Summary of the Evidence-Based VA/DoD Clinical Practice Guidelines for Tinnitus, in partnership with AVAA

Presenter: Tara Zaugg, AuD

Hello and welcome to Audiology Online. It's my pleasure to introduce Dr. Tara Zaugg who will be presenting for us today a summary of the evidence based VA DoD clinical practice guidelines for Tinnitus which is presented in partnership with the association of VA Audiologists. Dr. Zaugg is an audiologist who serves as The Veterans affairs visn 20 rehab and extended Care Integrated Clinical Community Clinical Lead and as the VISN20 Clinical Resource Hub Rehabilitation and Extended Care Consultant. Prior to working for VISN20, Dr. Zaugg worked in auditory research at the Portland VA for 22 years where she co developed the Progressive Tinnitus Management Program. You can read more about Dr. Zaugg on our website.

Dr. Zaugg, welcome and the floor is yours. Thank you. I'm really happy to be here today and this is my very favorite topic to talk about. So we'll start out with a little bit of housekeeping. So these are my disclosures, these are the limitations and risks of this webinar and these are the learning outcomes.

I'm going to start out talking to you just a little bit about how these evidence based Clinical Practice guidelines came to be. So the VA and the DoD has a VA DoD evidence based practice workgroup. It's first chartered in 2004 and it facilitates the development of CPGs for VA and DoD populations and is often also relevant to the population as a whole. It's funded by the Office of Quality, Quality and Patients. Funded by VA Evidence Based Practice Office of Quality and Patients Here's a list of the VA contributors who worked on the development of the CPG guidelines.

Their CPGs for tinnitus the VA DoD CPGs for tinnitus. They do a great job of recruiting excellent talent from both VA and dod. These are the contributors from the Department of Defense and the entire process is supported and has guidance from a variety of entities. And I'll say I worked in auditory research for the VA for 22 years and I accessed evidence based CPGs but this was really my first crack at playing a role in developing CPGs and I'm really very impressed by VA DoD's process. They've got a well oiled machine that's really knowledgeable that does a great job of providing the structure for

developing evidence based CPGs while extracting a lot of great knowledge from the partners they recruit from VA. And dodge just a quick qualifying statement that actually shows up in the VA DoD Tinnitus CPG.

These guidelines are designed to provide information and assist in decision making and are not intended to define a standard of care. So this is really not saying it's not prescribing an exclusive course of management. They're really intended to provide you with information about what's evidence based and what's not.

To access the VA DoD CPGs for tinnitus, there's a link on the PowerPoint slide, but also if you just Google VA DoD tinnitus CPG, it'll pop up really easily. When you go to their webpage, they've got a variety of products. There's the full cpg which is a really long document that includes everything. There's a provider summary, a reference card, a patient summary. I'm going to about talk talk you through some of my favorite products within the that's available.

The VA DoD webpage. The provider summary has an algorithm with recommendations for an initial evaluation of tinnitus as well as managing and improving quality of life. They've got some basic recommendations, information about routine care. One of my favorite options is the Tinnitus Pocket card. It's got some really good sidebars that are good for audiologists.

It's also, it's one page front and back. So it's good for audiologists. But it's also a great compact source of information that audiologists can also give to other providers involved in care of somebody who has tinnitus. It includes relevant history and symptoms. There are some really specific guidelines for suggested referrals that are especially helpful for people who are not audiologists.

Additional support to consider for people who are seeking care for tinnitus. So often there's a lot going on besides just tinnitus. So some concrete things to probe for and to consider. There's a summary of

evidence based practices to improve quality of life with tinnitus, some information on maintenance and support, and there's a little corner that's patient education in a nutshell. Sometimes the on the fly education that happens for patients who are presenting asking for care for tinnitus can have some unintended negative consequences that we'll talk about later in this presentation.

The pocket card has some really succinct guidance on what to say and what not to say that I appreciate. I think, I think it's good. I think these resources are great. Another resource that I think is lovely are care provider options for tinnitus. This is a single page sheet of information that's designed to be used by clinicians and that can be handed directly to patients.

So it just describes what can an audiologist do? If you've got tinnitus, what can behavioral mental health do? If you've got tinnitus, what can dentistry do? What can ENT do? What can PT do?

So it's a nice, patient friendly handout that can be given to providers and also given to patients. It was intentionally designed that way and I think it's, I think it's good.

A few words about the CPG recommendations. I'm going to walk you through CPG recommendations for tinnitus and the way the VA DoD CPGs are set up. There are five options that we were given. So for every area we were examining, we could give a strong recommendation for, weak recommendation for, insufficient evidence to recommend for or against, weak recommendation against or strong recommendation against. And I'll tell you up front, this applies to all of the quiz questions throughout the entire cpg.

We didn't ever give a strong recommendation for and we didn't ever give a strong recommendation against. All of our recommendations were either weak for, weak against, or insufficient evidence to recommend for, against. And I want to give you a little context around this. I know even as somebody who worked in research, when I didn't see a strong recommendation for, if I saw a weak

recommendation for, I wondered what, what it meant, why was it weak? The way that the structure that's used for the VA and DOD to develop CPGs, really the only way you can get to a place of a strong recommendation four is if you have a study design that's rigorous enough.

So one example of a study design that could result in a strong recommendation four would be a double blinded, placebo controlled study for a medication. In the kind of care we provide for tinnitus, we can never double blind them. These are often behavioral interventions where we can't blind the clinician to what they're giving the patient because it's not a pill and we can't blind the patient entirely to what they're being given again, because it's not a pill. So just the nature of the care that's provided for tinnitus means that it's extremely unlikely that there will ever be a strong recommendation for. And the only time we could come up with a strong recommendation against, probably for tinnitus, is if there was something that was really, really risky, like so risky that it could risk someone's life.

So I don't think the fact that we don't have any strong recommendations for a guest against doesn't mean we don't have good evidence. It just means that the nature of the kind of care we provide for tinnitus, we can't double blind control. So it actually Takes quite a bit of evidence for us to even give a weak recommendation for. It means a lot more to me at this point after having been involved in this process to see a weak recommendation for. I know that it requires quite a bit of evidence actually for us to be able to say anything other than insufficient evidence to recommend foragance.

So that's some, just some input on how to respond to the quiz question. Some of the things that you can look for. Some easy, I know it's not strong, but also some context around what it means when we see a weak recommendation for. All right, so I'm going to walk through. There's 25 recommendations total and they'll all be either weak recommendation for week against or insufficient to recommend for.

Against. All right, so let's dive into the, into some of the recommendations. So first up, the first recommendation is we suggest using validated subjective outcome measures. So this is something like

the tinnitus functional Index or the Tinnitus Handicap Inventory to monitor the effectiveness of the care being provided for tinnitus. I think this is a great recommendation.

It's based in evidence. That is one of the quiz questions. So it's a weak recommendation for. And we suggest against psychoacoustic measures to monitor the effectiveness of providing care for tinnitus. So psychoacoustic measures would be like minimum masking level, loudness matching, pitch matching.

So this recommendation, and we have evidence to support it is saying don't use that to measure outcomes. It really won't provide you with meaningful information about outcomes.

A few words. So recommendation number three is we suggest educational counseling to reduce the functional impact of tinnitus. So we do have some evidence to support that people do better if you provide some basic educational counseling.

Insufficient evidence to recommend for or against either web based or app based self management for tinnitus. And the same is true of computer based games or training programs for tinnitus self management. So we don't have evidence saying that it's not helpful to do those. But we also don't have evidence to say that it is helpful. So educational counseling, great.

All the web based and app based stuff we didn't see evidence of harm but also no evidence, not enough evidence to say that this is probably going to help your people end up in a better place.

We recommend hearing aids for tinnitus management in adults with hearing loss and this has shown that this shows up in our cpg. We do have some nice evidence showing that people that quality of life and functional status improve for people who have tinnitus and hearing loss when you fit them with hearing aids. It says C narrative for discussion of patients without hearing loss. And this is where I'm going to give you my opinion. So we don't have.

There's not an evidence basis out there to say that if you give somebody who has, say, hearing thresholds of 25dB or greater across the board, if you give them hearing aids to help them with their tinnitus, that that will improve their quality of life with tinnitus. So we don't have evidence for that. I'm going to tell you, outside of the realm of evidence based practice, some of my experiences. So I've been focusing on providing care for tinnitus for 25 years. That's been the focus of my career for 25 years.

And what I like about there are people who fit hearing aids on people who have normal hearing thresholds for the purposes of improving quality of life with tinnitus. The reasons I think this makes sense is that a lot of the coping strategies we provide that we teach people to use to improve quality of life with tinnitus is using sound. If you're using sound to make you feel more comfortable and to make it easier for you to do things like concentrate on reading, it will. It can make it harder to understand what other people are saying. So if you've got somebody who's been trying coping strategies and maybe those coping strategies are getting in the way of people being able to understand what others are saying, making communication a little harder.

Hearing aids can be a way to constantly increase ambient sound that just follows the person everywhere they go. And it won't make it harder for them to understand what people are saying. And anecdotally I can tell you that I've fit some people with hearing aids in these circumstances and I know other audiologists who've done the same and anecdotally are saying that a lot of people do benefit from this practice. I think it's a little cleaner when you're in the VA because we're not actually selling hearing aids. We provide them typically at no cost to veterans.

If you're in the private sector and you're selling hearing aids to somebody who has normal hearing thresholds, I just think you need to be very careful to make for sure the person understands that you're fitting hearing aids on them, you're selling hearing aids to them under circumstances that most people

wouldn't do that somebody from the outside could look at this practice and question you. So I think it's really important for patients to even be able to answer your questions like, you know, if I did a little pop quiz with you, can you tell me, am I fitting hearing aids with you in a way that most audiologists would? Am I doing this for hearing loss? So make for sure they really understand what they're agreeing to. So those are my comments on fitting hearing aids on people who have tinnitus.

We have insufficient evidence to recommend for against cross hearing aids for people with single sided deafness. And we suggest cochlear implantation for tinnitus management and those who meet candidacy requirements. I want to give you a little caveat to this one too. So we do have research evidence to suggest that cochlear implantation can improve quality of life with tinnitus. Here's the caveat I want to give you and it's a story I'll tell you.

This is a story about a real thing that happened. There was a veteran who, who was eligible for cochlear implantation based on his hearing. He had very, very poor hearing in both ears and he also had tinnitus. That really bothered him. He wanted cochlear implants for his tinnitus and he really, though he met the candidacy requirements based on his hearing for cochlear implants, he didn't really want the cochlear implants for hearing.

He really just wanted them for tinnitus. He was implanted and when he was implanted he didn't, they didn't help him with his tinnitus at all. It didn't. He didn't notice any changes in his perception of tinnitus and his level of interest in using the cochlear implants for communication was really low. And his ability to communicate with other people actually became worse.

And also it didn't help him with his tinnitus. And so he was in a much worse place after implantation than he was before. I try to take care with telling stories because sometimes that's the only piece people remember is the story you told, not the evidence that's out there. There are a lot of people with tinnitus who've benefited, whose quality of life with tinnitus improves after cochlear implantation. But I

think you really have to, as a clinician, pay attention to does this patient also want this for hearing and does the patient know that maybe it'll help with them with their tinnitus and maybe it won't?

We don't know that for sure. So that's my caveat around. That's the context. I want you to know around the rec saying that we suggest cochlear implantation for tinnitus management for people who meet candidacy requirements. Number nine is there's insufficient evidence to recommend for against implantable bone conduction devices for tinnitus management in adults with single sided deafness.

So and this kind of makes sense to me if you've got somebody with single sided deafness, a bone conduction device may make it easier for them to pick up sound in their good ear that's showing up on the side of their bad ear. But it's not going to provide if they're truly deaf in that ear. It's not going to, they're not going to detect sound because you've provided a bone conduction device. Same thing with a cross hearing aid.

10 is we suggest cochlear implants over implantable bone conduction devices or cross hearing aids in people single sided deafness who meet candidacy requirements for cochlear implants. And this makes sense to me that there's evidence to support this. And just on a basic level it makes sense that cochlear implantation may actually provide people with the sensation of auditory input in an ear that's deaf and a cross hearing aid or bone conduction devices, it's just routing sound to the good ear. But we don't, it wouldn't cause the person in their deaf side to have access to sound in that earth sound based intervention alone. So there's insufficient evidence to recommend for against auditory cognitive training.

So the studies that went behind this recommendation, we're looking at things like some people have done things like frequency discrimination training for people who have tinnitus or auditory attention training, insufficient evidence to recommend for or against. And, and it actually doesn't make sense to me also that those things would help somebody improve quality of life with tinnitus. I'm not surprised that we have insufficient evidence for those.

We recommend therapeutic use of sound for tinnitus self care. So we do have some evidence to suggest that supplementing adding sound to somebody's environment. People who have tinnitus do better with sound than they do in silence. That's almost universally true. So when we talk about therapeutic use of sound, it's really adding sound to the environment to improve quality of life with tinnitus.

There's insufficient evidence to recommend for against sound therapy with altered music. So things like notched music therapy or spectrally altered music, we don't have evidence to suggest that that will improve quality of life with tinnitus. That's the evidence I'm going to tell you separately some of my experiences around that. So excuse me. When it comes to things like notched music therapy or spectrally altered music, usually what the protocol looks like is starting out with a pitch match of the tinnitus and then like notching music therapy in some way that's connected to what the pitch match was.

Same with spectrally altered music. In my 22 years of working in auditory research, part of what our group did was worked really hard to see if there was a way we could do pitch matching that would result in people giving us the same pitch match more than once. So maybe a couple times within a day with a little bit of time, like an hour between or. Or a pitch match one day, and then they come back a couple days later and give us a pitch match. And we tried actually for years to find some protocol that would result in people saying, here's my pitch match.

I'm writing it as a 10. It's really good. Sounds just like my tinnitus. And then an hour later we do it again. They say, yes, this pitch match is great.

So 10 sounds just like my tinnitus. No, my tinnitus hasn't changed. And the same thing a day or two later. And what we found is that people over and over would say, yes, that's a 10, that's such a good

pitch match. It sounds just like my tinnitus.

Hour later, tinnitus hasn't changed. They would give us something completely different and say, no, my tinnitus hasn't changed. This is an excellent match. So we never. We never really found a way to do a pitch match that resulted in people just being consistent.

Just being consistent doesn't even mean that we're actually finding the pitch. It just means that they're being consistent, but we couldn't even get there. So my level of trust in somebody's pitch match is actually pretty low. And that's based on years of experience doing pitch matches and working really hard to try to find a way to do a pitch match that people would just be consistent with over time. So I kind of look sideways at almost any intervention that requires you to know the pitch of somebody's tinnitus.

I don't believe we can, for most people, that we can reliably know what the pitch of their tinnitus is. And so I'm not surprised that some of these things that depend on pitch matching, we don't see a lot of evidence to support it.

And I'm going to say, now I'm keeping An eye on questions. I encourage you to give me comments or to ask me questions as I'm going. If I see them pop up, you guys won't see each other's questions. But if I see them pop up, I'll respond to them in real time. So feel free to interact with me as I'm going.

I'm happy to do that. I'm also happy to answer questions at the end.

Okay, so this is another quiz question. Behavioral intervention alone, we suggest cognitive behavioral therapy by a trained provider for adults with bothersome tinnitus. With the cpgs, we just give a recommendation week for week, against, insufficient evidence to recommend for against, and we don't really rate them. We don't say this one has a stronger basis of evidence than this one over here. It's

really not how CPGs work.

But I will tell you, as somebody who has spent a lot of time looking at the evidence out there, my opinion is, is that the strongest body of evidence we have for improving quality of life with tinnitus is for cognitive behavioral therapy for tinnitus. There's just been more studies done that consistently look like even across different groups. So CBT can look like a lot of different things. The number of sessions varies, the specific skills taught vary, and we still see people improving even when very different people have somewhat different protocols that they're applying. So my confidence in CBT for tinnitus, cognitive behavioral therapy for tinnitus to improve quality of life with tinnitus is pretty high.

I think CBT for tinnitus is great when it's available. I'll tell you. I'm going to tell you two things about CBT for tinnitus. One, I'll just tell you a little bit about what CBT for tinnitus is. What does that look like?

What does that mean? And I'm also going to tell you a little bit about how to. Behavioral health providers frequently don't know that CBT for tinnitus is a thing and that it's something they can provide. So I'll give you some hints on how to talk to behavioral health providers to pretty quickly get them saying, oh, I see. I see how the skills I already have apply to improving quality of life with tinnitus.

So let's start out with a little bit about what CPT for tinnitus is. CBT for tinnitus is. It's like a set of coping strategies that are taught. So often. CBT for tinnitus will include like teaching relaxation techniques, being really intentional about adding pleasant activities to Your day.

The technical term is a behavioral activation, but really just talking to people about what lights you up, what do you love doing? Let's add some of that to your life, really intentionally. The cognitive part is called cognitive restructuring, and I'll tell you that this is how it was explained to me in a way that helped me understand the cognitive restructuring part of cbt.

So I'll give you an example that's not related to tinnitus. Let's say you invite somebody over for dinner and they're late. What you think about this event has a really big impact on how you feel. So if you're thinking it's really rude of them to show up late, you're probably going to be irritated. If you're thinking, oh, no, I hope they weren't in a car accident, you'll be worried.

If you're thinking, whew, I'm glad they're not here yet because dinner's not quite done and there are a few more things I want to do before they arrive. You might feel relieved. So it's not the event causing the feelings. It's the thoughts you have about the event that cause the feelings. And so with cbt, you can kind of play around with that with tinnitus.

So it's not necessarily inherently the tinnitus causing the feelings, but the thoughts you have about your tinnitus. So it's CBT for tinnitus. The cognitive part of it can be identifying the thoughts that you have about tinnitus that might be really upsetting. Like, I've gone to so many providers and nobody can help me. That's going to cause a set of feelings that are terrible.

And if you can identify thoughts like that and change them to something that still feels true but is less upsetting, that can. That can make a difference for people. So they might start thinking like, all right, well, it's true that I can't change what my tinnitus sounds like, but I am learning these coping strategies that can help make me more comfortable even though I can't change it. So that might be a thought that could result in less upsetting feelings.

Let's see. And then I'm going to. So, cbt, we've got really good evidence. In my opinion, it's a weak recommendation for. But we've got good evidence showing.

And I think the most solid body of evidence for improving quality of life with tinnitus is for cbt. It's also true that sometimes if you make a referral to behavioral health, they don't know that CBT for tinnitus is a thing. I've talked to more than one veteran who said, I was referred to mental health. I wasn't sure

why I was being referred to mental health. Mental health said, tinnitus is a medical thing.

I don't know why you're here either. Back to primary care and then maybe primary care, since ent. ENT says you don't need surgery. Back to prim care. And sometimes they never go to audiology.

So that's what that loop can look like. So if you're interested in sending somebody to behavioral health, it can be really meaningful to connect with them ahead of time and say, hey, did you know there's an evidence basis for CBT for tinnitus to improve quality of life with tinnitus? And if the behavioral health provider is like, why are you sending tinnitus to me? The magic words that have opened so many doors for me is to say whatever skills you have for working with people who have chronic pain also apply to people who have tinnitus. And that will cause lights to come on for people.

Most behavioral health providers, either there's somebody in their practice or they have some experience working with people of chronic pain. They'll be, oh, you can almost just replace the care provided for chronic pain. Behavioral health care, just replace. Swap out the word tinnitus for chronic pain, and all the skills apply. So that.

That's opened a lot of doors for me when I've been knocking on the doors of behavioral health and they've been like, why would we be involved? You give the chronic pain analogy, and then suddenly I have people on board with me. All right, I've got a question here. So do you find any value psychologically for patients in psychoacoustic measures, measurements such as during an initial eval, not to track outcomes, but for helping patients feel their concerns are taken seriously, assuming billing is taken out of the question. This is a really great question, and I appreciate it.

I spent years, mostly as part of research protocols, doing really extensive psychoacoustic test batteries with people who had tinnitus. A lot of those people said to me, finally, somebody is taking me serious, seriously, felt validated by having all the testing happening. So it is true that it. It often will result in

people feeling like they're being taken seriously by doing a psychoacoustic evaluation. I don't do them clinically any longer.

If it's part of a research protocol, sure. But clinically, I don't do them any longer. I have come to believe that you can Leave people with the impression that they're being taken seriously without doing psychoacoustic measures. And I think you can do it in ways that are help people feel like they're being taken seriously without causing them to pay closer attention to what their tinnitus sounds like. So the thing that I think is problematic about validating people and leaving them feeling like they're being taken seriously by doing psychoacoustic testing.

Is that psychoacoustic testing you're saying like minimum masking levels? How much do I have to turn up the sound before it covers up the sound of your tinnitus and.

And residual inhibition? Does your tinnitus sound any louder after I play this sound? That's a certain level over your minimum asking level for a minute, it's keep them focused on what their tinnitus sounds like. So when I'm providing care for somebody with tinnitus, I'm usually working pretty hard with some people anyway to make a shift away from paying attention to what does sound due to your tinnitus and instead to what does sound do to how you feel. Can sound make you feel more comfortable?

So it's usually not helpful for people to be focusing on what their tinnitus sounds like and instead is more helpful to help people shift to where we have more power and control, which is how do you feel? So I like to start talking to people. Like at the time I could spend doing a psychoacoustic evaluation, I can validate people, let them feel seen and heard, let them tell their story, talk to me about how it's impacting their life, and then start talking about where we have control and where we don't have control. And what we don't have control over is what tinnitus sounds like. And people often start heading downhill when they're trying to change what their tinnitus sounds like.

They'll get their hopes up and then it doesn't work out. But if we can shift to changing how you feel instead of changing what the tinnitus sounds like, that's where we. That's what can change is how you feel, not what the tinnitus sounds like. So I don't. Yes, there can be value psychologically in the psychoacoustic measurements, but I think it comes with problems.

I think it tells people that the important thing here is for us to pay attention to what your tinnitus sounds like. It's not going to guide care and it's not going to tell you about outcomes. The only time it would guide care is if you're providing. If you're giving somebody a device that requires like a pitch match to adjust it. So that's the long story of my opinion about psychoacoustic measurements.

I think it has a tendency to get people to continue to pay attention to what their tinnitus sounds like because that's what the psychoacoustic evaluation is all about. And that's not what the care should be focused on because we don't. We don't know that we can. We can't usually change what tinnitus sounds like, but we can change how people feel. Okay, next.

So I really appreciate that question. It's something that comes up a lot. So if you're doing a psychoacoustic eval and leaving people feeling validated, you're not doing a bad thing. If it's working for you, it's working for you. There are clinicians who I trust who do that, who use that as a way to leave people feeling validated and are very skilled at getting them focused on.

Let's change how you feel, not what it sounds like. So you can. But I personally don't do it. I think there are other ways to spend that time that are more directly connected to what you, what people can do to start feeling better. Okay, so is it appropriate for audiologists to do CBT for tinnitus patients?

And a related question, Are audiologists qualified to lead a previously established CBT for tinnitus program?

For example, following sessions laid out in the CBT for Tinnitus book written by Bukes, Anderson, Mankaya and Caldo, do you think this is in the scope of practice for an audiologist? So providing CBT for tinnitus is not in the scope of practice for an audiologist. The only time it would be in your. It's for an audiologist to say that they're providing cbt. To provide cbt, you really need to be trained in CBT and then monitored.

So when behavioral health providers are learning how to do cbt, then they're providing it under. Providing CBT under supervision until they're deemed ready to do CBT on their own. It's really hard for audiologists. Actually, we tried to get me trained to do CBT one time for as part of a study. And really like high quality programs wouldn't take me because I wasn't a behavioral health provider.

So I think it's pretty rare for an audiologist to be able to get the kind of training and supervision needed to be able to provide cbt. So audiologists, as we stand, without Some really special circumstances. It is not within our scope of practice. This comes up a lot in the VA because we can get audiologists who would like to start tinnitus programs. And we provide in the VA we provide a lot of support materials for people to start doing something called progressive tinnitus management, which is audiology and behavioral health combined.

It's really hard to get behavioral health involved. And so I've been asked 1 million times, which part of CBT can audiologists provide? There are so, and here's my usual answer. You should not as an audiologist say that you're providing CBT unless there are some really special circumstances. But what you can do is teach some of the coping strategies that show up in cbt.

You can't call it cbt, but it's okay for an audiologist to teach people how to do a relaxation exercise. It's okay for an audiologist to do things like help people plan pleasant activities to improve their quality of life. Don't call it cbt, but those pieces you can do. The cognitive restructuring part audiologists should not be doing. That really is specific to cognitive behavioral therapy and is not an easy skill to pick up.

So I'm going to show you a link later to support materials that audiologists and behavioral health providers can use. They're patient facing like PowerPoints that you can use to help you lead a session. And we have some sessions that are set up so that they like relaxation techniques, planning pleasant activities that can be provided by either behavioral health provider or by an audiologist. But the cognitive restructuring part shouldn't be done by audiologists. So don't say you're doing cbt.

You really can't do cbt. It's not in our scope of practice. But you can teach some of the coping strategies found within cbt. Just don't call it cbt. All right, great.

Thank you for those questions. I love it. Keep them coming.

Let's see.

And then there's another question that just came in related to is there training a training program for audiologists to provide cbt? Not that I know of. There used to be one through the UK that last years and years ago, probably more than 10 years ago, that it was CBT for tinnitus training for audiologists. I don't know how, what the scopes of practice are for audiology in the uk, but that program went away. I don't know the story behind why it went away and I don't know of any other training programs in the US that are available to audiologists and Like I said, I actually tried to get trained in it once and we couldn't find a reputable program who would take an audiologist.

Seems fair enough. All right. Behavioral intervention alone. So there's insufficient evidence to recommend for or against the following psychological interventions by a trained provider for adults with bothersome tinnitus. Not ranked.

So things like acceptance and commitment therapy, mindfulness based therapies and mindfulness based stress reduction. Insufficient evidence to recommend for against is because there's really not much out there. There's a little bit out there for each of context that I will provide for you outside of the realm of evidence based therapies. Is this in the VA when we're providing progressive tinnitus management, which is cbt, by a behavioral health provider, along with support for using things like sound to improve quality of life? With tinnitus, there have been cases where people in the VA system said, hey, I've got somebody from mental health who wants to engage with me.

This particular provider is really into acceptance and commitment therapy and they're not very enthusiastic as enthusiastic about cbt. They want to do an ACT version of this rather than a CBT version of it. And my advice to them was it really matters to have clinicians who believe in the care they're providing. So I said, keep track of your outcomes. Make for sure it looks like people are improving.

But yeah, go with what your behavioral health provider is enthusiastic about. People can feel that they can feel if their provider really is enthusiastic about and believes in the care they're providing. So my opinion outside of the cpgs is that if you've got a behavioral health provider who's into one of these and wants to partner with you as an audiologist, go for it and monitor your outcomes.

Let's see, there's another question here that's not really about cbt. It says, can you comment on sound treatment, fractals versus other sound treatment? And here are my thoughts on using sound people. So the ways sound can be useful. It's not going to change what their tinnitus sounds like.

And if that's what people are looking for, it's probably not. The result I think will not be as good. We can use sound to help people feel more relaxed and comfortable or to just get people out of silence so it's easier for them to do things like focus on reading, focus on computer work.

Everybody's reaction to sound is very different. A sound that's really soothing to one person can be downright annoying to somebody else. So I think as audiologists, I Recommend, not recommend. I don't think we should be recommending specific sounds. I don't think, as audiologists, we should be saying, try this, try fractals, try Zen, try whatever.

I think we should be saying to our people, hey, we know we have a lot of evidence to support that. Using sound can make you feel more comfortable, even if it doesn't change your tinnitus. Let's pay attention to which sound is helpful for you. I can't. I tell my.

I actually literally tell the patients I'm working with all the time. I need these ideas to come from you. We want to use your intuition about what's going to be helpful for you. You're going to experiment with sound and pay attention to how it makes you feel, and then you're going to use the sound that works for you or that's helpful for you. And that's going to be different from person to person.

So for some people, I've talked to people who really like Zen tones. They're like, it sounds kind of like wind chimes. I love it. Fine. And some people don't like it.

And that's how it is with almost every sound. Some sounds people are like, yeah, this is great. I feel more relaxed, or it doesn't really make me feel more relaxed. But you know what? It is easier for me to stay focused on my computer work if I've got some kind of sound going, rather than just being in silence.

So that's. Listen. Encourage your patients to really pay attention. How does this sound make? Is my life better with the sound here than it is without the sound here?

And they're the only ones who can tell you that we don't. We don't know ahead of time what's going to land for somebody.

And somebody else said, any comments on hypnosis for tinnitus? I have. I don't have. The last time I looked, I didn't find an evidence basis for hypnosis for tinnitus. I have talked to.

In the last 25 years, I've probably talked to like five to 10 people who've told me they tried. At least five, maybe a little more than five, who've told me they've tried hypnosis. And what I've. Every person has said, nope, didn't change what my tinnitus sounds like. Every person was hoping for that, whether it was promised or not, and said, nope, that's not what happened.

Some people were like, I don't think I got anything out of it. And some people were like, you know what it didn't change my tinnitus, but it's a really helpful way for me to relax. A gift. I get really relaxed when I'm doing that. So those are my thoughts on hypnosis.

All right, so let's take a look at combined sound based and behavioral intervention. So we suggest sound therapy combined with CBT for tinnitus management by a multidisciplinary team. And we suggest sound enrichment with ongoing directed tinnitus education by an audiologist. So for these two recommendations. So if we're looking at sound therapy combined with cbt, I will show you before the end of this presentation some links to a website at the national center for Rehabilitative Auditory Research that's out of the Portland, Oregon VA that any audiologists and behavioral health providers can use to support them in starting to provide PTM.

The evidence basis for number 16, sound therapy combined with CBT. Those were, I think there were two. The body of evidence included like two PTM studies and one other study that wasn't PTM but combined audiologists supporting people in using sound and behavioral health providing CBT for tinnitus. So that. What if you want to pursue something that looks like recommendation 16, there are support materials available at a website that I'll show you before the end of this presentation.

But it doesn't have to be ptm. That's just one way to do it. And then recommendation 17, we suggest sound enrichment with ongoing directed tinnitus education by an audiologist. The body of evidence for number 17 includes a collection of studies. There were actually no studies for PTM because PTM includes CBT and this is just audiology only.

So it was like tinnitus retraining therapy. There's like a tinnitus education group that actually was a precursor to ptm. There was tinnitus activities. It's tat. Tinnitus activities treatment, I believe is what the acronym stands for.

So it was a variety of interventions that were led by audiologists that had repeated visits over time. Every single study in the body of evidence that was used for recommendation number 17 was actually a study. So I'll give you one example with tinnitus retraining therapy. One of the studies was a tinnitus retraining therapy study where people were randomized into one of three groups. All three people were given the counseling and education for tinnitus retraining therapy that included the recommendation to enrich their sound environment using anything they had around.

One of the groups just really got the education. They didn't get a sound. They didn't get ear level sound generators at all. One group was given ear level sound generators that were adjusted according to TRT directions. And one group was given, they called them sham ear level devices that would produce a sound for light, half an hour and then it would very slowly fade out.

So they weren't really getting the recommended amount of sound. All three groups did great. The ones that didn't get a device, the ones that got the sham device, the one that got the device the way it was supposed to go. So for every study that formed the evidence basis for 17, it was really trying to pull apart. Are ear level devices important?

How important are they? Like which pieces of this intervention matter? And what all these studies found over and over again was that all the groups did well, whether they had the specialized device, according to the methods, instructions or not. And what was common across all these groups is that they were getting repeated visits with audiologists and they were being encouraged to enrich their sound environment. And all these people improved.

There weren't any statistically significant differences across groups. So none of the studies were really designed to say, hey, sound enrichment with ongoing direct attendance education by an audiologist is helpful. They were designed to pull all the pieces. But what we ended up with is this body of evidence saying, you know what, almost any form of repeated visits with an audiologist where you're providing education and support and encouraging sound enrichment, people do better. There's one study in this body of evidence, or there's yeah, one, but study in this body of evidence that did have one control group that didn't do as well as the rest.

And that one study included a control group where people were recruited for tinnitus, but then they were just given care for their hearing alone. So they were giving repeated visits with communication strategies, they were given hearing aids. Those people didn't do as well as the people who were given education specific to tinnitus. The people in the hearing group actually improved a lot, but they didn't improve as much as the people who were given tinnitus specific care. So I'm giving you all this long description to say that if you've got some program you believe in, whether it's ptm, trt, tinnitus activities, treatment, if you're regularly meeting with people to provide education and support and encouraging them to enrich their sound environment, you are providing evidence based care for tinnitus.

And with the PTM materials that you'll see what often happens is we can get audiology engaged, but we can't get behavioral health engaged. You're still providing evidence based care based on recommendation 17. So it's better to include behavioral health providers whenever you can. People

who are really struggling with their tinnitus, a big part of what's going on almost invariably is that they have really big emotions that are popping up, that are interfere, that are reducing their quality of life and impacting their ability to function. And so bringing a behavioral health provider into that scene is great.

Behavioral health providers are going to provide, they're going to provide care through a different lens than audiology and it's a really relevant lens. So whenever possible I strongly encourage engaging behavioral health. And we don't have enough behavioral health providers. So if you can't engage them, know that you can still provide evidence based care even if you can't provide that piece of it. You do though need to be ready to refer to behavioral health.

If you start establishing long term relationships, supportive relationships with people who have tinnitus, suicidal ideation will come up and you need a plan for how to engage behavioral health to address that.

Let's see another question up here. Are audiologists qualified to lead a previously established CBT for Tinnitus program? Oh, I read this one, but then I didn't answer it. Thanks for leaving that up there for me. So if there's a previously established CBT for Tinnitus program, like following the sessions laid out in CBT for Tinnitus by Mukes, Anderson et al, if you took over a previously established program like that and you're an audiologist, my recommendation would be to not call it the CBT for Tinnitus group anymore.

But you could call it Coping Skills for Tinnitus. I don't. If the previously established sessions are focusing on cognitive restructuring, I wouldn't do cognitive restructuring as an audiologist. But the parts that aren't cognitive restructuring, that's fine. So don't call it cpt.

Just call it Coping Strategies for Tinnitus and get input from you know. If it's a previously established program, I don't know if it was previously established by a behavioral health provider or by an audiologist. If it was previously established by a behavioral health provider, talk to them about their

thoughts on what's appropriate for you, which parts are appropriate for you to provide and not provide. If it was previously established by an audiologist who was calling it CBT for Tinnitus, I would change the name to say Coping Strategies. Don't say you're providing cbt.

All right, I appreciate the questions. Keep them coming. So here I've been Promising you so VA resources to assist with evidence based care for tinnitus for audiologists and behavioral mental health care providers. So this is the link. If you Google ncrar, which stands for the national center for Rehabilitative Auditory Research, you'll find your way to these materials.

We have things like PowerPoint presentations that were developed for use by audiologists and behavioral healthcare providers. And there's some other, like tinnitus handouts. There's a PDF of a workbook you can give to people. Workbook. In my experience, it's usually not helpful to just hand them a workbook and not do anything else that does send a message that you've got information about tinnitus and you care about.

Most people can't actually make use of the workbook on their own. They usually need somebody to walk through them with it.

All right, so neuromodulation and neural stimulation. There's insufficient evidence to recommend for against TMS for tinnitus management. So there's been quite a bit of studies done on TMS for tinnitus and we don't have reason to believe that it does more than placebo. So we have insufficient evidence to recommend for or against. There's insufficient evidence to recommend for or against transcutaneous electric nerve stimulation for tinnitus management.

Insufficient evidence to recommend for or against transcranial direct current stimulation. And we recommend against low level laser therapy for management. So with low level laser therapy there's more risk than benefit there.

We suggest a multidisciplinary approach for the assessment and treatment of patients with bothersome tinnitus and temporomandibular disorder. So problems with their tmj, cervical spine dysfunction, or both to reduce the functional impact of tinnitus. Note the wording to reduce the functional impact of tinnitus. I think if you're sending, if you're going sending somebody for manual therapy, if you're referring for like a physical therapist for tinnitus, I think it, I would encourage you to talk to patients about what they're hoping to get out of it. Usually what they're hoping for is that like PT will make their tinnitus quieter.

Probably it can't make their tinnitus quieter. But people who are struggling with tinnitus, if you're taking care of other things they have going on. So if you're providing treatment that can reduce dysfunction related to TMJ problems or improve their range of motion or reduce pain related to back and spine problems, their quality of life with tinnitus probably will improve, but not because it's making the tinnitus quieter. So I'm often talking to people about mind the roller coaster. Sometimes people get their hopes up like, oh, this is the thing that's going to make my tinnitus quieter.

And they try it and it doesn't make their tinnitus quieter and they kind of crash and then they're like, oh, here's the next thing, I'm going to try to make my tinnitus quieter and the hopes get up and sometimes they crash even lower. So I think managing expectations is really important. I do think it's meaningful to attend to these other physical problems that are negatively impacting quality of life that will make life anything people do really to improve their health and well being is going to improve their quality of life with tinnitus. Insufficient Evidence to Recommend for Against Acupuncture for Tinnitus Management the side note that I'll tell you about with acupuncture specifically, I've talked to a lot of veterans who've tried acupuncture for tinnitus and it's a similar story about managing expectations. Every person who's had acupuncture for tinnitus that I've talked to has said, nope, didn't change what my tinnitus sounds like.

But some of those people, not all of them, some of them have said, but you know what? I found out that acupuncture I sleep better after I have acupuncture. And people have told me that acupuncture helps with mood stuff. So sometimes it helps with anxiety or depression. That's what I've been told.

That's not evidence land. That's what veterans tell me about their experience with acupuncture. And some say it just gets me really relaxed and I feel better after I have acupuncture, even though it didn't change my tinnitus. If somebody's talking to you about trying acupuncture, I encourage you to set expectations. We don't have any reason to believe it would make your tinnitus quieter, but maybe it'll help you with sleep or maybe it'll help you with mood and that can be really meaningful.

Herbs, nutraceuticals and supplements we suggest against the use of ginkgo biloba Dietary or herbal supplements are nutraceuticals for tinnitus management. This is quiz number five. So this is not neutral. We're not saying insufficient evidence to recommend for against we're saying weak recommendation against using ginkgo biloba dietary herbal supplements or nutraceuticals for tinnitus management. Some of those supplements, supplements can make can interact with drugs people are taking, particularly drug blood thinners, and can cause problems that weren't there before.

That's why it's a weak recommendation against using supplements. And everybody here probably knows if you look on the Internet, if you search for. There are tons of people out there who are selling supplements or nutraceuticals, claiming that it will help people with tinnitus.

When I'm working with people who have tinnitus, I directly tell them, beware of anyone selling you. Anything that they say will can make your tinnitus quieter. That's not what we can control, what we. But. But we can change how you feel.

I feel confident about that. We suggest against the use of anticonvulsants, antidepressants, antiemetics, antithrombotics, beta histamine. So a list of drugs for tinnitus management.

These are things that have been tried and the risks outweigh the benefit. So this is a weak recommendation against use of this list of medications for tinnitus management. When I'm working directly with people who have tinnitus, the kinds of conversations that come up around pharmacotherapy tend to look like this. People are. It's in people who are searching for a way to make their tinnitus quiet.

Sometimes they'll say, you know what, I'm taking like six different medications. What if that's causing my tinnitus? And sometimes people say, I'm thinking about stopping taking all my medications to see if that helps my tinnitus. So that might include, like, antidepressants, or it might include antihypertensive drugs that are, you know, being given for blood pressure or given for depression. And I will.

How I run the conversation is usually to say, hey, let's talk about timelines first. How long have you had tinnitus? When did you start these medications? Do you feel like there's a connection between when you started them and tinnitus? And almost always people are saying, no, I've had this for like 20 years, or this just became a problem for me.

And I've been taking these medications for a long time. So just talking about timelines can kind of help settle people down, that this is probably not what's causing your tinnitus. And then I'll, you know, I'll say things like depression often run alongside tinnitus. I think it sounds pretty risky to me, actually, for you to be thinking about not taking a medication for depression. Depression's something that's really important to stay on top of when you're trying to improve your quality of life with tinnitus and always encourage people to talk to their doctors.

But it's what I tend to see clinically is people thinking about not taking medications, wondering if that'll make their tinnitus quieter. So I don't recommend these medications for tinnitus management. And what it sometimes looks in clinical settings is people being like, maybe I shouldn't take these things.

All right, so some overall key points for people with tinnitus and hearing loss. Hearing aids are a great option to explore. This is a really big deal. Often the audiologists here are going to know this already, but I'll say it out loud. People who want help with.

Who are saying, I need help with my tinnitus, if you ask them why, they'll say, it's because I can't understand what my grandkids are saying. My tinnitus gets in the way of me hearing it. So often. If you're treating a hearing loss problem, you're often going to be working with people who are calling their hearing loss problems tinnitus. So if you're providing care for hearing, you are, you may actually be directly treating what they want help for, even though they're calling it tinnitus.

And if that's not the case, still, the reduced stress from being able to communicate better is going to make a big difference for people. It's also going to add constant ambient sound.

So CBT for tinnitus is a great option to explore when it's available. Similar to CBT for chronic pain, sound enrichment is helpful not to mask the tinnitus, but to improve comfort and functional status. I specifically avoid using the word masking when I'm talking about sound. And it's because I had so many people coming back to me saying, you know what? I have to turn the sound up so loud to mask my tinnitus that it bothers me just as much as my tinnitus does.

So I completely dropped the word masking. So I talk about using sound to help you feel more comfortable, help you do the things you want to do. Once I dropped the word masking, people immediately stopped coming back to me saying, you know what? I had to turn it up so loud to cover up my tinnitus that it, like, it just went away because I wasn't using that word. And sometimes people will come to me saying, I tried sound.

It doesn't work for me. And I'll say, tell me about that. Tell me about your experience and it's usually a masking paradigm. They're saying, I tried to cover up my tinnitus, couldn't bother me. And I'll say, you know what, it's true for almost everyone.

It's rare for somebody to be able to cover up their tinnitus with a comfortable level of sound. Let's start thinking about using sound in a different way to change how you feel and how well you're able to do the things you want to do rather than trying to cover up your tinnitus. And sometimes people who previously said, I tried sound, it doesn't work for me, can make that shift into using sound to improve their quality of life.

I'm going to talk to you a little bit about proprietary devices marketed to people with tinnitus and to clinicians. So none of them appear in the current cpgs because of lack of evidence that meets the standards to be included in the body of evidence. The thing I want clinicians. So I'm talking, I guess I won't name specific devices, but there's a list of proprietary devices marketed to people who have tinnitus. If you're considering fitting somebody with one of these devices, take a look at the literature of the manufacturer that they've published in peer reviewed journals, most of them have.

And look for the adverse events, look for the side effects. I know there's one device where in some of their own publications it says like up to 30% of people say that their tinnitus became louder while they were using the device. It's important for you as an audiologist to understand that that's a real risk for tinnitus to become louder and for you to communicate that to people who are asking for these devices. I've spent decades teaching people coping strategies for tinnitus and also I've spent years sometimes fitting a handful of these proprietary devices, usually as part of a research protocol. And I have never had anybody.

So when I've been teaching or somebody else is teaching coping strategies for tinnitus, I've never had somebody say that they ended up worse off than they were before. Almost everybody says it's helpful

to some point. The worst I've heard is I don't think this helped me when it comes to proprietary devices for tinnitus. Every time I've worked with a range of them, I end up with a small handful of people crying in a booth, often saying, my tinnitus is louder than it was before. Like, I thought this was the answer.

I don't know what I'm going to do. So start saying words that make me start probing for suicidal ideation and people become really not okay. It's not most people. Most people have these devices, say they feel better. They often don't know why they're not learning coping strategies that they can apply to other areas of their life.

But there's a small subset of people who sometimes do worse. And when I was in research, part of the informed consent process, I became, over time I became really blunt with saying, it is possible that your tinnitus will become louder as a result of using this device is at risk. Okay with you? It's because it happened every time in really upsetting ways. So I lean hard into teaching coping strategies.

You know, when we teach people coping strategies for tinnitus, they'll just naturally start saying things like, you know what, I can use these strategies for my PTSD symptoms. I can use these strategies. This, some of these came up in my anger management class. I never thought about using them for tinnitus too. Kind of see this like taking on coping strategies and helping people become more adaptive in general.

It spreads into other areas of their life. When you have a proprietary device for tinnitus, I've never heard that. I've never heard people say like, oh, this is also good for my ptsd. So those are my thoughts. There are lots of devices out there.

Make for sure you read the manufacturer's literature on the side effects and talk to people about it ahead of time. There's often a much more of a hunger for these devices that make really fantastic claims and look flashy and not as much hunger for these down to earth coping strategies. But when I

see people's lives transforming in meaningful, sustainable ways, it's. It usually looks more like these boring coping strategies and less like these black boxes that are doing tinnitus magic. But that's my opinion.

A few words about leaving patients with a sense of hope about life with tinnitus. I've had a lot of people, a lot of veterans with tinnitus go to provider after provider and what they hear is that nothing can be done and it really can exacerbate, it can cause a loss of hope about life with tinnitus. So an important messaging out there, it's okay to tell and sometimes people are scared to tell people that their tinnitus can't change. It's okay to tell people that we don't have a way to quiet tinnitus. You just need to follow it up.

There are really effective ways to improve quality of life with tinnitus that we can do things not to say nothing can be done. Learn to live with it. It's all in your head. These are things that veterans have repeatedly told me they've heard and I've had veterans tell me that they don't always like it when providers disclose their own experiences with tinnitus. So just be cautious about that.

Here are some patient facing support material or patient facing clinician support materials with websites where you can access them. Here's an example of one of the slides from those patient facing materials. It can help you talk to people about what sound can do and what it can't do. So it can't cover, hide your tinnitus or make it go away, but it can help you feel more comfortable. This is a chart included in some of those patient facing materials where you can say, see this purple line?

That's your tinnitus. It's not going to change. But what can change is your quality of life. The tinnitus, it can improve.

And there's a, there's even a little video in there including those patient facing materials. It's me talking about what you can explain. Expect if you're learning coping strategies for tinnitus, I won't play it for

you. But you can access this through the slides or at the NCRIR website.

All right, looks like we're at 10:05.

Thank you, Dr. Zaugg. I think there's one more question in the chat if you want to try and answer that real quickly. Sure. So it says, do you know of any research into incorporating OAE testing into tinnitus evaluations for adults? And in my AUD program I was taught that OA testing in adults, especially older adults, isn't that helpful for hearing loss.

But recently a patient with tinnitus called our clinic and asked about OAEs. So my opinion, this is Tarazag's opinion about OAEs, is that it's doing OAE testing in somebody who has tinnitus.

For tinnitus, doing OAES isn't going to change the course of care either way. I do know there are some clinicians who like to OAEs and will see some funny in the oaes even if they've got like normal looking hearing, say, oh look, there's some evidence that there's been some damage to audio. Maybe that's why you have tinnitus as kind of like a counseling tool. I don't think it's, I don't consider it to be meaningful. It's not something I'm adding to my test battery.

It won't change the care I provide. Great. Well, thank you very much. Dr. Zauggs provided her email address here, so if you have other questions that occur to you later, please feel free to reach out to her. Dr. Zag, if you could please advance to the final slide.

I'd like to thank everybody for participating in our webinar today. I'd like to thank Dr. Zaugg for sharing her time and expertise. Please remember to complete the exam, which will be available in your pending courses, in about 10 to 15 minutes. And that concludes today's webinar. So have a great rest of your day.