

How entrepreneurs can integrate hearables into their clinic

BY BRIAN TAYLOR

Brian Taylor provides an interesting perspective on market segmentation of the hearing impaired population, and how as clinicians and entrepreneurs we need to be able to recognise the different approaches that are required to address the large percentage of the aging population with hearing loss who choose not to seek audiological intervention. Hearables is a concept he discusses with advice on how to successfully integrate them into our practices.

For decades clinicians have wrestled with a frustrating problem: an abundance of individuals with age-related hearing loss who too often fail to seek help for their handicapping condition. Further, these same business-minded professionals are beginning to realise the provision of customisable amplification devices, predicated around several office visits, is not valued by a large swath of individuals with hearing loss, and a different approach is needed. A summary of the data to support this thesis includes the following:

- Approximately 75% of the population with hearing loss has a mild to moderate high frequency impairment, yet less than 10% of this group uses hearing aids [1]
- There are a significant number of individuals with normal audiograms that have self-reported problems with their hearing. Tremblay et al. (2015) suggest that 12% of adults fall into this category, and it is likely none of them consider themselves candidates for traditional hearing aids [2]
- Stigmatisation related to ageing is a probable factor, as less than 7% of adults between the ages of 50-69 with hearing loss use hearing aids [3]
- The challenge of low uptake of hearing aids is not confined to stigma, as less than one-quarter of adults 80 years of age and older with hearing loss wear them [3]
- Although high cost is a culprit for non-use of hearing aids, perhaps it is not as significant an issue as many believe, as countries with socialised healthcare programmes

have essentially the same market penetration as nations where hearing aids are mainly a private expense.

This data suggests the audiology profession has built a clinical system that fails to appeal to a large swath of patients with age-related hearing loss. Simultaneously, it also represents a significant opportunity for the entrepreneurial audiologist, poised to create demand for new and innovative products and services.

To address this huge unmet need requires audiologists to rethink their value proposition to the market. This starts with an ability to recognise we are working with two completely different segments of the hearing impaired market. One segment is those with greater degrees of hearing loss. This segment of patients often need more office visits because they have been coping with their condition longer and their hearing loss and its sequelae are more complex. Historically, this is the market segment that we have built

successful businesses around. On the other hand, there is a second segment of the market, often younger with milder losses, summarised in the bullet points above, that do not value the additional services wrapped around the provision of programmable hearing instruments. The critical question is, how can we offer services to two uniquely different segments of the market?

The morphing of traditional hearing aids and consumer electronic devices into a new category of devices, called hearables, provide the business savvy clinician with part of the answer to this question. Hearables provide an opportunity to address the needs of those patient categories listed above who often live with the real world effects of hearing loss, but fail to seek help. Hearables are a broad category of products, comprised of personal sound amplification products (PSAPs), smartphone apps (e.g. EarMachine), wearable augmented reality devices (e.g. Doppler Labs) and directed audio devices (e.g. Hypersound). All of these hearables offer some combination

Hearables: Morphing of Two Different Technologies

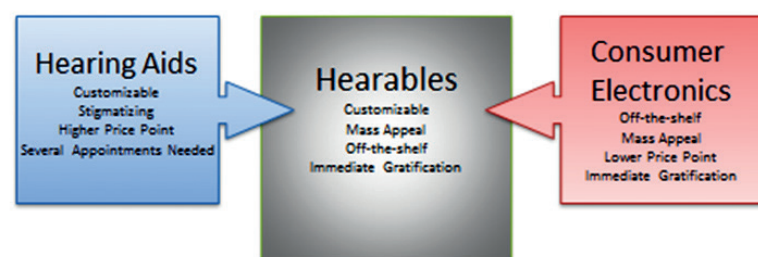


Figure 1. Some of the key attributes of hearing aids and consumer electronics morph to create a new product category called hearables.

Figure 2.

Listening to Television With a Hearing Loss:
TV Device or Hearing Aids?

An Interactive Decision Aid

Check all statements that apply to you

If you like a statement, check ☒ the box
If you dislike a statement place an ☒ in the box

My hearing problem causes arguments with family members. The TV is too loud!	A TV device is less costly than hearing aids	Hearing aids are expensive, but they can be used in all situations
I have difficulty understanding dialog, especially fast talkers, female talkers or foreign accents.	No long clinic appointments needed	Usually, 3-4 clinic visits are needed, to fit, fine-tune and troubleshoot hearing aids
My difficulty with the TV is affecting my personal and social life. My spouse or other family members can't be in the same room.	A TV device is easy to install, use and maintain	I will have to learn how to use hearing aids; regular cleaning and care are needed
I have difficulty when the TV is at normal volume. I can hear it, but cannot understand what is being said.	Device only works for TV; other listening situations may still be difficult; indoor use only	Hearing aids are designed to enhance speech understanding; they can be used in all situations
The speech is too soft but the music is too loud. I can't find the right volume.	Device overcomes distance and background noise to isolate the TV signal and improve viewing experience	Hearing aids may not solve my TV problem; I might need to buy extra devices that connect hearing aids to the TV
The more items you checked, the more likely it is that you need help listening to TV	Device does not disturb others; family members can view TV normally	Hearing aids do not disturb others; family members can view TV normally

If you feel ready to address the difficulties, your Audiologist can help you to decide on the next step.

TV Device
Total ☒
Total ☒

Hearing Aids
Total ☒
Total ☒

Do your responses appear to favor one over the other?
With your audiologist, explore your preferences and dislikes.
Discuss them together to aid your decision

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of features from both traditional hearing aids and consumer electronic devices, as per Figure 1.

It is probably a mistake for clinicians to offer hearables in their practice relying on the same protocols used to deliver traditional hearing aids. One; many hearables can be sold directly to consumers, thus licensed professionals risk being eliminated from the delivery process. Two a large portion of the; untapped market probably doesn't value the current, relationship-based hearing aid delivery process, predicated on several follow-up visits. To fully capitalise on the successful integration of hearables into clinical practice, clinicians must recognise that many of the individuals in this untapped market value an arms-length, rather than a relationship-based transaction.

An arms-length transaction necessitates the need for an interactive website where patients can self-assess their functional communication ability

using a computerised and validated questionnaire, such as the abbreviated version of the Hearing Handicap Inventory. This website would also have Patient Decision Aids (PDAs), like the one shown in Figure 2, which consumers could use to make their own decisions about products to try.

Patients that have significant hearing handicap on the self-report would be strongly encouraged to schedule an appointment for a comprehensive assessment with the clinician. Others would be free to buy vetted hearables directly from the website. Patients that buy directly from the vetted list of hearables on the clinic's website would have an opportunity to visit the clinic for a fee-for-service appointment in which the hearable is acoustically and physically matched to the ear. After all, regardless of product category, audiology must own quality control in the ear.

Creating demand for new products and services should not be confined to vetted

hearables on a website. Clinicians must add new wrinkles to their existing clinical protocol, such as using more effective patient-centered communication focused on the stages of change model, screening for cognitive decline, pre-educating all patients on their device options, expanding their aural rehabilitation repertoire and conducting more demonstrations of hearable products. The current uncertainty within the profession, much of it a result of the morphing of traditional hearing aids and consumer electronics, is an opportunity for entrepreneurial audiologists to experiment with innovative service delivery options.

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Declaration of competing interests: Brian Taylor is employed by Turtle Beach, the manufacturer of Hypersound.

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