Sound Bites Podcast Transcript Episode: Dr. Brandon Rawlings

Dave Fabry:	Welcome to Starkey Sound Bites. I'm your host, Dave Fabry, Starkey's Chief Innovation Officer. We've long known that veterans and active-duty military suffer from hearing loss and tinnitus at higher rates than the general population.
	A new study published in the American Journal of Audiology provides new numbers that help illustrate that stark contrast. The paper that was published at the end of March in 2023 showed that self-reported prevalence of bothersome tinnitus in the US Army is substantially higher at 17% than that of the general population, which is around 6.6%.
	The hearing health of our service men and women is very important to us here at Starkey. And since it is Better Hearing Month, we've dedicated this episode to raising some awareness to talking about those solutions. Our guest is uniquely qualified to dive into this topic. Dr. Brandon Rawlings is an audiologist and an active member of the US Army Reserves.
	He worked as an audiologist in the VA, and we'll talk a little bit about his experience, and now he's on the staff here at Starkey, working directly with audiologists in the VA, DOD and in Indian Health Service. Dr. Rawlings, thank you for joining us today on this edition of Starkey Sound Bites.
Dr. Brandon Rawlings:	Thanks, Dave, for having me. I'm excited to be on here with you.
Dave Fabry:	Well, I love that you are very patriotic today in your dress. I got some of the colors mixed here, but not all of them. I've got the blue. But I think really, first of all, I want to thank you for your service in the military and in your continued service, given that you still are an active member of the Reserves in the Army. But let's talk a little bit about first what drew you to a career in audiology?
Dr. Brandon Rawlings:	Sure. It's interesting, I was one of those interesting ones that originally was going in to becoming a speech language pathologist and started the courses. And as I was going through my undergraduate degree, I was realizing I was enjoying the audiology courses much more than the SLP classes.
	In fact, I had a teacher, and SLPs I have so much respect for them, and but I just had a teacher that, an audiology teacher that really just shined for me and made me excited about the field of audiology. And what's interesting though is that it's also kind of nice because my
Dave Fabry:	Call them out. I think one of the things I always say is tip your waiters and thank your mentors.
Dr. Brandon Rawlings:	Yeah.

Dave Fabry:	This is an opportunity for you to recognize them.
Dr. Brandon Rawlings:	Yeah, so I had an audiology professor in, so I went to Brigham Young University in Utah and I had a great professor's name was Dr. Harris.
Dave Fabry:	Yeah.
Dr. Brandon Rawlings:	And his name was Dr. Richard Harris. And he was great. He got me excited about it. And then I did go on and get my AUD and had wonderful professors at Missouri State University as well.
Dave Fabry:	Fantastic. I know Richard and he is a stellar human being and a great Professor of audiology as well.
Dr. Brandon Rawlings:	Yeah. He was great, and like I said, got us all excited about him. That's one of the reasons why I'm in the field of audiology.
	But one of the interesting things is my wife, her cousins, they have a family of people that all have hearing loss as well. And so it's been that having nice to have that connection with them as well, even in the family.
Dave Fabry:	When you went into speech path and then ultimately audiology had, did you know your wife already at that time? Was it a chicken and egg thing or had you met her and then developed the relationship and then learned of the hearing loss in her family?
Dr. Brandon Rawlings:	Yeah, so we were already married when I made the move over to SLP. And it was actually technically communication disorders was my undergraduate degree, but we were already married. But during that transition, that was one of the things that she said "You know, my cousins are all have pretty significant hearing loss."
	And so that was something that's been fun with me whenever we've been at her family reunions and stuff, being able to talk hearing aid technology with them. And it was a nice way for me to be able to get them to know them better, which is pretty cool.
Dave Fabry:	Now the real kicker is have you worked with any of them clinically? I don't want you to violate HIPAA, but one of the most challenging things in my career is when I've worked with family members as patients because I want to make sure, obviously with every patient you want to give them everything you've got, but when it's family, there's a little extra motivation and a little extra burden there.
Dr. Brandon Rawlings:	I have given a lot of guidance and a lot of professional opinion in a lot of their decisions, so I'll put it that way.

Dave Fabry:	Well said. That was good. And so then when did your active duty, you've been US Army Reserves for what, about five years now?
Dr. Brandon Rawlings:	Yep. Yeah, I'm just coming on five years.
Dave Fabry:	What prompted you, so now you're an audiologist already.
Dr. Brandon Rawlings:	Yep.
Dave Fabry:	What was your first job as an audiologist?
Dr. Brandon Rawlings:	My first job as an audiologist, so after finishing my fourth year, I actually went to, moved to Las Vegas and worked as in a private practice in Las Vegas. And so I was there for about four years and then I left there and went and at a VA in Texas for a while.
Dave Fabry:	Okay. And was that the moment in time when you started thinking about joining the US Army Reserves?
Dr. Brandon Rawlings:	It was actually when I was in Texas. I've been thinking about joining the military for a while now. In fact, my brother-in-law who just recently retired from the military, he was a recruiter for the Army, Army National Guard. Now, when we look at National Guard, what's interesting about the National Guard is they don't actually have audiologists in the National Guard. You can't join the National Guard as an audiologist. And so, but he was a recruiter for a while and he had talked with me, but whenever he would talk with me, the time wasn't right.
	And anyway, when we were living in Texas, I have a friend of mine that's an anesthesiologist who's in the Army Reserves, and he said, "Brandon, the Army reserves are actually looking for audiologists." And so I reached out to him and got the ball rolling in there.
Dave Fabry:	That's awesome. Well, and I certainly have had a lot of friends and colleagues over the years who joined the military first and then became an audiologist. And I know several who've gone all the way through to get not only their AUD but their PhD because of that demand and will pivot to this in a moment. But with the need, hearing loss and tinnitus are the two most frequently listed disability suffered by soldiers when they are giving their ears, in this case. They always say all give some. And hearing loss is very much a part of service for many veterans. And certainly the Army is an area where they frequently are exposed to high decibel levels.
	I think your story is very interesting in the sense of starting out as an audiologist and then working first in a private practice and then for the VA and then feeling the call to serve. And again, I say thank you to that, but it sort of gives you a

unique vantage point in terms of your role now. Describe a little bit what you do with Starkey in your present role?

Dr. Brandon Rawlings: Yeah, absolutely. No, and I agree that I think the experiences I've had working at the VA and working in the Army really has helped me in this position. Because I am a government services rep, a field rep for Starkey. I cover a lot of the mid-part of the country. I actually cover 12 states, and so 12 wonderful states of the US.

But that's really my job is going out and meeting with now when I say government services that that's obviously referring to the VA, DOD, and Indian Health Services as well are really those three. And even on the side of that, we also have the wonderful private practice people out there that are also community care providers that are also for the veterans that can't necessarily get into the VA in a specific amount of time, or maybe it's just easier access for them to go to a community provider. We work with them as well. And that's my job is to go out and meet with them to make sure that their patients are being taken care of, making sure their patients are hearing well with the wonderful Starkey technology that we have.

- Dave Fabry: And I don't know that we've ever discussed this, but my first job after I finished my PhD, I worked at Walter Reed Army Medical Center as a civilian working in the Army Speech and Hearing Research Group.
- Dr. Brandon Rawlings: Wow.
- Dave Fabry: And when it was still a standalone at Walter Reed in the northwest part of the district. And it was there really where I really learned the rich history of audiology in the military and specifically in the Army branch Forrest Glenn really by all regards, as the birthplace of a lot of what we've done after World War II with veterans for developing a lot of the best practice protocols, a lot of the ways that we treat sensory neural hearing loss really can be found not only in the military, but in that Forest Glenn Hospital. Which then grew into Walter Reed and is now part of Walter Reed at Bethesda. And so we owe a debt of gratitude for our profession due to treating veterans dating back to those thirties and forties at the early part of our career. And it's sort of a who's who as to some of the founding fathers and mothers of audiology and their service to this country in the military.

You're part of a long trend of tradition here.

Dr. Brandon Rawlings: Yeah, you're exactly right. What's interesting is even when I fulfill my role as an audiologist in the army, so many resources of ours come from Walter Reed. It's like, "Oh, this protocol came from Walter Reed." You're exactly right. We owe a lot of debt of gratitude to them for setting certain standards.

Dave Fabry:	Well, so let's turn a little bit to the patients that you served when you were working in the VA.
Dr. Brandon Rawlings:	Yep.
Dave Fabry:	And then now in your role, did you see that recent study published in the American Journal of Audiology?
Dr. Brandon Rawlings:	l did, yeah.
Dave Fabry:	Did it surprise you that disparity?
Dr. Brandon Rawlings:	To be honest with you, it doesn't. And that's because I have seen this myself in both the VA and as a role of playing an audiologist. Now I'm in playing. It's not like a, I'm in a play, but being an audiologist in the army as well. What's interesting is that I just returned home from a mobilization.
	I was mobilized at Fort Bliss in El Paso, Texas. And my job over there was just, I was as in an audiology clinic and I was the loan audiologist. And for all of the soldiers that were getting deployed and coming back from deployment, every one of them, it's part of your readiness of being able to be deployable. They have to go through our clinic and get they're hearing tested. And so we had some sometimes up to 500 people coming in per day for hearing tests. And I had technicians that were doing most of the testing, but for those of fail twice, they saw me for more diagnostic testing. And it was interesting just having that experience because I saw there were so many soldiers who are constantly shooting, had just come back from deployment. And man, so many of them had that noise notch of 4k.
	And so many of them reported that tinnitus. And so when I see that study, just from my personal experience, it doesn't surprise me at all because I'm seeing it firsthand. I'm seeing the effect that being in the military does on the hearing and on the auditory system.
Dave Fabry:	And it really begs the question, because you are seeing a lot of these young soldiers, presumably many of them were only a few years into their term of service, and they already had that noise notch because as you say, of that exposure to weaponry, gunfire, et cetera. And one of the issues, it would seem strange for hearing aid company to be concerned about preventing hearing loss before it occurs. But it seems like in the military in particular, there is an opportunity to ensure that those veterans, to the degree that they can be, are protected against noise-induced hearing loss.
	And wondering a little bit about the attitude, I know when I was 20 years old, 25 years old, I kind of thought my ears were bulletproof. I was a drummer, I am a drummer, rode motorcycles. And I can remember before, very early days before I really started thinking about audiology, just hitting the symbols until my ears

rang. And I thought that was really cool, and now they never stop. But I thought I was kind of bulletproof because in many cases it was a temporary threshold shift that I was experiencing. But over time, low and behold, that's turned into a permanent hearing loss that I now have in the high frequencies in particular, due to that noise exposure.

When you were counseling some of these young soldiers about that they already had a noise notch, did you encounter any sort of like, "Yeah, well that's part of what I'm doing, I know that it's an occupational hazard." Or were they genuinely concerned about losing their hearing when you're, like you said, young and feel bulletproof?

Dr. Brandon Rawlings: It's interesting because I saw some of both and these soldiers, so obviously when I make reference to them having those noise notches from shooting, certainly there's going to be other loud noises they are exposed to too. There're all kinds of, there's grenades, there's bombs, there's just so many different loud noises. And so you get these young soldiers coming back from deployment, and some of them, you tell them they have a noise notch. And then some of them, I mean noise notch hearing losses, some of them are like, okay, that doesn't surprise me. And then some of them are very concerned, and some of the reasons why they're very concerned is that in order to stay deployable, in order to stay in the military and stay deployable, you have to be able to have still have somewhat good of hearing. One of my roles as an audiologist in the army is to run several tests to determine is this soldier still deployable?

> If this soldier was out in combat, would they be able to hear the commands being yelled to them by their leader out there, right? By their commander? And it was sad because I had soldiers, in fact, I had one young soldier, early twenties, just got back from deployment and he had been exposed to multiple IEDs and he came back and his hearing was just shot. And I ran several tests and he failed most of them. And I had to be the barer bad news to tell him that he was going to have to be essentially kicked out of the army in one sense or another because his hearing was so poor. And so there are some soldiers that were so nervous when I was testing him because they were like, "Well, am I going to be able to stay in the Army?"

But then there are all those others too, that when they find out that they have hearing loss in general, they're like, "What?" I saw just several different reactions to me telling these soldiers that they have hearing loss.

And once again, it was, I had to, it's hard sometimes to be that to beat, have to be the one who tells them those things, but we just have to be up frank and honest with them, and especially telling them some of this is preventable.

Dave Fabry: Yeah, I think a lot of the audiologists who work with civilians exclusively don't really consider. We talk about stigma, we talk about accessibility and affordability. Well, any veteran that has lost his or her hearing due to noise exposure appropriately can receive hearing aids at no cost. That affordability isn't an issue. The accessibility to a professional, we know because of that increased prevalence of hearing loss and tinnitus in the military is sometimes hard and challenging to get in to see a professional.

But I know the VA is staying on top of that to provide, as you mentioned, those community-based as well as hospital and clinical-based access to veterans so that they can be seen as soon as possible. But I think a lot of times you don't think about that individual worried about their livelihood if they have hearing loss as being an issue. Similar to police officers and firefighters in some areas. It's the ability to hear sounds and to prevent loud sounds from becoming uncomfortable, but then also the spatial awareness. I think for the military that's particularly important for those of us in civilian life, it can be sort of a nuisance. But for a soldier that can be the difference without any hyperbole at all between life and death.

Dr. Brandon Rawlings: Yeah, absolutely.

Dave Fabry: The issue is certainly going back to my period when I was at Walter Reed, I was fortunate to serve on the selection committee that would help select those products that would be offered to veterans and other government service employees at the time. And we've seen tremendous advances in the past decades for technology that can not only help individuals hear better, they can be connected to their phones, so they can stream, they have a host of other features. And Genesis AI is now on the government services contract. And I know that you've been waiting for this product. We have to be developed and introduced, and this really, the latest technology we have available is now available to veterans on the contract. Talk a little bit about some of your favorite features that are available now for veterans, for DOD, for Indian Health Service, et cetera?

Dr. Brandon Rawlings: Thank you, Dave. I can't begin to tell you how excited we are to have this available now for all the government services audiologists, because it is an exciting time to be a Starkey and the Genesis AI hearing aids are just unbelievably cool, and they can just give these veterans so much benefit. And not only veterans, but active duty and Indian health patients as well.

> Some of my favorite features is number one, starting with the sound quality. Every time I put the Genesis AI hearing aids on my ears myself, I just think it's such a fantastic sound quality. When we were at JD Vac in March, we had the opportunity, we went to dinner and I had the opportunity to put the Genesis AI hearing aids on, and that was in Las Vegas. That was a really noisy environment, and they were just phenomenal, especially when I activated the Edge Mode and then it was even better.

> And so that's one of the exciting things is about the Genesis AI. It's a refresh and this sound quality is new and it's so crystal clear and I just love it. And so really that sound quality, the patients are going to get such a great benefit and improvement in their quality of life utilizing these hearing aids. But also, you

Dave Fabry:	 can't beat the sound quality, Dave, the sound, or sorry, the sound quality. You can't beat the battery life, the battery life of these hearing aids 51 hours on a full charge. And especially the thing that seems to be one of the biggest eye-openers is when I tell the audiologists about our bi-cross system, and even with a bi-cross is on a full charge, 29 hours of battery life. That's just incredible. And that can really, so looking back on our veterans, we have so many that have maybe had an explosion on one side and maybe one side is a lot worse than the other one. And so that's an area bi-cross system can be hugely beneficial for them. And with 29 hours of battery life, that's that. That's exciting. It's exciting time to be Starkey. Yeah, you hit on a couple of really important points. I mean, the military does see more than its fair share of cross and bi-cross. Contralateral rounding them a signal and bilateral amplification on a better ear, even if there is some hearing loss. And then routing it over from that other side, IED explosions are unfortunately a perfect example of when that might occur. And 29 hours for a bi-cross solution is nothing short of phenomenal. 51 hours out of the RT, the RIC with a telecoil in a rechargeable battery is again, people are saying, well, why so
	much? You're blowing it out of the park. But I think one of the important things that we all know whether it's a cell phone or a computer battery, or frankly any piece of electronic equipment that uses rechargeable batteries, we know over time those lithium-ion batteries do degrade somewhat.
	And we didn't build this just for today for 29 hours of streaming more hours than there are in a day for most people, unless they're traveling or they're being deployed somewhere. And going, those days can become very long, but even three to four years from now within the service life of hearing aids that will be provided for active-duty, veterans, Indian Health Service as well, even after three, four years, you're going to still get all day battery life all day streaming on a cross or bi- cross solution. And so that's really the ticket is we want to provide that peace of mind and comfort for both the professional and for the patient that they're going to be able to get all day use regardless of their circumstance now and in the future.
Dr. Brandon Rawlings:	Absolutely.
Dave Fabry:	And the other thing I think that people should be aware of is that we've made important improvements in the tinnitus functionality on Genesis AI.
	Do you want to talk a little bit about that? Have you tried that yourself or had any feedback so far from audiologists?
Dr. Brandon Rawlings:	I have, yeah. I've tried that out and I've done person used that personalization feature in there and been able to personalize the tinnitus masking to the

	patient. I've assisted some audiologists with that and it's just awesome. And what's interesting though, Dave, is a lot of people don't realize that we have that feature available within the software. And that's one of the things that's really good to educate everyone on. Everybody knows that most manufacturers have the tinnitus masking in there, but they don't realize that we have the ability to personalize that to the patients, which is very beneficial for them.
Dave Fabry:	They can change it to their audiogram, use white noise or another personal stimulus, and then even vary the rate at which there is some temporal fluctuation, slow, medium, fast.
	And I think being able to change that, the end user can change it as well within the App. We like to say with Genesis AI, it's all new everything. And with the new fitting software, we call it Pro Fit, there are some important advancements for ease of use and really considering the audiologists working in these facilities, streamlining that process to get from the box to a first fit in four clicks. And that Minute Fit functionality really I think was built specifically for the VA audiologist to get them to that starting point from the box to the patient's ears with that first fit in just as little as four clicks. I think that's a really important functionality that I think they'll find. And yet we didn't throw the baby out with the bathwater. I think a lot of people said, well, wait a minute. I really liked Inspire as it was, but I think that Minute Fit is an important one.
	Can you think of any other features that we incorporated in Pro Fit? I've got a couple, but I'll give you an opportunity to say some of your favorite features in the fitting software?
Dr. Brandon Rawlings:	The new Pro Fit fitting software is just awesome. And you're right, it really is built for the VA in order to help them. If there's anything that VA audiologists tell me, so they want to be able to get through these faster and want to make it easier. For those that you've said that we're worried about Inspire, we still have that pullout menu on the side of it. So it's just like the Inspire. For those that are, they can still do that, but there are a lot of great features that are going to help the patient. Especially at the VA.
	A couple of them. Number one is, let's look at e-STAT 2.0. And that's one of the things that is really important to audiologists at, especially at the VA, but audiologists all around the country, is that ability to be able to provide good sound quality, but also be able to run the real ear and do it in somewhat of a reasonable amount of time. And that's one of two of the features we have that are going to help with that patient, help the audiologists to help their patients and get through an appointment even faster is number one, the improvement with the e-STAT 2.0.
	And so the improvement we're getting with the bumps in those lower tones as well as the high frequencies, and it's taken them even closer to meeting those real ear targets. But also one of the things that's really catching on that people are loving is that auto RM target matching that we can do right through the

software in and of itself, that's allowing them to run the real ear even faster in there as well.

- Dave Fabry: About half the time, right?
- Dr. Brandon Rawlings: Half the time.

Dave Fabry: And yet you can still go in and fine tune beyond that if you wish so.

Dr. Brandon Rawlings: Absolutely. Yeah, absolutely. But you're exactly right that the ability to do fitting in only four clicks, that's incredible. And where we really are saving these audiologists time, and that's really what it's about. And the other thing that I want to mention along with that is just the fact that our hearing aids with the Genesis AI hearing aids are even more durable than they've ever been. They now have that eight layers of protection in there that are going to make those hearing aids even more durable, protecting them from the moisture. They're not going to be seeing the patients back much at all anymore because they're being so protected so well. And so this is this huge advancements that we're giving to the audiologists here that we're really excited about.

Dave Fabry:Yeah, it's really beyond IP68, which is the highest rating that a hearing aid can
achieve. And a couple other points that I think of the Snap Fit 2.0.

Dr. Brandon Rawlings: Yes.

Dave Fabry: And really it's a smart ID so that now when they attach the receiver to the RIC device, Receiver-in-the-Canal device and fulfill that component with the appropriate length and power of the receiver, and for the left ear and the right ear, those will automatically be read up and incorporated in the fitting so that they don't have to go and read the serial number, which gets increasingly difficult for me to do and saves time. And then as well, within the feedback initialization, I encourage professionals to use that, initialize it on every patient, do it in their ears, not on the table because it takes into consideration and personalize and optimizes the venting parameters with the length and the depth of the insertion in the patients ear to really ensure that that first fit is getting there in those four clicks when they're running through the steps.

And then the last thing I'll point to as a particular favorite of mine is Self Check because it helps us triage whether the patient has had a change in their hearing, whether they need to come in to see in the facility, whether they need to get a new audiogram to determine that there's been a change, whether there's a need of a repair for the device or whether it's simply wax that needs to be removed and rerun the Self-Check feature. And I think that's a way to really empower that end user to know a little bit about what treatment they need next, whether it's a repair, a cleaning or an assessment. And like I said, I think there's so many features that we could go on another hour based on that alone, but I think so many features that are tailored to the veteran in terms of better hearing and tinnitus during Better Hearing Month, as well as catering to the professionals so that they can see more patients more efficiently with greater outcomes throughout the day.

Dr. Brandon Rawlings: Absolutely. And I want to add to this too, Dave, is that one of the things that we have to remember too is that at Starkey, we really do such a good job at emphasizing, on treating our veterans and treating our military, but we also have such great resources as well as far as being able to help prevent a lot of this hearing loss as well. And that's why we're one of the greatest resources we have available is also our Sound Gear line. And that can be such a huge asset for our veterans, for our military, for our Indian health patients, on being able to even prevent that hearing loss from the beginning. I know that when I was doing that mobilization, a lot of these soldiers, they revealed to me later that, "Gosh, this hearing loss probably happened when I didn't wear my hearing protection on the range."

And we as audiologists, that's certainly within our scope of practice to be able to help prevent the hearing loss as well. And that's another thing that the VA has available to them as well as our Sound Gear line to be able to even help prevent it in the first place along with being able to treat it as well.

Dave Fabry:For sure. And even post-military service, if they're engaged in noisy hobbies,
preventing that hearing loss from continuing or accelerating is, and thanks for
making that point about Sound Gear.

As usual with the conversation between you and me at the time, just flies by. And I thank you so much during Better Hearing Month for sharing your story, your journey, and also thank you for your service to the country. Thank you for your role with Starkey, and I hope to have you on soon again to talk a little bit more about your journey as it continues forward.

And for those of you listening, if you enjoyed this episode of Sound Bites, please like and subscribe, share with your colleagues if you would, your networks. We also want to hear from you, if there are any topics that you'd like us to discuss and bring on other experts like Brandon to talk about their experience and solutions to some of the questions that you might have.

Brandon, thank you again for being here today and I look forward to seeing you again soon.

Dr. Brandon Rawlings: Thank you, Dave. Thank you. Thank you for inviting me on. It's been my pleasure.

Dave Fabry: It's my pleasure. And to our listeners, thank you for listening to this podcast and continuing to support us. We look forward to seeing and hearing you again very soon.