Collaborating with Pharmacists on OTC Hearing Aids, presented in partnership with the University of Pittsburgh

Presenter: Elaine Mormer, PhD; Lucas A. Berenbrok, PharmD

- [Announcer] It is my great pleasure to welcome our two presenters today, Dr. Lucas Berenbrok, and also Dr. Elaine Mormer. They're presenting this course in partnership with the University of Pittsburgh, a ongoing partnership that we have with AudiologyOnline. Today, they'll be discussing collaborating with pharmacists on OTC hearing aids. A really hot topic. Over to you, Dr. Mormer.

- Okay, thank you. These are our disclosures. Dr. Berenbrok and I are the co-developers of a continuing education course for pharmacists and pharmacy students that is currently owned by the University of Pittsburgh. Here are the learning outcomes, and we'll be focusing on each of them individually as we move through the program, but we're gonna start with a little bit of background. So we'll start with kind of a brief history of OTC hearing aids, and probably many of you know that we've been talking about OTC hearing aids for a long time. This topic really came into the public eye during the Obama administration, and at that time, President Obama formed the President's Council of Advisors on Science and Technology, or charged that group to investigate what was happening with hearing aids and hearing loss, and particularly in older adults, this was really part of the goal to make healthcare more affordable and more accessible.

And that council, which is known as PCAST, determined something that we all know, which is that untreated hearing loss is an issue of national concern. And what was exciting was that they really drove efforts to actually find out more about it and take some action to make hearing care more of an issue and more accessible to people. So this led to the legislation to create this new regulatory category of hearing aids that became known as over-the-counter hearing aids, and that was back in 2017. When we have legislation like that that happens, it's then handed off to the FDA and the FDA creates the regulations that will be used to put the law into place. So those proposed regulations were released in 2021.

We were all given a period of time to respond and make comments. And then the final regulations were released in August of 2022. And the implementation date was on October 17th of 2022. And that was the day when these hearing aids became available in retail settings, anywhere from Best Buy to Walmart and in our local and chain pharmacies. So that's where we are now. We're not that far out, only about six months. And what we've seen kind of more than anything, is a lot of confusion in the marketplace. So one thing that I think it's worthwhile to do is to take a minute and kind of talk about these products, how we can differentiate them and understand that they pretty much all look the same.

You can't look at a product and know if it's an OTC hearing aid or to know what it is. So I like to use this little table to help us kind of walk through what are some of the differences between these devices and what are they really meant to be used for. So we all know that what we now call prescription hearing aids, which came out of this legislation, that prescription hearing aids are the hearing aids that many of us spend our time learning about and training on and fitting people with. And they are intended for addressing hearing loss. They are of course available for both adults and children. And the purpose of those hearing aids is for a patient to receive professional level treatment.

And these devices, as we all know, require a licensed professional like many of us, to do the fitting. And of course, the degree of hearing loss that we can address is from mild to profound. So we can contrast that with these OTC hearing aids, which again, are certainly intended for addressing hearing loss. And they are intended for use with adults 18 and over, but absolutely not for children, they are not, as part of the regulations, they are not regulated for children under age 18. Their purpose is to provide self-care or self-treatment for hearing loss so that licensed professionals are not required in order for them to be used. And they're intended for people who have perceived mild to moderate hearing loss.

Yes, perceived mild to moderate hearing loss. And that's a concept that's really difficult for many of us as audiologists to wrap our heads around. Then we have this other group of products called personal sound amplification products or PSAPs that are actually not designed to treat hearing loss, though they may, some people may try to use them that way. They are products that are considered consumer products that have very specific targets for things that people wanna listen to. So the classic example is for bird watchers to be able to hear the bird song more easily when they're out listening, or for hunters to hear things in the woods that they wouldn't hear otherwise, assuming that they have normal hearing.

They can be used by adults, they can be used by children. Therefore, that, again, very situational listening. And again, not intended for any specific degree of hearing loss, although many of you, like we do at our medical center here, might use these for patients who are in the hospital or even seeing, having outpatient visits. And we wanna make sure that they can hear the important health conversations that they're having with their care providers. So those are actually being used off-label for those products. And then we have this other group, sometimes they're called hearables, sometimes they're called wearables. It's a little bit hard to differentiate them from PSAPs for the purposes of this presentation, I kind of pulled them out because again, they're not for hearing loss.

They can be used by adults or children, but those are those products that are really more for entertainment and now can also be used for amplification. So those could be things like earbuds, Bluetooth earbuds that you buy or AirPods that you use with your iPhone that can be used if you do have hearing loss now, you might be able to adjust it for that. So, and again, I really always like to stress. You can't tell, you can't tell what these are just by looking at them because even now, some of the OTC hearing aids end

up looking more like hearables and it's getting harder and harder to differentiate. So then we get to the question of pharmacists and why are we talking about pharmacists?

And I've had several people ask, well, why do pharmacists even care about this? They're busy. They don't have enough. They already have too many other things to do. And so I wanna make the point that pharmacists are actually very interested in learning about OTC hearing aids. And my colleague, Luke Berenbrok, is gonna explain to you how they are used to providing help for self-care products. Just to give you an example of how very interested they are, I made this table that shows you all the different publications. This is all within the last year. These are publications specifically for pharmacists and the headlines or the articles that were in there. So in "Pharmacy Today", which is the journal or a more like a magazine from the American Pharmacist Association.

And you can see that the headline was OTC hearing aids may soon be available. "Elements" magazine, which is another pharmacy focused magazine, talked about everything you need, everything that pharmacies need to know. And then drug topics which provides continuing education. Talked about preparing to counsel patients on OTC hearing aids, and you're gonna learn in the next hour how what that means to a pharmacist to provide counseling is very different than what we mean when we talk about counseling patients. There have been two articles, two peer reviewed articles in the Journal of the American Pharmacist Association, and then Advanced CE, another continuing ed source in print for pharmacists has had OTC hearing aid offerings. And then "America's Pharmacist" had a feature on the cover of OTC hearing aids could bring hassle-free relief to patients with hearing loss.

So yes, pharmacists are definitely interested. Of note, this article came out in JAMA, this article by Sumit Dhar, and they did a survey of over a thousand consumers on their attitudes about having hearing healthcare delivered either direct to consumer, either by

mail or in person. And really the main takeaway from this is that, and it's in red at the bottom, is that we really need a lot of focused consumer education and that people want to get information and a large amount of the respondents said that they would rather get help in person from someone than to order something online. So if we think about who should have this information, again, you're gonna hear about pharmacists providing front just in the trenches care to people, especially in our rural locations where audiologists are not available.

It makes sense for us to get this information to pharmacists and to work with pharmacists. So we'll go right to with that background, right to our first learning outcome, which is that we want you after this session to be able to explain the required education training and scope of practice of pharmacists. And that will put you in a great position to work directly with them knowing what background they've had. I'm gonna hand it over to Dr. Berenbrok.

- Thanks, Elaine. It's great to see everybody today. Again, my name is Luke Berenbrok. I'm a pharmacist and I'm the faculty at the University of Pittsburgh School of Pharmacy. Elaine and I met a few years ago when we wanted to bring our students together in our experiential learning programs so that pharmacists can learn a little bit more about hearing loss and audiology students can learn a little bit more about medications. And when we first started collaborating, we had not intended to collaborate on OTC hearing aids, but the timing was right and we really set our sights on educating pharmacists about all the great things that audiologists do and vice versa. So thanks for having me here today with you.

So one of the things we decided that would be really great to start doing is to talk to each other about ways in which our professions could collaborate and how we could work together. And we really went back to the basics and said, well, you probably should know a little bit more about each other's education, training, scope of practice

to best understand how we can come together for OTC hearing aids. So when you look at a pharmacist and how they're educated, not unlike the AUD degree, pharmacists are granted a doctor of pharmacy degree after completing our education, which is anywhere between six and eight years. The doctor of pharmacy degree or the PharmD is a sole entry level degree, which means everyone who graduated from pharmacy after 2000 are awarded the PharmD.

And then 1999 and before pharmacists were awarded a bachelor's degree in pharmacy, which took about five years to complete. Across the nation, there's 141 accredited schools and colleges of pharmacy, and we graduate about 14,000 pharmacists every year. So I'd like to highlight that number because I think that's close to the total number of audiologists in America. So you can tell that our profession is rather large. I think we're the third largest healthcare profession behind physicians and nurses. When you look more specifically at the training that pharmacists do to be able to practice, it's two to four years of undergraduate coursework. Some PharmD programs can get you through in as little as three years after that undergraduate coursework is completed.

Here at the University of Pittsburgh, we're a 2-4 program. So students come to us after completing sophomore year of OCAM, and then they have another four years before they get their doctor of pharmacy degree. And then unlike medical training, we do have residency training, but it's optional. So pharmacists can graduate, get licensed, start practicing, but then elect to do one or two additional years of a training program that allows them to specialize in cardiology or infectious disease or oncology. When you look at the curriculum that occurs in that four years of pharmacy school, you can see that it is largely didactic in nature. That's within the P1, P2, P3 year, but there are some experiential learning that's peppered throughout.

In the first year, our students do service learning. So they're volunteering at cancer centers, they're tutoring young children, they're working in the community. P2 year, they're working at community pharmacies, P3 year they're working in hospitals. And then in their last year of pharmacy school, P4 year, it's about 40 weeks of experiential learning rotation. You would probably call those clinical experiences. In that first year, in that didactic portion, pharmacists get a lot of the foundational sciences. And so they're learning A and P in the context of drugs, biochemistry, they're learning about community health, public health, how to develop themselves into a professional. And they're learning skills like how to give a vaccine, how to take a blood pressure.

In the second year, our students learn more about the therapeutics. So that's cardiology, infectious disease. They learn how the drugs are metabolized by the body, that's pharmacokinetics. And then that last didactic year before they move on to their experiential learning, they get immunology, oncology, pharmacy, law, population health, and a little bit more skills. In their last year when they do experiential learning, that's 36 weeks in total. They do rotations in acute care. So they're rounding with physicians and nurses in the inpatient setting. They're helping take care of patients chronic disease states and ambulatory care or outpatient settings. They're dispensing medications in community pharmacies. They're learning more about how hospital pharmacies work, and then they can take electives in industry and research.

That leads us to what we really train pharmacists to do when they graduate with the PharmD. And it all boils down into one very specific statement in which we are training pharmacists to be able to look at a medication's appropriateness, a medication's effectiveness, a medication safety, and the way that people can conveniently use their medications. And we also do these things for OTC products. So these are the things that we really hang our hats on as pharmacists in that everything that we do is as a medication expert and as a self-care expert. Patients come to us with medication

questions. They come to pharmacists to obtain a medication, but they also come to community pharmacies for some self-care.

That's treatment without a prescription. And that also includes medical devices like over-the-counter hearing aids, maybe blood pressure machines, and then some accessibility walkers, crutches, canes, things like that. All right, so when we look more about the self-care and non-prescriptions, you could probably guess what's in this category. If you go to any corner community pharmacy, whether that's a chain or independently owned, you'll see these things out on the front end where patients can grab and go, but they can also request to talk with the pharmacist behind the counter about any questions that they would have before they purchase the product. So these things would be OTC medications, maybe like ibuprofen or acetaminophen, dietary and herbal supplements like vitamins and minerals, other things that have not been approved by the FDA, but you can purchase without a prescription.

CLIA-waived tests for home use, this would be like a at-home COVID test or maybe a pregnancy test. Durable medical equipment, again like the walkers, wheelchairs and canes. And then medical devices like blood pressure meters, glucometers for testing blood sugar, and then of course OTC hearing aids. So you can see that the pharmacist scope really kind of transcends only medications and also includes all of these other things that are sold at a pharmacy and that a pharmacist is expected to be able to help patients safely select and use without a prescription and without supervision once they take that product home. Now that we have that context of everything that's in a pharmacy and the pharmacist scope of practice, Elaine and I really thought critically about where we would think to see OTC hearing aids would be sold if we could guess before October 17th, 2022.

And a lot of people asked us where we thought it would be. We came up with this chart and now you're probably seeing, or you could probably better guess or see exactly

where these products are being sold and where they're being stored at pharmacies, because now that they're available for purchase, but there's four really main places or locations in a community pharmacy where people may seek to buy a product. The first is on the shelf. This would be considered front end, and it's probably things that are unsecured. This could be like the OTC medications where patients can grab and go. They don't have to show an ID, they don't have to talk with anybody before they purchase it, but they could always go up to the counter and talk with the pharmacist if they had questions about a dose, about the right type of dietary supplement or mineral, how often to take the medication or what time of day is best to take it.

The second place is still on the shelf in that front end, but secured, this would be something that's like locked up or behind a glass cabinet to prevent theft and loss and shrink. So these are typically things that are higher priced like men's razor blades or maybe electronic toothbrushes. Again, no IDs required. You don't have to talk to the pharmacist about this, but you do have to talk to some type of non-pharmacy employee to unlock that case and get access to that product. Then we have things that are behind the front register in a pharmacy. If pharmacy's still sell tobacco, you're gonna see cigarettes there, maybe lotto tickets. These are things that require age to be verified by the store clerk.

But again, it's not a conversation with a clinician, it's a conversation with someone who works at a pharmacy. And although the pharmacy is a place for destination, or is a destination for health and wellness, the pharmacy is selling other things that are not health related, kind of like lotto tickets and things like that. And then lastly, when we're talking about things that are not prescription, we have a very unique category of medications called behind the counter. This is Pseudoephedrine or Sudafed, maybe a few of you are familiar with this medication since we're kind of in that allergy season now, this is a medication that's some quantity limits. You have to show some type of ID to purchase it, and it requires you to talk to someone at the pharmacy, which means

that there's this conversation that could happen naturally about why you are using the product and how to best use it.

And it's unlike the on-the-shelf unsecured where you can grab and go, and there's not that forced conversation in which a pharmacy employee or a clinician can talk to you about any questions that you have and to make sure that the medication that you're using is safe and effective and is convenient for you to use. So no matter where these medications, or no matter where OTC hearings would be sold at a community pharmacy, a pharmacist is really gonna think of a patient in the same way each and every time. And this is what we call our pharmacist patient care process, again, as medication experts and as pharmacists who are being trained in that very specific scope of practice, which is looking at medications and OTC products for their appropriateness, their safety, their effectiveness, and their convenience.

A pharmacist always kind of looks at patients in the same way. And this is a joint process that all of our pharmacy organizations came together and crafted in 2014 to really describe the way that pharmacists take care of patients and the thought process that goes behind to how we can help patients avoid and how we can help solve medication related problems. The very first step in this process is called collect. That's when a pharmacist is gonna ask questions of a patient to learn a little bit more about them and gather information maybe from the electronic health record or from their other healthcare professionals to get a clear comprehensive picture. Then the pharmacist is gonna assess the patient to make sure that a medication is appropriate or that what type of medication may be best to treat certain symptoms.

They're gonna develop that plan in conjunction with other members of the healthcare team. They're gonna implement that plan, and then they're gonna help the follow up, monitor and evaluate for that patient. This is all done with the patient at the center and it's in a collaborative environment that's communicative. And then pharmacist

document how they go through this process. If we look at that very first step, collect, this is where the pharmacist is gonna ask patients in a community pharmacy questions about the symptoms that they're having about their hearing loss if they are questioning or seeking an OTC hearing aid device. And Elaine and I thought it was really important to show audiologists these types of questions that pharmacists are asking so that you can feel more confident in us, or your local or a pharmacist down the street if they choose to sell these devices.

And this is a better way for you to connect with them. So you can learn the language that pharmacists are speaking. In this collect step, pharmacists are gonna ask a patient questions about the symptoms of their hearing loss or for any medical condition really, whenever they're coming and asking the patient about an over-the-counter product, they're gonna ask about the characteristics of the symptoms, the history, when they started to occur, the location, what makes those symptoms worse, and what makes them better. They'll also ask a patient about other medications that the patient takes. Here is a really great way in which a pharmacist might look for drugs that have ototoxic properties. They're gonna ask about medication allergies, other medical conditions that might exclude someone from using an OTC hearing aid, and then social history like using illicit substances or a social support that they have at home.

When we move on to assess, a pharmacist will not be expected to do a hearing screen, nor will they be able to interpret it if they had one in front of them. The assessment piece here is pharmacists making sure that the patient can safely use an OTC hearing aid device. So a green check if they're over 18 and they have perceived mild to modern hearing loss. And then a red flag, which we call contraindications or exclusions to self-care, which are those things that would preclude a patient from using an OTC hearing aid and which would necessitate a referral of that patient from the pharmacist to an audiologist. Those are things like unilateral hearing loss or sudden hearing loss or ear wax in their ear.

That plan is really important. And so the pharmacist is gonna develop a plan. This is where a pharmacist can have a playbook ready to go and use your phone number at the ready. So when they see a patient that needs referral to care, or when a pharmacist is discouraging a patient from purchasing an OTC hearing aid, they know who to call. And hopefully that's gonna be someone that's in the same community like you right down the road so that there can be a warm handoff and that patient can get connected with care really easily and quickly so that they can have their hearing loss and their hearing healthcare needs addressed by an audiologist. So those are some things about how pharmacists are educated, how pharmacists are trained, and what pharmacists do best as the medication experts.

Alan and I also wanted to make sure that we touched upon how audiologists and pharmacists can work collaboratively and work together so that we can help expand hearing healthcare access in local communities. Elaine's gonna help me with this second learning objective. So you'll see us kind of trade off in the middle here. We really wanted to highlight again, the opportunity. You heard me talk about the number of pharmacy graduates every year. It's about 14,000 and how that compares to an estimated number of audiologists nationwide, which is just under that. There's tons of community pharmacies. I'm sure you can imagine that a community pharmacy is on almost every street corner, and that community pharmacies are really accessible and people know where to find them.

You know, if we could take a poll, I would say, how many of you as hearing healthcare professionals know where your closest pharmacy is? How many of you set foot in a pharmacy? How many of you have talked to a pharmacist? And probably the majority of you would say yes. I can tell you all those things. If we pulled a group of pharmacists and we said, do you know where the closest hearing aid dispensary is to you? Have you ever communicated with an audiologist or a hearing aid dispenser? Do you know

someone who has used a hearing aid? The numbers would be much less. So it really is an opportunity for you all to connect with pharmacists and help us understand the uniqueness of your profession and what you do best for patients.

When you look at the sheer numbers, the estimations of how many people have hearing loss, the number is staggering. You've all seen this number, I'm sure, dozens of times before. So we have this opportunity to work together to help get those patients some hearing healthcare needs. Pharmacists are very accessible, and about 90% of Americans live within five miles of a pharmacy. And so we really try to use this stat to help strengthen that case, that together we can help reach those 38 million people in new ways through OTC hearing aids. When we look at collaboration in what pharmacists and audiologists can do, Elaine and I have borrowed a framework of how pharmacists collaborate with physicians, because pharmacists have been doing this type of work for a very long time.

In fact, pharmacists have a very clear picture of a patient's health because we see prescriptions from all of their prescribers, not just their PCP or their specialists. We also are seeing prescriptions from dentists and podiatrists and nurse practitioners and a patient's dog's vet. So we really have this very comprehensive picture, and so we know how to collaborate with other people, and so why not add audiologists to that list? When we look at this framework from 2001, McDonough and Doucet tried to explain the ways in which pharmacists collaborate with other healthcare professionals and how that can be elevated with new ways to explore. And so professional awareness is where we probably sit now, in which we are aware of each other as professions, we're aware of each other in our scope of practice, but it kind of ends with that.

The next stage is where we're trying to go is professional recognition where our professional organizations are recognizing each other for our uniqueness, the utility and the value that we have by working together. And then you can see stage two there is

when people start exploring it and trialing it, that's you calling up a pharmacy and saying, Hey, send me some patients that don't meet the criteria for OTC or non-prescription use, and I'll help them and pharmacists doing the same thing, expanding those relationships and then having something formalized, the commitment to collaborating together. And so this is where Elaine's gonna jump back in and talk about how you can embrace OTC hearing aids and use this framework to really find pharmacists and start this collaboration.

- Yeah, so we've done some thinking about, so, and actually talking with pharmacists and saying, what are the best ways for you to connect with audiologists? What works best? And what can we share with audiologists? And I want all of you to know that I have been out talking to lots of pharmacists, both Luke and I have been invited to the American Pharmacists Association to a number of other pharmacy association Continued events. And we are literally going around the country talking about this is what audiologists do, these are the challenges that you might encounter with patients who come in and are looking for OTC hearing aids. And we're just trying to keep communication open so that it can be beneficial for both the pharmacy, the pharmacist, and for us.

And when I say pharmacists, I wanna say the pharmacist who are interested in doing this, which is not all of them. And I'll get back to that in a little bit about who are more likely. But so practically, here are some things that you can do, and it kind of boils down to being discoverable to them, making information available to them, being informative and being collaborative. And I'm gonna give you some examples of each of those things. So, oops, sorry, I went too far. So the first one, how to be discoverable. So they are looking for you, and as Luke said, it's much easier for for you to find a pharmacist than for a pharmacist to find you.

But are both of our professional organizations, the American Academy of Audiology and the American Speech Language Hearing Association, have listings to find an audiologist. If you click on the these, or if you scan these QR codes with your camera, you'll see those listings and think about whether you are listed there. Again, if you're interested in forming a relationship with a pharmacist, make yourself discoverable by being listed under in the find an audiologist sections for these organizations. And of course, you can be discoverable other ways on the way that you do that. You put place yourself on Google. So whether you're using search engine optimization, but the easier it is for them to find you, the quicker that they will get to you and then start to work with you.

And again, hopefully making referrals back and forth, which we'll also be talking about in a little bit. So be discoverable. The second thing, make resources available. And right now, there are some great resources for over-the-counter hearing aids for both consumers and for pharmacists. And a great way to connect with pharmacists is to share those resources with them. So again, this slide has QR codes that you can scan and get access to. You don't need to create something new. If you wanna give some information to a pharmacist, if you go to the ASHA website, and with this QR code, they have a toolkit for audiologists, specifically for sharing information with pharmacists. It was actually written using language that pharmacists use, and it's been reviewed by a pharmacist who happens to be on this call with us.

But that contains an actual, a really nice letter that you can send to a pharmacist. So if you find some pharmacist in your area that you wanna work with or get to know better, they have a templated letter that you can download and you can edit it or customize it however you want it. They have a patient hearing checklist that a pharmacist could use. They have an audiology referral sheet again that you could edit or you could use. And they're used to making referrals, and they're used to having forms to make a

referral. So the more that you give them and the easier it is for them to make the referral to you, then the more yield that you're going to get from them.

They also have lists of the, what pharmacists would call the exclusions for self-care that we call the red flags. So you can access those things there and use them. AAA also has a lot of great OTC hearing aid resources, and just recently they added resources for reaching out to pharmacists. So very similar. They have a lot of similar materials. And now specific to what the language and the things that pharmacists are interested in, you can suggest Continued to them. And again, Luke and I are co-author, co-creators of a Continued course that this link currently will take them to a course they can sign up for and they can get about three hours of Continued to get some background on hearing loss and hearing aids.

The next thing is to be informative so you can be informative in another way by sharing with them any information. And this, what you see here is an image of a magnet. And I happen to have these magnets right here with me that I can show you. So these are magnets that Luke and I created based on a grant that we got from AAA, from their outreach group, which funds projects that try to help establish interprofessional relationships and to bring other professions into audiology to call them into us. And so we had these magnets created. We learned that pharmacists like magnets, they all have refrigerators somewhere in the pharmacy and they like magnets with quick, easy information.

So we worked with a graphics designer, and had these created, this is a great thing to actually offer up to give to a pharmacist if you're meeting them for the first time, just to give them information, hand them this magnet, they will find it very useful. It contains the basic regulation criteria that the patients need to be age 18 and older, and that they need to have perceived mild to moderate hearing loss. And they can scan the magnet as you can as well, as with the QR code to see the exclusions for self-care and to get

connected to other local audiologists. So we're happy to have audiologists distributing those out. And we've heard some great stories about people taking them and handing them out to be useful to their pharmacy colleagues.

And you can be collaborative. And what I mean by that is that we have little easy, simple tricks of our trade that are second nature to us, but when we show them to pharmacists, and as you know, to other professionals, it can really be eye-opening and very helpful to their practice. So for example, and the first image that you see is just the simple use of a SuperEar or a Pocket Talker or any kind of amplifier. So if you think about what pharmacists do day in and day out, they are talking to people in kind of challenging and in a challenging listening environment. And they're talking to a lot of older people and older people who have hearing loss.

And I've heard this over and over in my conversations with pharmacists that the patients have a hard time hearing them, and sometimes it's noisy and there's distance between them. And actually I've given them a SuperEar to try. And the response was, well, why don't we have this behind the counter in every pharmacy. I had pharmacy students say, "Wait, can I take this with me? I wanna take this to the pharmacy where I'm doing practicum because we need this with all the patients." So again, for us, a simple trick for the pharmacists, if you share, you could let them try one. Let them borrow one and see what it's like. They're gonna be your friend forever. The second example that I have is just that simple trick.

I think many of us know that if you have AirPods and you use the Live Listen app, if you turn that on, then you can turn your iPhone into a remote microphone for conversation. And I've shown this to a few pharmacists, who are like, whether they're gonna use it for themselves because they have hearing loss and they have a hard time, or whether they somehow wanna use it to talk to their patients. This is great information, and they get such a kick out of this information just like when you offer up, you know, use this app

or that app, and people think it's really magical. And to us, again, it's second nature. So sharing that kind of information can be really helpful.

We had a pharmacist in one of our audiences one time as I was giving this description, I was giving them some tips, and she literally, and she had a hearing loss, she had AirPods in, and she quickly put on the live listen. And she was just blown away and came up to us at the end of the presentation and said, "I had no idea that this was possible. I'm gonna use this all the time." And wow, audiologists are amazing people. So great way to show what we're able to do. And my third example is getting people excited about using live transcription apps. So again, you know, you can simply, if you're in a situation and someone's having a hard time with their hearing, and especially in a pharmacy, if the pharmacists, they're giving patients really important information that is critical to their good health and wellbeing.

And if they can't be heard, that is really kind of a disaster. So why not tell the pharmacist, oh, if you download the Otter App for your Apple phone or live transcribe for your Android phone and just use the live transcription while you're talking, it can make everything better. And I think a lot of us are learning that and seeing that over and over and sharing that information with patients. But this is a great opportunity to also share it and to help start a relationship and show what we can do. So now we're gonna move to our last learning outcome, which is to discuss ways that OTC hearing aids can actually increase referrals for audiology services.

So just some of the scenarios that we can see that's happening. And I included in here a little project that Luke and I did where we decided to, that we wanted to visualize, we've talked about the numbers and Luke talked about this earlier, the difference in numbers between audiologists and pharmacists. And so what we did was with one of our students, a little geocoding project, and so that we could actually visualize it. So we looked at, this is the state of Pennsylvania. We looked at pharmacy locations based

on NPI numbers, and then we looked at what we would call hearing aid dispensary. So those would be audiologists or hearing aid dispensers, hearing aid specialists. We looked at all those offices through the Pennsylvania licensing office, and so again, licensed hearing aid dispensers and audiologists.

And we created this map where you can see that the blue dots are all community pharmacists. So you see lots of blue dots, even in our very rural areas, you can see at least some blue dots. And those are pharmacies. And then the red are places that you could get hearing aids. And so you can see again in our more urban areas like Philadelphia in the Southeast and Pittsburgh, in the Southwest, you see lots of hearing aid dispensaries. But if you look around the more rural parts of the state, it's really very, they're very sparse and very spread out. We have some counties where there's literally not a place you can go and get hearing aids.

And I like to use this visual to remind people that people who live out in these rural areas are really going to the pharmacy for their first line healthcare in many situations. It's also been interesting for me to recognize that pharmacists are the only licensed healthcare professionals who you can walk into without an appointment and ask them a health question. And if they don't know the answer, they will be able to refer you somewhere where you can get the answer. So let's have them understand what audiologists do and what happens with hearing loss and how hearing aids can be helpful. And because we all know, I think that OTC hearing aids are not gonna be the solution for all of the patients who need them.

So again, this visual just to help us see what's out there, who we can reach out to for those, for referrals back to us. I like this article that Abram Bailey published where he did a survey asking audiologists what were their biggest concerns about OTC hearing aids. And so this is basically a list of the objections they had to OTC hearing aids, and they are ranked from their strongest objections to their weakest objections. And I think

of this as a list of all the reasons why we may end up getting referrals from other people that are selling OTC hearing aids because again, we know that they are not always going to work out. And so if you just look at these, the ones at the top, consumers will struggle to identify and address the common problems that we are all aware of, like moisture and wax issues when they purchase OTCs.

They will not be educated on realistic expectations. They will not be educated on effective communication strategies. So they may find that the hearing aid's not gonna solve all these problems. And you can see some of these others here. I checked off a couple that we've had like a little bit of experience with now, the one that says, consumers who purchase OTC hearing aids will not be educated on hearing protection and on hearing conservation. And I think that worries all of us because we worry about those patients who are gonna get these OTC hearing aids and whether they are self fitting them or whether they're preset that they could actually be damaging their hearing. And that's gonna be a hard thing to know when that's happening.

And secondly, this, the new OTC class of hearing aids will lead to greater confusion in the marketplace. Well now we actually have data on that from that article that I showed you earlier that was in JAMA. So all of these reasons are reasons why things may not work out, and again, if we guide the pharmacist to make those referrals to us, when things don't go so well, we'll have a much better chance of seeing that play out in a positive way ultimately. So this was a, I've been watching, I think we've all been watching carefully, in social media, we're seeing lots of responses. This was a social media post in one of our audiology groups that I thought was really interesting.

And it started out by the person, and I don't know, maybe the person who posted it is in the audience, but I really love this post. They said, if you're wondering who is buying OTCs and how it's working out, and they posted this audiogram, which again, for those of us who say, oh, the criteria is perceived mild to moderate hearing loss, but that,

here's an audiogram. And I don't know if that's mild to moderate in the person's perception, but in any case that's a typical audiogram we might see. And the story was that that person was fitted with, came in to the audiologist because the OTC hearing aid didn't work out. But then there were many responses which were very encouraging.

I had one last week brought in, they brought in aids from Best Buy complaining they weren't working. I did the audiogram and real ear measures and showed them why I got to charge for that testing and they're getting aids from me. Or this one, if we do our job well and continue to care about ears, OTC will have minimal, if any impact, except to cause patients to wait longer to get proper help through a licensed registered hearing aid dispenser. And finally, I had this last week, the same kind of hearing loss. He bought OTC from Best Buy, couldn't understand why it didn't work. I explained to him why it wouldn't work, and we put on my hearing aids, instant results and bought a set of hearing aids.

So I think now we're actually starting to see at least anecdotal evidence that these referrals are happening. And I think that's a good thing. So really we're talking about why are these referrals going to come from pharmacists? They're going to come because some of our patients, many of the patients who go there are going to meet the exclusions for self-care. Again, that's pharmacist language exclusions for self-care, meaning for us, that means they have the red flag conditions and those red flag conditions are on the labeling. If we educate the pharmacist to be able to know them and or to have them available on a magnet on the refrigerator, that will help. We know that some patients are gonna have way more complex listening needs.

They're not just gonna wanna have something put on that makes things louder, but that maybe they need, they wanna integrate their listening with their church system, or they wanna, they might need help making sure that it's gonna work in their car. And so they're gonna need more attention than some pharmacists are gonna be able to or

want to give them. We're also gonna have those patients who need more refined customizations. So when we talk about these OTC hearing aids, some of them are self fitting, and so that self fitting is great, but to a point, so some patients, as we know, are gonna need custom ear molds or a custom retention solution if they have some odd shaped ear or lots of other ways that we customize things that we can get that fitting when we're actually programming a hearing aid with all of the gazillions of different settings that we can make adjustments to, they're gonna have a better outcome.

And so generally, we're gonna find that there are patients who are just not satisfied. And when they're not satisfied, let's make sure that if they've gotten this at a drug store, that they, when they express their dissatisfaction, when they go to do the return for credit, that at least the pharmacist can say, oh, you know, the audiologists, you probably need to see an audiologist and this is who you should go see. So just to wrap things up, hopefully, and we'll have some time for question and maybe some discussion, hopefully what you're taking away is that OTC hearing aids are like other self-care products that pharmacists deal with on a regular basis. And so they do fit within the scope of practice of pharmacists as self-care products.

There are efforts underway really at a national level, including that we have connected the American Pharmacist's Association with both the American Academy of Audiology and the American Speech and Hearing Association, and they are communicating together and sharing continuing ed. Luke and I have actually done sessions for both audiologists and pharmacists together to learn from, to learn together and from each other. So there are efforts underway to educate pharmacists about hearing loss and hearing aids. And just to make the point, they are learning about audiologists, but we are not part of, were not part of their regular vocabulary before OTC hearing aids. Then OTC hearing aids, again, can't we all agree they won't be a satisfying solution for many patients, but let's get those patients to us when they're not satisfied.

And I hope that you'll have a takeaway that collaborating with pharmacists will open a new opportunity for increasing referrals in your practice. And again, another channel, another profession to work with and another channel through which you can have in referrals come your way. And with that, I think we can look at the chat, see if there's any questions, discussion. Okay. Yeah. So this is a great question and we've been getting this question a lot. And the question is, how would you advise a community pharmacy which OTC hearing aids they should offer? Should they ask for your advice in that?

And I'm gonna assume that you're saying like, that you're expecting that maybe a pharmacist is gonna say to you as the audiologist, "Oh, well, you know, what do you recommend?" And I think there are different ways to think about that. Certainly there's a lot of information out there about different products. I'm gonna guess that many of us, because of we're so used to working with our legacy hearing aid manufacturers, I can tell you that, we can each bring our own ways to think about that. I don't know if, Christy, did you wanna address that?

- I think she just clicked the button to answer live. Elaine, I think I would also add that, you know, community pharmacists really know the communities that they're working in and a lot of times they're living in, and so they might ask you specific questions like, you know, the people that I serve are of this demographic, or I need multiple price points because we're in an urban setting, but we're close to some suburban housing plans. And they'll tell you kind of what they need. They'll help you, kind of guide you towards products if they're asking for your help. So price points I think is important. And then I think the other things that you all know best, like the form and the function to give patients a couple different options to choose from, but I don't think a community pharmacy is gonna stock five different models. I think they're gonna pick two or three because they're high cost items that are gonna be on their shelves and it's unclear how quickly they're gonna sell.

- Yeah, and I had a really interesting conversation with a pharmacist at a meeting that I was at in Birmingham, Alabama a few weeks ago. And she was asking me this question and I asked her, you know, tell me about your population, just like what you were saying, Luke. And she was asking questions about, well, for my population, I don't think that they're gonna be people that are gonna independently be able to download their apps, download the app, and follow the directions. So something that's more simple for them to use. So I think it's a great point that you really wanna know, like who is the population. Okay, and then, oh, we had a question. What about the name of the app?

And that iPhone app is, well, the one I use is called the Otter App, O-T-T-E-R. And it's a great app. You just, you download it, you get free something like six hours a month of live captioning. And it's great, we use it with patience all the time. I use it in even taking notes when I'm having an appointment somewhere where I need to remember things, with permission, of course. And then we had a question about what is your experience with large chain pharmacies versus a private pharmacy with their interest in OTCs? Do you wanna take that one, Luke?

- Sure, I think, you know, there's not a whole lot of difference in interest, but there is a difference in speed, especially in adopting new things like this, to speak very general, a chain pharmacy, you know, the decisions for what occurs or what's available in the stores are coming from the top down. And so things have to be run up the flagpole and some decisions are made for locations across the country, but when you look at independently owned or privately owned pharmacies, these might be like the mom and pop shops that are in your local town or city. They're their own boss and they make the decisions.

So I think that's important whenever you're looking to collaborate with a pharmacist, if you're talking with an independently owned pharmacist, you're gonna be talking to a decision maker. If you talk to a pharmacist who is staffing at a chain retailer, they're gonna have to, you know, run it up the flagpole or they might not have any control on the devices that are on the shelves. They have to work with what they got. So just make sure that you know who the decision maker is.

- Yeah, and I would add to that, my experience has been, in talking to pharmacists who work for large chains, they may or may not be interested at all at that personal level in terms of, you know, you want to work with the pharmacist who actually wants to be educated and have the information. And so again, that's a hit or miss. But when I, and again, I was at this meeting in Birmingham that was all independent community pharmacists, and I probably had about, maybe about a hundred of them come to the talk that I gave about OTC hearing aids. And the ones who were interested were very, very interested and they want lots of details and they wanna work with, they wanna find audiologists. So I think they're really different groups. And I don't see any other questions, so I think we'll wrap things up. Thanks for your attention.