk about the Nucleus 22 recipients for just a moment. We did discuss it briefly in our second session, but just to make sure people know, there are some different ways of programming the internal device. So it's really very exciting that we can continue to keep this technology backwards compatible for this group which have devices that are over 30 years old. But when we're programming, there are some differences. And so we will be having a refresher course on working with that community, just to be sure, everyone feels comfortable, that might have a Nucleus 22 patient. Once we have newer devices available, sometimes people show up, they usually are, they're many years out from their activation. And as we've discussed repeatedly, there tends to be less variation in map needs over time. And so unless they need a repair, patients that far out from activation don't tend to show up, every six months on your clinic roster. So if it's been a while since you've programmed a Nucleus 22 device, we will be having a refresher course for that coming up in the near future. I had another question, Natasha, I was thinking about Cochlear link and how people can enroll for that. I think we have a really large majority of our existing customers are enrolled, but for people who may not have heard of that, how can they enroll in that?

- [Natasha] We would be delighted to have you reach out for us. It involves completing a process, where we install Cochlear link software in conjunction with you, of course on your custom sound installation. What this allows it to do is for, our custom sound database in the cloud to mirror what you have on your computer or your network computer for your patients. This allows us in the case, to process these automated service requests so we can ensure, to make sure, to have the correct map settings upon a patient's sound processor. There's a lot of flexibility into the system as well. For example, a clinician can decide when to automatically have a return process through Cochlear, or they can also decide that, jeez, I haven't seen that patient for two years. If it's been two years since that patient has been seen or a processor has been touched,

it won't allow it to be processed, and instead ask the patient to reach out to their clinician.

- [Mary Beth] Thank you, Natasha.

- [Natasha] Hopefully, that helps, Mary Beth?

- [Mary Beth] Yes, that does help. I think you said that the Kanso Two, has SmartSound iQ and ForwardFocus? So we have a question about, the ForwardFocus in the Kanso Two. Can you talk about that for just a moment?

- [Natasha] Sure can. So that's a great question. As we discussed before, there's different pre-processing algorithms available in both Kanso Two, and Nucleus Seven. And what's wonderful about them, is we have equivalency across both products so that people can employ what is most important to them. I'll first talk about SmartSound iQ with SCAN. So that is a scene analysis engine, that automatically takes in environment sounds from the sound processor, and depending upon the listening environment, will automatically, it changes adapt microphone directionality, as well as in play pre-processing algorithms. And this happens automatically without any intervention from the patient. It is approved by the FDA for children ages six and over, so that they can audibly report sound changes. But essentially, it is a wonderful tool. What was interesting about it, is when we first rolled it out, back with the Nucleus Six sound processor, we did a study kind of measuring, the difference between what we called super users, so you can think of these as the remote jockeys, the people who change their programs all the time . All the way back to those patients who when asked said, do you mean I have another noise program? So we had a wide variance, with most people somewhere in the middle. When we did that test, and it was an independent clinical test, done with Mauger and group. What we found was that every single one of those patients, whether they were the never touched the button in their

life all the way up to those who were touching it frequently, experienced an increase in understanding, especially in noisy environments. In quiet, it was relatively the same. But as we well know, none of real life is quiet, rather, we're all in noise all the time. So that's kind of how that one works. And it's a setting that the clinician can enable, and it will automatically provide those benefits to the patients. When we go to the next option, ForwardFocus, is a unique algorithm. And what ForwardFocus does is it actually does two things, it involves both directionality, but also pre-processing algorithms, that attenuate the sounds behind them. So it allows the user to be able to really concentrate on things, listen well to the person or speaker of note, in front of them. And one thing to note, the reason that this is a, it's a very powerful algorithm and what we like to do is apply it as on an as needed basis, because it does attenuate the sound behind you. Our recipients have reported some of the best scenarios for them to use ForwardFocus, is when they're in a large group and the speaker of interest is in front of them. And so they're able to focus on that, and it allows them to really be able to hear what that patient is saying. However, when we talk about distance, which is a different thing entirely. That's when accessories like the Mini Microphone Two Plus really come into play. And I always say of all the accessories, if you really want to see vast improvement in speech perception in over distance and noise, you can't go wrong with the Mini Microphone Two Plus. Hope that answers the question Mary Beth.

- [Mary Beth] Thank you, Natasha. I don't see any other questions here, on our, on our screen here. So I think with that, we are really happy that you all were able to attend today. And you'll be hearing from your clinical territory managers in the near future, about some in-person trainings for you or virtual depending on what state you're in and what you have available to you. And we're really excited to be able to roll these out to your patients and support you along the way.

- [Natasha] Thank you very much, you guys. Have a great day.