This unedited transcript of a live webinar is provided in order to facilitate communication accessibility for the viewer and may not be a totally verbatim record of the proceedings. This transcript may contain errors. Copying or distributing this transcript without the express written consent of continued is strictly prohibited.

Pro Fit Software Enhancements with Omega AI+: Powering Performance

Presenter: Andrea Hannan-Dawkes, AuD, FAAA

Welcome everyone. I am Dr. Andrea Hannan-Dawkes, a member of the education and Training team at Starkey. Thank you for joining me today to learn about the exciting profit software enhancements with the brand new Omega AI Technology Family.

Before we get started, I want to cover a few housekeeping notes. If you would like to ask a question during the presentation, please click on the Q and A area, type in your question and then click Send. I will address all questions at the end of the talk today, but please do feel free to to enter questions as they come to mind. There is a PDF handout of this presentation available to you through your pending courses on Audiology Online or by clicking on the link in the Resources tab within the classroom today 05 CEUs or 1/2 hour of CEUs are available for this session if you if you participate in the CEU program offered by Audiology Online. After completing the course, just go to your pending classes on AO and pass the short multiple choice exam.

Keep in mind that you have seven days to complete the quiz when viewing live courses and 30 days when viewing recorded courses. And finally, if you need any technical assistance, please stay logged in and request help by using the Q and A window or by calling or emailing Audiology Online.

You are welcome to review risks and benefits that are applicable to all courses offered through Audiology Online. I'll give everyone a moment to review the information on this slide and it will also be available in your handout.

These are the learning outcomes for this course. After this course, participants will be able to describe two updates to the Edge Mode On Demand Adaptive Tuning feature that it has been designed to delight both parents, patients and professionals. You will be able to identify at least two enhancements to the integrated REM Target Match feature for enhanced professional flexibility and you will also be able to explain at least two additional new profit software features designed to support successful hearing aid fittings.

I'd also like to point out that this course has been designed with professional and evidence based best practices in mind.

All right, let's go ahead and get started. The brand new Omega AI plus flagship technology family offers an entire suite of wireless and non wireless hearing aids that allow patients in every style to benefit from the updated G4 Neural Processor and even in the smallest custom devices.

With the introduction of this comprehensive technology lineup, the Starkey Difference stands out by delivering better hearing with a superior product and unmatched support.

Starkey has been recognized as a leader in hearing health care innovation by integrating advanced technologies with the use of artificial intelligence, machine learning, deep neural networks and even Generative AI to enhance the hearing care experience as we move from one technology family to the next, the commitment to excellence for both patients and professionals remains unparalleled.

Omega AI is anchored by the most advanced processor in the hearing industry, the G4 Neural Processor, which delivers incredibly sophisticated algorithms in real time with extraordinarily low power consumption. In a small package at this family's core is quad DNN architecture with features including dual Compression, Edge Mode, DNN360 and always on noise reduction to provide a more intelligent process, personalized and responsive hearing experience. And while all of the primary hearing aid technology companies are using AI in one way or another, there are differences in the number of features, the precision, the speed and even the impact on battery life. So delighted to share some of these features with you today and show you how remarkable the Starkey technology is for helping your patients and assisting you as well. So in this session we're going to look at really several remarkable updates to the Starkey Profit software designed to help deliver a best in class fitting experience from first fit to fine tuning.

And the overarching goal is to help you send even more patients home each day satisfied and hearing their best. So let's start with the brand new DNN dual compression system. By adding DNN into the mix, we bring a degree of precision to identifying speech signals and activating fast compression. If speech is not present, the slow compressor will be active to keep signals within the patient's dynamic range and support overall sound quality. This really helps ensure that soft sounds are audible, average sounds are comfortable and loud sounds are not too loud.

The fast compressor only engages when speech signals are present to provide more gain for soft sounds like consonants to promote important audibility for the best listening experience. And the integration of DNN in the compression architecture reduces artifacts and really brings unparalleled precision.

The brand new DNN Dual compressor in Omega AI wireless hearing aids manages fast compression resulting in both smooth and seamless sound and the best listening experience available. It defaults on but may be managed by increasing or decreasing the setting value to make speech sounds like those soft consonants more or less pronounced respectfully.

Non Wireless Omega AI hearing aids will offer dual compressor to align nomenclature with the wireless product family. This feature functions the same as legacy consonant brightness and can be adjusted in the same way.

DNN 360 automatic directionality uses deep neural network, trained data or a trained data set to automatically steer the hearing aid microphones into the optimal response for every listening environment. Three key sources of input acoustic information, sensor information and even user Intent, information, they're all, all of that is fed into a central processing system that evaluates multiple factors simultaneously. Several very important acoustic and environmental cues are considered. Things like

the presence of speech, noise, wind, motion, loudness information, the signal to noise ratio, frequency band information, and again, even user intent. And then all of these data points are, well, they're all interconnected.

And that allows the hearing aids to dynamically interpret the listening environment. And then based upon intelligent analysis, the hearing aids can predict where speech and noise may be to then select the most appropriate microphone mode for the user situation. And this degree of sophistication does an amazing job of allowing the hearing aids to, to provide personalized and optimized performance. Again by seamlessly adapting to the environment and intent in real time. The best part is that the patient doesn't have to do anything.

The four possible applications for the microphones with DNN360 include omnidirectional DNN spatial awareness, DNN directionality, which takes advantage of independent null steering within the hearing aids to tackle the dominant noise source and promote the speech and improve the signal to noise ratio, and then motion based optimization. So they're enhancing that spatial awareness as well. So four possible applications for the microphones with the DNN360 feature. The use of DNN in this feature or in DNN 360 is to again predict and apply optimal adaptation parameters with greater accuracy for what I like to describe as more intelligent sound processing, improved listening effort, and a more natural listening experience as well. So, so you're seeing some research here.

Starkey prides itself on being an evidence based company. And so here you're seeing some research which showed a consistent trend across signal to noise ratios whereby participants rated listening effort for speech presented at both 90 degrees and 180 degrees, significantly lower using DNN360 compared to our legacy adaptive directionality feature. And so this does a great job of showing that participants were able to achieve the same listening effort rating with DNN360 at a lower signal to noise ratio than with our previous feature. So some really nice benefit there with DNN360 as it pertains to listening

effort. Starkey is now excited to expand DNN360 to Omega AI plus wireless custom styles with directional microphones.

It will default on whenever adaptive directionality is selected in profit to allow again those automatic hearing aid microphone configurations to enhance the listening experience in every situation. If for some reason a patient doesn't like enhanced spatial awareness, you have the flexibility to toggle off feature on the sound manager screen in profit. I'm also excited to tell you about Starkey's all new intelligent feedback management system that combines phase cancellation with intelligent controls to optimize the listening experience with the next level of feedback control by leveraging comprehensive fitting specific information that includes venting gain and hearing aid features. Feedback Management system proactively identifies feedback risk and applies the appropriate feedback protection strategies to deliver enhanced response stability and fewer feedback related compromises to preserve signal audibility during feedback initialization. The system measures available feedback headroom and evaluates how it compares to the prescribed gain if feedback risk is detected.

Targeted adjustments help preserve audibility while minimizing feedback and the system is also more context aware and optimizes stability during rapid changes in gain to support a more stable and natural listening experience. So with phase cancellation at the core and gain adaptations applied only as needed, feedback free fittings are more achievable than ever with the Omega AI plus technology family. A little bit more research here. Clinical validation of the new feedback System showed a 2.2 times lower feedback occurrence add initial fittings with Omega AI plus data devices when compared to a legacy generation validation study. And then not only that, on the right hand side you can see data related to the ability to remedy feedback if it did occur.

And the findings indicated that the ability to manage feedback was easy requiring only one adjustment. So if feedback did occur, easy to remedy only one adjustment required. And there will be a white paper

on the new feedback management system coming soon, so be sure to visit StarkeyPro.com for that. REM Target Match is Starkey's integrated Real Ear wizard which provides the ability to quickly and easily verify hearing aid frequency responses to the selected sitting formula without having to leave the Profit software. It's fast, easy to use and reliable.

There are four helpful updates to REM Target Match with this technology release. First is that REM Target Match data is now saved with a session. Next is the ability to review REM Target Match measurements from within Profit. Third, the ability to adjust previous aided REM Target match curves and fourth is a brand new Target Match button. So let's just take a moment to take a closer look at each of these REM Target Match measurements are now saved to the Profit session for easy access.

They can be found by clicking on REM Target Match from any applicable screen in Profit. The date of the most recent measurements will be listed between the graphs and I've got that highlighted there for you with a gold box. This was an ask from the professional community and opens the door for the other features that we will talk about next. The second update is the ability to review previous measurements. This can be really helpful for a quick check of hearing aid programming or when considering requests for changes to the hearing aids.

Responses may be viewed with hearing aids connected to profit or without when a previous session is opened. The third exciting update is that manual adjustments to previous aided responses can now be made by using the Adjust button on the screen and in the image there you can see that in the bottom right corner of the Profit screen after changes are made, the Start button is used to run new software soft average and loud measurements to verify the changes that were just made without having to complete the entire REM Target Match wizard. So a nice time saver there. Unaided measurements and automatic target matching aren't required. So again fast and easy, very nice for making quick adjustments and verifying them and all new measurements will be saved to the session and then the

fourth update to REM Target Match is a brand new Target Match button.

It can be used to reset soft average and loud frequency responses back to target and may come in handy to quickly undo fine tuning adjustments that were made inside or outside of the REM Target Match feature. It functions like the Target Match button in profit by resetting the response curves without adjusting other feature settings. So that may also be a handy tool and a nice time saver. The ability to adjust previous aided REM Target Match measurements is available with all compatible real ear systems. When viewing REM Target Match measurements, select and I mentioned before the Adjust button to to be directed to the REM Target Match setup and calibration steps and then you can make those manual aided adjustments as needed and I think I mentioned just before, but overall the process is simple, straightforward and really ideal for busy professionals.

Edge Mode is another Starkey AI driven feature designed to optimize comfort and clarity when whenever a patient needs it. And Omega AI plus expands the power of this feature with three important enhancements. With this new family and with this technology release, Automatic Edge mode is now available in non wireless custom products allowing them to automatically adapt as listening environments change. Edge Mode Reduce noise has been enhanced and may be activated from the My Starkey app to deliver even greater comfort in noisy environments. And then in the middle there a nod to always on edge mode that will continuously optimize speech audibility and noise management without requiring any user interaction.

And so together these enhancements help deliver a smarter and more effortless listening experience. Two of the three enhancements here are manageable through the Profit software, so let's take A look at those Automatic Edge Mode will now be available in both wireless and non wireless Omega AI plus hearing aids so everyone can benefit from the seamless nature of the feature. For optimizing comfort and clarity, it will default on and can be managed on the User Control screen if needed. And then just

as a reminder, non wireless hearing aids without a push button will need to use the T2 app to access Edge Mode unless Always on Edge Mode is enabled and we will talk about that next.

Let's see. There we go. Sorry, got my clicker confused there. So Always on Edge Mode, this is a feature that will default off can be found on the User Control screen under Additional Configuration Options. What it does is it removes the need for the patient to manually activate Edge Mode.

Really nice tool for listeners who want the feature on all the time. So it is going to default off and as I mentioned, it can be found on the User Control screen under Additional Configuration Options. In the image there you can see it highlighted in the gold box just below. Automatic Edge Mode if it's turned on or enabled by you, the Professional Edge Mode will remain active in whatever program is implemented in the first program position. It does require Automatic Edge Mode to also be engaged.

Most listeners will be successful without this feature enabled thanks to the very effective automatic adaptations that are already taking place in the hearing aids every 5 to 6 milliseconds. But if a hearing aid user is continuously using Edge Mode and enjoys the benefits, the Always on feature may be a helpful tool. If listeners haven't used Edge Mode or are sensitive to adaptations and signal processing, consider leaving it set to off. This was an ask from the field for those patients who really enjoy Edge Mode and again are using it all the time. So we were excited to bring this to you with this technology release.

All right, a few good to knows When Always on Edge Mode is enabled, users may notice a brief delay or maybe even a short audible tone when the hearing aids are powered on while the system analyzes the environment and applies the best sound setting. Always on Edge Mode turns off when the user switches out of Program one or begins streaming. It automatically resumes when streaming ends or when the user returns to Program one. Users can also start or stop Edge Mode at any time if added to the hearing aid user controls if they're using the My Starkey app or or if you have issued a Remote

Control 2.0 and the favorite button is configured for Edge Mode. And then just a reminder or a mention here that the My Starkey app is still required for the patient to select their listening intent with either enhanced speech or reduced noise.

To assist professionals in knowing if Always on Edge mode is active, a new icon will appear in Profit adjacent to Program one, so you can see that highlighted here. We have also added new fitting tips for Always on Edge mode to support understanding and use of the feature, and these are indicated by purple light bulb icons on both the User Control screen and the Data log screens.

There are a few additional profit enhancements to be aware of with this launch. Hearing aids can now remain in a patient's ears during a firmware update and the hearing aid microphones will remain active. This change promotes greater appointment efficiency because conversations can continue without a period of downtime, so that is a nice update there. New with this release is also the ability to view a cross transmitter in a NOAA session. Receivers will be labeled with RX and transmitters will be labeled with TX as illustrated here, so this change provides a straightforward way to identify both receivers and transmitters.

Another great update to Profit is that session notes will now make it easier to capture important hearing aid details. A brand new Include Hearing Aid Information toggle allows device information to be automatically added when notes are saved to noaa. Exported or copied details like device configuration, firmware, receivers, coupling controls and even paired accessories can all be included, helping to streamline documentation and even improve record keeping. And the toggle for hearing aid information is enabled by default. Another great enhancement to PROFIT pertains to the SCIF Compliance letter that is available when SCIF mode is activated in the software.

Hearing aid and owner information will now automatically populate in the fields on the compliance letter instead of having to be handwritten for added ease and convenience. And there are still two language

options for the letter, both English and Spanish. Vanish.

I hope you have enjoyed learning about the profit enhancements with the new Omega AI plus Technology family and all the really incredibly valuable features that are designed to support patients and you in the most meaningful ways.

As I wrap up today, I want to direct you to the StarkeyPro.com website where you can access a wide number of resources including white papers, quick tips, videos and additional learning opportunities. Please also be sure to reach out to your account representative if you need more information. They would be delighted to assist you and with that I want to thank everyone for joining me today. I really appreciate your time and attention and I hope you enjoy the rest of your day.