Empowering Patients to Pursue Hearing Health Part I

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- Welcome everyone, I'm Dr. Andrea Hannan-Dawkes. I'm member of the education and training team at Starkey. I'm delighted that you have elected to join me today to learn more about empowering patients to begin their hearing health journey. Before we begin, there are a few housekeeping items to cover. If you would like to ask a question during the presentation, you can use the Q&A area, just type in the question and click send. I also want to let you know that a PDF handout of this presentation is available for you through the pending courses on AudiologyOnline, or by clicking on the link in the chat within the classroom today. One CEU hour is available for this session if you participate in the CEU program offered by AudiologyOnline.

After completing the course, just go to your pending courses on AO and pass the short multiple choice exam. Just 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&A window or by calling or emailing AudiologyOnline. So the learning outcomes for this course include the following. After completing this course, you'll be able to list at least three things that help create great patient provider relationships. You'll be able to discuss at least three effective ways to educate patients on the impact of hearing loss, and you'll be able to describe at least two tools for identifying the unique listening needs and goals of patients.

Once again, thank you for joining me today. It can take a bit of skill and expertise to motivate patients, to empower them to take action to treat their hearing loss to pursue amplification, and while there is so much to gain from acting sooner rather than later, many patients wait several years to address their hearing loss. This presentation will provide you with some helpful information and ideas for encouraging patients to prioritize hearing health and begin the journey to better hearing. I'm gonna begin with some data around hearing loss and the use of amplification, and then I'll dive into the

first three areas that are crucial for empowering patients, the patient provider relationship, patient education, and identifying unique listening needs and goals.

Before we jump into the first segment of this talk on the importance of the patient provider relationship and ways for enhancing it, I wanna just take a moment to look at some data around hearing loss and the use of amplification. Hearing loss is a very prevalent chronic health condition in the world. According to the World Health Organization, 5% of the world's population, including 430 million adults, require rehabilitation to address their disabling hearing loss, and it's estimated that by 2050, over 700 million people, or one in every 10 will have disabling hearing loss that's defined as having hearing loss greater than 35 DB in the better hearing ear. The CDC states that hearing loss is the third most prevalent or common chronic physical condition in the United States, and is twice as prevalent as diabetes or cancer.

And according to the NIDCDD, age remains the strongest predictor of hearing loss among adults. Approximately 2% of adults aged 45 to 54 have disabling hearing loss, and then that rate increases to 8.5% for adults between the ages of 55 and 64. Then nearly 25% of those between the ages of 65 and 74, and 50% of those who are 75 and older have disabling hearing loss. And when it comes to age, the total number of Americans that are over the age of 65 or 65 plus is projected to grow rapidly in the United States over the next 27 years. Not only that, but according to the US Census Bureau, by the year 2030, so that's just seven years away, all baby boomers will be older than age 65, and one in every five residents will be of retirement age.

By 2034, 77 million people in the US will be 65 or older, so the demand for hearing healthcare services is only going to increase over time. So with the amount of disabling hearing loss in the world and the prevalence of hearing loss, why do people wait between four and a half and five years for their first professional hearing evaluation, and then another seven to 10 years before taking action to address their hearing loss?

Why do they wait when research tells us that there are many advantages to using amplification? So here, you see some MarkeTrak data that tells us that hearing aid owners show more signs of living fully compared to non-owners with comparable levels of hearing loss. So here, you can see comparisons of hearing aid owners in blue, with non-owners in gray, who say they regularly exercise, socialize, engage in life, and find they are not getting more forgetful.

Data also tells us that hearing aid use leads to many positive changes for individuals, changes impacting the ability to communicate effective, certainly, but also benefits related to overall quality of life, the ability to participate in group activities, and better relationships at work and at home. Hearing aid use also facilitates a sense of independence, and is linked to improvements in confidence, sense of humor, and improved mental and physical health. Patients who are candidates for amplification have so much to gain from using it, and yet only a third of the people with self-reported hearing loss do something about it. Over the years, we've seen slightly higher rates of hearing aid adoption in Europe, where social benefits in many countries, either partially or fully subsidize hearing aids, but even in those countries, the adoption rate is still less than half.

And then if we look at data from MarkeTrak 2022, we see a slight increase, but not a big one. This suggests that the biggest barrier around hearing aid adoption isn't cost, it's noncompliance. So what's at the heart of this? There are quite a few of objections to hearing aid use. I can hear fine. It's not me, it's you. You speak too softly. What's the problem? I can just turn the TV up. I'm too young for hearing aids. I don't wanna look old. Hearing aids are expensive. I can hear just fine. I don't go out anyway, so why does it matter? Doesn't really matter if I hear perfectly, right? I'm sure everyone logged in today has heard at least one of these, if not all of these excuses from patients.

In part two of this series, we're gonna discuss strategies for overcoming objections like these, but before we do that, there are a few important fundamental or foundational building blocks for empowering patients to pursue hearing health that need to be covered first, and these include a solid patient provider relationship, effective patient education, and the ability to identify unique listening needs and goals. These elements are essential to motivate patients and secure their compliance with treatment recommendations. So let's begin with the provider patient relationship. I really like this quote from the Duke Center for Personalized Healthcare. The provider patient relationship is a foundation of clinical care. It's been shown to positively influence health outcomes by increasing patient satisfaction, leading to greater patient understanding of health problems and treatments available, and contributing to better adherence to treatment plans.

The essential building blocks of a good provider patient relationship includes things like demonstrating integrity, engagement, honesty, and expertise, being genuine, showing sincerity and empathy, and always being respectful. While I imagine there's no surprise with the character traits shown here, what I would propose is that it can be difficult to ensure these attributes are communicated consistently and in every dimension of your practice. With that in mind, I wanna share some information and thoughts that you can use to examine your own work environment. First up is that first impressions matter. Research has shown it can take as little as a 10th of a second up to 30 seconds, as little as 10th of a second, up to 30 seconds to cement a first impression.

That means it's critical to plan for those initial moments and do your best to have a great impact. In fact, the first interaction a customer or patient has with your brand or with your practice is a moment that heavily influences their future actions. It helps inform and determine future actions, whether that happens in your office or on your website. There's a lot written on this topic, and the considerations that I am showing you here come from "How to Win Friends and Influence People" by Dale Carnegie, who

was a very respected expert in salesmanship. Interestingly enough, I found the same or very similar considerations combing over the healthcare literature, be genuinely interested, smile, remember that a person's name is the sweetest and most important sound in any language, so be sure to use it, be a good listener, and encourage others to talk about themselves, talk in terms of the other person's interests, and make others feel important in a sincere manner.

An easy way to evaluate this for your practice is to consider the impact walking in the door has on our primary senses, so for example, what do patients see, hear, smell, and what can they touch? Is the office clean and organized? Is there a warm greeting? Is their music playing or an educational video? And here's a little tip, don't play the news in the waiting room. News can be upsetting and polarizing. Is there a neutral or pleasant scent? Also, another consideration. I have a colleague who swears by the value of offering fresh baked cookies. While that won't be possible for all of us, but we can certainly make sure there are no adverse smells, and really like, consider where and how cleaning supplies are stored, and even where the garbage bins are placed.

Is there educational reading material they can pick up? And here's a hint for a conversation that we'll have during part two of this series. Reading materials should not include hearing aid brochures, and these of course are just a few examples. So here's what you can do. Today or tomorrow, turn your phone camera on and video record your entry into the office and each space that patients visit, then sit down with team members or trusted advisors to identify tweaks that may be beneficial. People tend to make generalizations based on their first impression, so a positive first impression is a fundamental step in making the halo effect work in your favor. The halo effect is a cognitive bias in which people see one good trait in another person, and then make additional positive judgements about the person as a result.

A good first impression can help you build a good relationship. A bad first impression can work against you. The negative companion to the halo effect is a cognitive bias known as the fundamental attribution error. This is centered around a tendency for people to attribute intent to the actions of another, and use that to generalize about the other person's character or personality. And the example that I have for you here, a new patient is waiting a long time to be seen, and while the professional they are seeing is absolutely dedicated, caring, and wonderful, the patient may assume they're not a priority, and end up extending negative thoughts to either the professional or the entire practice when they shouldn't.

In this situation, the reason for the delay is because the patient being seen just prior had some dexterity challenges and ended up needing more support than anticipated, which caused the clinician to run a little late. These errors occur when a person fails to consider situational factors that can affect day-to-day flow or experiences. So what can you do? Prepare and distribute meaningful messages, and I would recommend in the form of a script for everyone to learn them, that touch on possible pain points for patients like when the wait on the phone or in the office has been longer than normal, and I wanna share with you my personal story from a couple of weeks ago.

I had a doctor's appointment, and waited almost 15 minutes to be called up to the checkout window when I was the very next person in line to be leaving the office, and I will admit that I was a little frustrated because I had to get back to work. When I finally got to the window, here's what I heard. I heard, "I'm so very sorry you were waiting so long. You are important to us, and I apologize that it took a little bit of time before I could call you over. The patient I was helping just before you needed some clarification on a few things, and I was helping to make sure she fully understood her next steps.

Thank you for understanding." Well, my frustration melted away. She was sorry, I was important, and I was given an explanation that resonated with the way I would wanna

be treated if I needed some additional clarification. And I'll be honest and tell you that I am a self-proclaimed customer service fanatic, and I wasn't resentful at all when I left, and even made a point to talk with the patient care coordinator or facilitator at the office that greets everyone when they are coming into the building to tell her what a wonderful experience I'd had. And so also keep in mind another important consideration is that this can actually work both ways. We as professionals can also attribute patients' actions to their character or personality.

Think about the patient who is always late to their appointments. You know, we have to be careful not to assume that they're disorganized or lazy, when in reality, they're often late because they ride the bus to their appointments, and are dependent on the driver and road conditions. Or maybe perhaps because they babysit grandchildren who play with the car keys, right? And they get misplaced. So just the point is, you know, or the point is that all parties need to be fair about correlating actions with character to help support great patient provider relationships. When it comes to gaining trust and confidence, consumers tend to treat businesses the way they treat other people, holding them to certain standards and building relationships with the ones they have faith in.

People want to engage with companies they can relate to and have confidence in, so what you wanna ask yourself is, how can I demonstrate that my business is one of the good ones? How can I prove to prospective patients that I have their best interests in mind? A few ways to do that include ensuring that you are providing the best possible customer service. Share positive reviews and testimonials. Be honest and transparent. Data indicate that consumers appreciate excellence and authenticity. You wanna ask for and act on feedback. Your practice has to evolve to remain competitive, and you need to be reachable. I'd like to expand for just a moment on testimonials. Testimonials that paint your practice and the technology you fit in a positive light are valuable, but the most effective ones do that while being framed around how a life has been

changed as a result of working with you and wearing hearing aids, essentially before and after stories that mirror the common objections to pursuing amplification.

These types of testimonials can help compel perspective patients. So if we just, you know, consider taking the common objections that I shared just a moment ago, and you know, and some of those of course we're gonna talk about in more detail in part two of the series, but the idea would be to find real life patients who can provide testimonials that address those common objections with a positive outcome. Others in the waiting room or looking at your website are thinking and feeling similar things. So let other patients validate what others are thinking and encourage them with good outcomes. So here you can see some example questions to really arrive at an epic testimonial. You know, what was your main concern about getting a hearing aid, and how was it overcome?

What were you feeling at that time, and how do you feel now? What was life like before you started wearing a hearing aid, and what's it like now? What made you choose our practice? If you were to recommend your hearing aid or our practice to a friend, what would you tell them? And then I love also, what surprised you about hearing better? So consider strategically placing some around your office, places where patients will see them. There are certainly many ways to share testimonials. Some practices have testimonial walls or testimonial whiteboards that get updated weekly. There are many creative ideas out there, but definitely consider the questions you're asking in those testimonials. Trust and credibility, so to wrap up this segment on the patient provider relationship, know that positive attributes like the ones shown here, that help build trust and credibility, need to be evident in every aspect of your practice, with the staff, in your physical office, your digital office, or your website, on your social media platforms, right?

And in all of your marketing efforts as well. The look and feel of your practice communicates a lot about you and what patients can expect. All right, so the second step in empowering patients to pursue hearing health is patient education, and this should extend beyond the hearing test results. We need to ensure that patients understand the consequences of untreated hearing loss, because these can be powerful motivators for acting sooner rather than later. While most patients and their family members experience the impact of hearing loss on communication, things like impaired memory, fatigue, depression, reduced alertness, and even mood changes are also undesirable effects of untreated hearing loss. Hearing loss, of course, is also correlated with a number of chronic health conditions.

Individuals with mild hearing loss are three times more likely to fall than those with normal hearing. People with heart disease have a 54% increased risk of hearing loss. Hearing loss is two times as common in people with diabetes. 74% of people with heart failure have hearing loss, and mild hearing loss increases the risk of cognitive impairment by two times, and that's gonna jump to five times with a severe degree of hearing loss. So this type of information can be eye-opening for prospective hearing aid users. The literature also tells us that older adults with hearing loss experience a 30 to 40% faster decline in cognitive abilities. Seniors with hearing loss are significantly more likely to develop dementia, and untreated hearing loss can contribute to, among other things, cognitive decline.

The Lancet Commission on Dementia published a report in 2020 that laid out recommendations for addressing dementia at a global population health level. The collection of research that contributed to that report showed that 40% of dementia is potentially modifiable, and that in midlife, hearing loss is the largest modifiable risk factor. This is evidence that hearing loss should be addressed as soon as possible, and not towards the end of life. Information like this may also help motivate patients to treat their hearing loss. And then in fact, by way of another data point, in 2021, there was a

survey by the Transamerica Center for Retirement Studies, and they surveyed 10,000 American workers, including baby boomers, and that study revealed that roughly one third, or I think it was on the order of 32%, one third of all workers said they worry they'll face a decline in their cognitive abilities, whether that's from Alzheimer's disease or some other form of dementia.

So my point in sharing that is just that patients will care about this information. A little more interesting data, a large study done at the University of Oxford showed that people with a moderate degree of speech and noise impairment had a 61% increase in the risk of developing dementia, and those with a severe degree had an 80% chance. And although it's too early to talk about causation instead of correlation, this appears to be a silent risk of hearing loss. Speech and noise testing is a valuable part of an assessment protocol, and we're gonna talk more about that a little bit later. And then finally, here's some research that compared the performance of non-hearing aid users and hearing aid users on a memory deficit task.

Hearing aid users did better than those with untreated hearing loss with both mild and moderate to severe degrees of hearing loss. So educating patients on the consequences of untreated loss, the relationships between hearing loss and other health conditions, and the benefits of amplification really plays an important role in motivating them to begin their hearing health journey. And so here's a question for everyone. Do you administer formal cognitive screenings as part of your assessment protocol? I ask this question kind of to conclude this section on patient education because many professionals, both inside and outside of hearing healthcare, believe that screening and awareness of cognitive decline should be part of treatment decisions. We also know that cognition can impact patient education.

So for anyone who isn't doing this yet, and interested in adding it into their assessment protocol, I found this study from 2020 which indicates that among audiologists, the

most commonly used screeners were the Mini-Mental State Exam and the Montreal Cognitive Assessment. And they're not time consuming, on the order of five to 10 minutes to administer. There definitely are other options that are not listed here, so I just wanna invite everyone certainly to do your own research on this topic, just keeping in mind of course, right? That cognition is gonna play an important role in our efforts to educate patients about hearing loss and the benefits of amplification, and then of course, can impact all aspects of our interaction with patients as well.

Another important consideration when counseling and educating patients is their primary learning style. There are five primary styles, visual-spatial, auditory, physical-kinesthetic, verbal-linguistic, and logical-mathematical, and there are two secondary styles, social-interpersonal and solitary-intrapersonal. Let's take a closer look at these. So ideally, we would assess learning style prior to our interactions with patients, and there are several tools available to do just that. Diving into them today is beyond the scope of this course, but I wanted to give you a few ideas for how to meet the needs of each type of learner, because this can make counseling and encouragement much more impactful. And when in doubt, use a combination of strategies from each modality.

So here, we've got the visual learners. These individuals understand best by seeing information presented in a visual rather than written format. So I've got a few examples here of educational materials that come in, say, a handout or poster style application. We know that also auditory learners, these individuals process new information by hearing and repeating back the explanation for validation, and I think we all meet this learning style on a regular basis, right? As we're counseling patients, but this definitely is a good reminder to have patients repeat back key information and ideas to ensure that they understand everything that's been said. Kinesthetic learners absorb information by touching and by active participation through demonstration. Definitely want to have items in your office for patients to touch, feel, and experience.

Listening demonstrations are gonna be essential for these individuals. Verbal/linguistic learners or reading/writing learners understand information best by writing it down as words and text, so an idea here is to consider offering patients a pen and pad of paper during counseling sessions. And then logical/mathematical learners, these individuals succeed by using order, steps, and logic. They prefer cutting to the chase and focusing on facts, so you'll want to provide these learners with a structure for their experience with you. You know, we're gonna do a hearing test which will tell us X, we're gonna follow that with a hearing aid consultation to recommend the best technology. From there, the next step would be a hearing aid fitting, et cetera, so just kind of mapping out the experience and what they can expect working with you.

These learners also sometimes struggle with ambiguity, and may need help seeing the big picture. They do the best with visual materials, so provide visuals, maybe direct them to websites to support their understanding, and helping them wrap their minds around the big picture as well. So we've got those five primary learning styles, and then there are two secondary learning styles. Social-interpersonal learners like to talk it out. These are the patients who will wanna discuss and debate with you, so what can you do to support them? Schedule a follow-up phone call or an additional appointment to talk through things. Solitary-intrapersonal learners, on the other hand, prefer learning on their own, so for these individuals, you'll wanna use videos, websites, and even articles.

These are the people who usually thrive with a journal or diary after being fit with their hearing aids as well, so keep that in mind. And so in just kind of concluding this topic, while you may not know specifically which style suits each patient, the idea is to incorporate a multimodality approach to your counseling, so examine the process you use now, and add in some additional elements. A strong support system has many positive benefits. Research shows that having an active social support network can

contribute to positive emotional and physical health, and help an individual deal with stress. Hearing loss can be stressful, and adapting to hearing aids, although ultimately positive, can also be stressful, so to this, I say involve the family, or loved ones, friends, neighbors, anyone who is close with the patient and can come alongside and support them.

So you're gonna wanna educate them as well on the impact of hearing loss, the benefits of amplification, and the overall journey to better hearing, and here's a tip that's easy to implement. When scheduling patient appointments, steer that appointment to a day and time that will easily include family members, for example. So perhaps you say something along the lines of, "Mrs. Jones, we have an opening on Wednesday, July 28th at 2:00. Can both you and your husband, or daughter or son, as the case may be, come at that time?" If not, then find a day and time that will work for both of them. So the response then perhaps is, "Well, let's find a day and time that will work well for both of you."

And then you'll see in part two of this series how important it is to have that loved one or trusted advisor involved from the very beginning. The third step in empowering patients is to identify their unique listening needs and goals. Our ability to truly solve patients' problems with amplification is dependent upon our ability to acquire information that is specific to each individual. No two patients are the same, and our ability to provide the best technology solution will be derived by considering the things listed here. So we wanna consider the patient specific communication challenges, their unique listening needs and goals, lifestyle, expectations, preferences, previous experiences with amplification, cognition and memory, and even physical dexterity. We obtain all of this information by asking, listening, and observing.

A successful discovery process is one that empowers the patient to understand the impact of their hearing loss and be able to identify their personal goals and priorities so

that you can provide a personal recommendation. This process is also sometimes referred to as the patient intake or case history. You begin by being present by providing your full attention, staying focused, and actively listening, and by clarifying what's been said when necessary. For the most effective discovery process, use motivational interviewing techniques. It is well known within healthcare that it's important for patients to be active participants in their wellness journey, because they are the sole drivers of change. According to the American Academy of Family Physicians, motivational interviewing is a method for changing the direction of a conversation in order to stimulate the patient's desire to change, and give them the confidence to do so.

So we wanna use techniques that include open-ended questions, not just yes or no questions. We wanna offer affirmations and express sympathy or empathy during difficult moments of a conversation. We wanna practice reflective listening, which allows patients to express their thoughts versus us just telling them what to do, and of course, summarizing the information that's been shared and providing an opportunity for them to correct any misunderstandings. It's not difficult to incorporate motivational interviewing into your discovery process. It's important to understand that language matters in every aspect, right? When we're probing those communication challenges, identifying specific goals and priorities, when we're trying to understand expectations the patient may have, and even when identifying the patient's requirements for action, hearing loss is a team sport, so we also wanna consider the opinions of a loved one or valued third party, and that may be the spouse or the child of the patient, for example.

So it all begins by asking the right questions in the right way. Too often, professionals use the case history process to obtain just enough information to pitch a solution, versus getting information that's gonna help them win the patient's business. So you wanna a mix of closed and open-ended questions along with processes that will allow you to acquire all that's needed in order to make an expert recommendation.

Personalize how you, your practice, and the technology are unique and will bring value to the patient, and identify ways you can not only meet, but exceed expectations. And of course, you always want to include a valuable third party as well. So language matters. Words can reflect values, beliefs, and influence people.

Choosing the right ones will make or break the discovery process that's designed to help both you and the patient understand the full impact of hearing loss. Have the patient, for example, verbalize motivation, the impact of hearing loss, their feelings, and others' reactions to the hearing loss, because by doing so, it really brings the challenges and issues they face to life. Verbalizing these things lifts them off of the written intake or case history form, and you wanna use language in your questions that will prompt them to paint the picture of their hearing loss and challenges, and you can see a few examples here on this slide. Now, how long have you been struggling? What impact does hearing loss have?

Are there any specific incidents that come to mind? How did you feel, how did others react? And here are a few ways for probing communication challenges. Be sure to probe who, where, and when when you're asking about hearing difficulties. You can apply what you learn about specific challenges when you are verifying and validating the benefit of amplification later on. Have other people expressed concern? Do you avoid certain activities or situations? Do you find yourself relying on someone else? So few examples here. When it comes to goals and priorities, in what situations would you like to communicate better? Are there certain people you want to hear better? What would family and friends list as priorities? What are your healthy living and lifestyle goals, right?

Expectations, understanding the patient's expectations for amplification is a very important part of the discovery process for a variety of reasons. You need to know what information or mindset they're walking in the door with to help facilitate realistic

expectations, right? Their sister-in-law's experience with hearing aids may not be their own, so ask questions like, how much benefit do you think hearing aids can provide? Have you read about or researched hearing aid technology? Sometimes we need to address unrealistic expectations, but the conversation can lead to opportunities to help them become enthusiastic about what hearing aids can offer. How technology can be personalized to meet their needs and goals, you know, what would it mean to you to be able to hear your grandchildren better, for example?

Patient expectations also are absolutely influenced by information that is found online, so I wanted to be sure to address this as well. Google partnered with a market research firm in 2020 to understand the digital habits of baby boomers and seniors, particularly as they related to health and wellness. They identified a group of 4,400 digital seniors. These were people who are age 55 and older who spend time online each day, and they found that they go online for a variety of reasons, so we've got staying in touch with family and friends, to organize finances, and on the right hand side there, you can see to look into improving their health and wellness. And if prospective hearing aid users are not online themselves, they have family members or friends who are.

Most seniors will have people in their lives who they're considered to be trusted advisors. Those are the people that they run decisions by, especially as it pertains to healthcare and purchases. Another valuable aspect of the discovery process involves the use of formal communication needs assessment tools that can be used to help identify personal hearing priorities and measure the benefit of hearing aid use after the fitting, and I've got a few examples for you here. The Abbreviated Profile of Hearing Aid Benefit, this tool shown on the far left hand side, this one measures communication ability in common situations with subscales that address ease of communication, reverberation, background noise, and negative reactions to environmental sounds, and it's administered pre and post fitting, and the results help measure the patient's

perceived benefit with hearing aids, and can identify challenges that warrant additional conversation or support.

The COSI there in the middle, this was developed by the NAL, and it has patients identify up to five specific situations they would like to have improved by wearing amplification. They can be listening situations, or they can be emotional or social in nature. It's also administered pre and post fitting to identify changes with amplification. And the last one I have highlighted here, the HHIA, this is a modification of the Hearing Handicap Inventory for the Elderly. It's comprised of two subscales, emotional and then social/situational, with added consideration for the occupational effects of hearing loss. So we know that research shows that pure tone hearing sensitivity and super threshold word recognition ability are not adequate for understanding a patient's reaction to their hearing loss.

Self-reported hearing handicap measures are an important tool for us to use. And just for reference, I found a downloadable copy of the HHIA just by searching online, and then also know that these are just a few of the options available. There are others you can definitely look into as well. I just wanted to touch on a couple of them or a few of them. And here's a good to know, for those of you using the NOAH patient database, you can access the COSI, APHAB, and the International Outcome Inventory for Hearing Aids under the questionnaires module, so a nice convenient access point there for some of the tools that are available. In addition to subjective measures, objective needs assessments, you know, those types of measures are also important, including speech and noise testing.

It's very important for us to measure the most common complaint of patients with hearing loss, because hearing a noise can't be predicted by the audiogram, and as I mentioned, right? Even the super threshold word recognition testing, so speech and noise testing is easy to administer and reliable. It can be used to predict hearing aid

use, can help you make technology and feature choices, can be used to assess hearing aid benefits, and allows you to be compliant with best practice guidelines as well. So how long do you think it takes to do speech and noise testing, five to 10 minutes, 10 to 15 minutes, 15 to 20 minutes, or 30 or more minutes? So if you chose answer A, five to 10 minutes, you would be correct, it is fast.

I wanna share with you a couple of tests that are easy to integrate clinically, and really give us a lot of information, and are very efficient and fast to administer. The first is the Acceptable Noise Level Test by Anna Nabelek. It's an audiometric test that's designed to measure how well a patient can tolerate noise with speech. Willingness to tolerate background noise is related to hearing aid use. The ANL, therefore, can help predict if patients will wear their hearing aids, and can validate the need for noise reduction technology, directional microphones, remote mics, and for additional counseling as well, and the ANL can be completed in as little as three minutes, so very fast. The patient who has a low ANL score, so two outcomes here I'm gonna touch on with the ANL, the low ANL score, these individuals have a high tolerance for background noise.

They're gonna be willing to listen at poor signal to noise ratios. They're likely to be successful hearing aid wearers. They do tend to focus on the intelligibility of speech, so we do wanna keep directional and remote microphones in mind for individuals with a low ANL score. Patients who have a high ANL score, these individuals have a low tolerance for background noise. They're only gonna be willing to listen at high signal to noise ratios. They are likely to be unsuccessful hearing aid wearers, and they tend to focus on listening effort or loudness, so directional and remote microphones need to be considered for these individuals. Noise reduction technology will be important, and usually additional counseling and support will be needed as well.

Realistic expectations will be an important conversation with a noise intolerant patient, and you'll wanna bring them back and follow up with them sooner or more often than

you may normally follow up. So a couple of clinical considerations for those noise intolerant patients, the ones with a high ANL score, I mentioned directional microphones, noise reduction technology, auditory training, oral rehabilitation, structured adjustment process to amplification, so kind of gradually increasing the wear time and situations in which they're wearing their hearing aids. Keep in mind aural experience manager as a great tool, that aural acclimatization tool. Also keep in mind counseling on the impact of noise and realistic expectations. Definitely involve the family, and these, again, individuals are likely gonna need more counseling and encouragement, so bring them back sooner and more often, so a couple of thoughts for you there as well.

Another really helpful tool that is offered by Starkey is the Hear Share app, and this allows hearing aid users to invite loved ones to view things like hearing aid use, the amount of physical activity, and degrees of social engagement based on the type of sound classification occurring in the hearing aids. So the idea is that loved ones can open the app to check in on the hearing aid user or elect to receive notifications of met or missed goals, which then allows them to reach out and provide support. Another potential application for Hear Share that I've been talking a bit about is for professionals to use this during the trial period. So if I fit Mr. Smith on Monday, and my typical process has me bringing him back for his first follow up appointment in two weeks, if I am using Hear Share, and I either receive notifications of met or missed goals, or if I go in and check in on Mr.

Smith at any point in time, and you know, maybe it's four days in, right? Maybe it's Thursday, maybe it's Friday, and I open up the app and I see that, gosh, there's just no hearing aid use or very little hearing aid use, well, now I have an opportunity to bring him back sooner rather than wait the two weeks, right? So to come alongside the patient and provide more help as needed or if needed, if you will, and then after the trial period, the professional drops out of the mix, so nice way to help support individuals

as they get used to their hearing aids. Another important speech and noise test is the QuickSIN. There are a variety of applications for this test.

You can use it to measure unaided performance and noise. You can use it to, again, unaided performance, help you determine technology needs. You can compare the patient's performance in the unaided versus aided condition. You can compare how they do with their old hearing aids in relation to their new hearing aids. You can also use it to quantify performance with omnidirectional or directional microphones, or even remote microphones. It can help you prioritize the listening demonstrations that you may wanna do, and it can help justify the expense of amplification as well. So I'm not gonna go through how to administer the QuickSIN today, but the end result of the QuickSIN is that you achieve or obtain a signal to noise ratio loss for the patient.

The score of zero to three means that the patient may hear as well as someone with normal hearing, and may do just fine only using omni microphones. A score of three to seven means the patient may hear almost as well as someone with normal hearing, but that directional microphones may prove valuable. Signal to noise ratio loss of seven to 15, patient's gonna need additional support with directional mics and noise reduction. And then above 15 DB, the patient will need a significant amount of support, so we wanna be thinking, you know, about directional mics, noise reduction, remote mics, or maybe even an FM system. So I mean, just imagine knowing if patients will be more or less inclined to wear their hearing aids, and what technology is going to serve them best right out of the gate, right?

That's just huge. Think of the time, effort, and energy that's saved in formulating your expert recommendation for an individual and your plan for counseling them effectively, and there's a lot to be gained from needs assessment tools, both subjective and objective. And one of the best things about speech and noise testing is that people don't argue with their own data. If hearing aids provide a quantifiable advantage, it's

difficult for them to dismiss them as not necessary or worth the cost. So if you're interested in learning more about the two tests that I shared, the ANL can be obtained from Frye Electronics, so you'll wanna reach out to Frye, and the QuickSIN can be obtained from Etymotic Research.

So in summary today, keep in mind that patient empowerment is a process that involves knowledge, confidence, and self-determination to decide whether to accept treatment recommendations. The patient provider relationship, effective patient education, and identifying unique listening needs and goals are all important building blocks to providing a personalized approach to care and empowering the patient to act sooner rather than later for all of the important reasons we discussed today, and professionals play a very key role in this. By educating, we provide knowledge that brings confidence. Confidence facilitates motivation and the patient's ability to truly share concerns and preferences that are important for self-determination, and as a result, patients may take more responsibility for their health and be more involved in treatment.

Researchers have found through many studies that when people are more motivated, they are more likely to achieve their health goals over time. So with that, I want to invite everyone to apply what you've learned today, evaluate all aspects of your practice to see how you might enhance patient provider relationships, provide effective education, and identify the unique needs of each patient. Please also join me for part two of this series through AO, where we'll continue the conversation by talking about the value and importance of making an expert recommendation. We'll talk about factors that influence technology adoption, because being aware of those can help you as you are communicating and counseling on the technology. We will also address a variety of objections to hearing aid use and strategies for overcoming them.

So we'll walk through some of those common objections that I shared earlier in this talk, and I'll give you specific ideas and strategies, tools, ideas for how to overcome those specific difficulties. And then we'll look at a variety of professional tips as well, so kind of pulling all of this together, both parts one and part two of Empowering Patients to Pursue Hearing Health, and give you a variety of easy things to implement to ensure that you are supporting and encouraging patients to the best of your ability. So with that, I want to thank everyone for joining me today. I appreciate you, and I hope you have a great rest of the day. Thank you so much.