

The Official Publication of the Canadian Academy of Audiology

What's In a Hearing Number? An Interview with Frank Lin, MD, PhD

Published September 10th, 2025

Frank Lin, MD, PhD

Editor's Note: Since the original publication of this interview in HearingReview.com, a new app has been developed which is available on both iOS and Android. Go to www.HearingNumber.org



Hearing care professionals rely on many tests and evaluations to determine a patient's hearing health needs. But all of the resulting data can seem foreign and incomprehensible to people outside of the field. Frank Lin, MD, PhD, a practicing ENT and professor at Johns Hopkins University Bloomberg School of Public Health, sat down to discuss the Know Your Hearing Number

campaign and why this concept can help break down barriers to hearing care.

The Hearing Review: What is the Know Your Hearing Number campaign? And what are its goals?

Frank Lin: The Know Your Hearing Number campaign is an initiative by the Johns Hopkins Bloomberg School of Public Health that introduces a common way for people to talk about hearing.

Hearing connects us to the people and world around us, but the average person doesn't have the language or context we need to understand and talk about it. That's where the Hearing Number comes in, which is simply what we're calling the four-frequency pure tone average (PTA4).

The Hearing Number introduces an approachable, widely understood metric for hearing, destignatizes hearing loss, and improves fluency in hearing loss as a public health issue. When people know and track their Hearing Number throughout their life, it moves people toward thinking about their hearing as a dimension of their overall health, and away from thinking about hearing only in the stigmatizing context of loss or aging.

The Hearing Number/PTA4 itself isn't a new concept—it's the entire basis of how the World Health Organization, ASHA, and other organizations classify hearing. While there are many ways to measure hearing, the Hearing Number is an easy concept for the average person to grasp: it represents the softest speech sound someone can hear. The higher someone's Hearing Number, the louder sounds need to be for that person to hear them.

The goal of the campaign is to empower people to know their Hearing Number and how it changes over time, so they protect their hearing and embrace strategies and technologies to optimize their hearing throughout their lives.

HR: Audiologists already conduct testing and share results with their patients. Why is the Hearing Number needed as a concept?

Frank Lin: As a practicing ENT, one of my routine challenges in talking with patients about their hearing is that we have many ways to measure hearing, but the average person has very little context for understanding this important sense in the first place: What does "normal" hearing mean? what are hertz or decibels? Even the basic categories we use are vague and slightly problematic; someone's hearing loss might be considered "mild" or "moderate" by medical standards, but if it's having a big impact on someone's life it's not mild or moderate to them!

It may seem like an oversimplification to choose a single metric for hearing, given that our field has no shortage of ways to measure hearing. If the PTA4 is only one of the many ways that we hearing care professionals (HCPs) measure hearing, how did we pick it as the Hearing Number? The PTA4 is universal, accessible, and actionable: There are many hearing measures that give us nuanced information about how people hear speech. But other measures depend on language, and any hearing measure that depends on language is not universal. The PTA4 is used by hearing specialists all over the world, so no matter where your hearing is tested, your PTA4 is the same.

The PTA4 is accessible: right now, iOS users can get their Hearing Number using the Mimi or Jacoti apps, and by end of year both iOS and Android users can access their Hearing Number using

a Bloomberg School-branded smartphone app that's in development now.

Lastly, the PTA4 is actionable: if you know your Hearing Number you can find communications strategies and technologies that help you optimize your hearing.

HR: How can audiologists and other HCPs utilize the Hearing Number when talking with patients?

Frank Lin: We know that health and wellness metrics give shape to aspects of health and make them tangible and neutral. Introducing a Hearing Number and encouraging people to monitor their hearing across their lifetime aligns with broader macroscopic trends of empowering consumers with their own health metrics to understand and optimize their health?

Patients get overwhelmed by all the data around hearing test results. A universal metric for hearing that can be accessed easily can help patients understand their hearing and give them the vocabulary to talk about it.

The Hearing Number doesn't replace the ways we measure hearing; it offers a very understandable anchor point for describing hearing, much in the way that visual acuity, blood glucose, total cholesterol, and blood pressure are commonly used health metrics that are familiar to both clinicians and the lay public.

As part of this campaign, we are creating materials geared to primary care clinicians that will help integrate the Hearing Number into discussions of overall health. Right now, primary care doctors rarely feel empowered to discuss hearing with their patients and how important it is to health. I've recently written a clinical practice piece on hearing loss for the New England Journal of Medicine that specifically introduces the concept of how to use the hearing number in patient care.

Further Reading

Hearing Care Best Practices: Bridging Gaps for Adoption

HR: What feedback have you gotten from patients about the Know Your Hearing Number campaign and why it's helpful to them?

Frank Lin: I started using the Hearing Number with patients about two years ago, and it has really resonated. For example, any hearing care professional has had the experience of a patient saying they're only getting a hearing test since their spouse made them come in. Descriptive phrases like telling someone that their hearing test then shows a normal to mild sloping sensorineural hearing loss don't resonate. Instead, giving someone the quantitative information that their hearing number is now a 27 in both ears when they are likely used to around a 0 or better can often be a bit of a wakeup call. Having the objective number gives someone the clear understanding that something has changed with their hearing and that the problem isn't just with their spouse mumbling all the time

HR: What are your hopes for the future of the Know Your Hearing Number campaign?

Frank Lin: My goal with introducing the Hearing Number is for every teenager and adult around the world to understand, measure, and track their own hearing, because enabling consumers to have access to health metrics can change behaviors at an unprecedented scale.

We want to make hearing something that people of all ages understand as an important part of overall health, that they track the same way they do other aspects of health and wellness, like steps, sleep, weight, blood pressure, and so on, and that they act on, either to protect their hearing or to adopt strategies and technologies as they need them.

For more information about the Know Your Hearing Number campaign, visit hearingnumber.org

Photo: Frank Lin, MD, PhD

From: What's In a Hearing Number? An Interview with Frank Lin, MD, PhD | The Hearing Review. Used with permission courtesy of Hearing Review