

## OTC Hearing Aids: A Call to Action

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The letters "OTC" are rendered in a large, white, bold, sans-serif font with a soft blue glow effect, set against a light blue background.

Hearing loss is a prevalent and costly condition. Most individuals with hearing loss could benefit from intervention, yet hearing loss typically goes undetected and remains untreated. When hearing loss begins to interfere with communication and simple adaptations to the communication challenges fail, persons with hearing

difficulties tend to seek treatment. The delay in seeking treatment seems to be universal.<sup>1</sup> Simpson and colleagues recently reported that average time from audiometric testing including a hearing aid recommendation and communication strategies counseling was 8.9 years.<sup>1</sup> While not a clinically or statistically significant difference, individuals aged 65 or younger averaged 9.2 years to adoption while those older than 76 years averaged 6.6 years to adoption. The likelihood of hearing aid adoption was tied to severity of high frequency hearing loss and perceived social effects of hearing loss based on scores on the Hearing Handicap Inventory (HHI). In short, poorer hearing and more self-assessed hearing handicap in social situations significantly decreased the delay in seeking treatment. Notably, the hearing aid adoption rate of 29% was quite low in their sample.

In their MarkeTrak 10 survey Powers and Rogin reported that hearing aid owners waited approximately four years before discussing their hearing difficulties with a

“general medicine doctor,” waited an average of 4.2 years before proceeding with their first hearing test and waited on average 4.6 years before getting their first hearing aid.<sup>2</sup> The majority of hearing aid owners surveyed had a hearing test and reported receiving a recommendation for a hearing aid. In contrast, about 70% of the non-owners who were surveyed reported having a hearing test but the majority were not given advice about hearing aids by the hearing care professional. Among non-owners, the major reasons for not moving forward in their hearing journey included the fact that: (a) they heard well enough, (b) they could not afford hearing aids; (c) hearing aids were too expensive; and there was no coverage for hearing aids. The hearing aid adoption rate in their sample was 34%.

Finally, Fischer et al followed a sample of older adults with hearing loss to track their hearing health behaviors.<sup>3</sup> The 5-year incidence of hearing aid use in their sample was 14.3%. The 10-year cumulative incidence of hearing aid acquisition was 35.7%. Self-perception of hearing difficulty, and having friends or relatives thinking that the person had hearing difficulty were instrumental in moving participants further along in their hearing journey. Among participants followed for ten years who reported having been told that they would benefit from a hearing aid, the major reasons for not acquiring hearing aids was not needing one, the cost, the inconvenience and the poor hearing aid use experience of others.

Despite the enormous technological advances which have taken place in the ten-year span over which the above studies were conducted the conclusions are quite humbling. Hearing aid adoption rates remain low and persons with hearing loss tend to delay seeking help for their hearing difficulties.

## **It is About Reframing Your Practice**

Fischer and colleagues offered an interesting observation when trying to understand the conundrum surrounding hearing help seeking behaviors.<sup>3</sup> They suggested that if a hearing aid is purchased too early in the journey a benefit substantial enough to offset the time, effort, and cost involved in using the new hearing aid may not emerge; whereas if hearing aid adoption is postponed too long after the individual has adopted compensatory mechanisms, additional difficulties adapting to amplified sound may emerge.

In my opinion this is where the disruption potentially posed by availability of OTC hearing aids comes in to play. Yes, OTC hearing aids represent a new category of hearing aids that will soon be available for purchase in stores and online; Yes, OTC hearing aids will not require an in person consultation with a licensed hearing health care professional or a prescription, Yes OTC hearing aids may be a more affordable option; Yes, persons with hearing loss will be able to control and customize the unit (s) as they see fit. However, what will the opportunity cost be or the cost to the consumer incurred by not reaping the benefit associated with the best alternative choice, namely an encounter with a hearing care professional who has the expertise to recommend the intervention most appropriate to the needs of the consumer? An OTC purchase will by definition require a sacrifice on the part of the person with hearing loss. In short, in the interest of cost saving, the consumer may forgo the many benefits associated with working with a licensed hearing care professional.

The availability of OTC hearing aids is a wake-up call for audiologists and is an opportunity for us to reach the large number of persons with hearing difficulties who are under- served. Recall that only one third of those who could benefit from hearing aids actually own them and up to one third of persons who own hearing aids do not use them regularly.<sup>4</sup> We must accept the latter reality and challenge, and make every effort to reframe our delivery model. We must disentangle our services from the products we sell and spread the word that for persons with hearing loss to receive the full benefits of amplification they must work with a licensed hearing care professional. The value of an audiology-based (AB) best practice approach to hearing aid purchase as compared to a consumer decides approach is clear based on a number of recent publications.<sup>5</sup>

In terms of reframing we have to target two distinct audiences; persons with hearing loss who have low activation levels and are not seeking help for their hearing difficulties and consumers who have purchased hearing aids but continue to require assistance to enhance auditory function with hearing aids (e.g., emotion-based counseling aimed at improving quality of life and facilitating acceptance of problems remaining despite hearing aid use).<sup>6</sup> In short, help your hearing aid users remain connected to life through effective use of their hearing and hearing aids. Further, help these customers become ambassadors for what you do, namely enhancing how they experience life with the gift of hearing/communicating. Make sure to distill the human

from the technology, your north star should be about caring rather than curing. Adopt the mantra that through your focus on the person/family rather than the technology you are actually disrupting the disrupter (OTC).

## **It is About Patient Activation**

Advocates for OTC contend that consumers will make more prudent hearing health care choices when they are given financial incentives and improved access. Promoters of OTC assume that the latter combination of incentives will increase activation levels or will automatically convert “postponers” into effective and informed managers of their hearing health and in turn, by reducing costs, the outcomes will improve.<sup>7</sup> When it comes to driving traffic to your office by reaching “the postponers” (persons with low activation levels) applying principles of human behavior which is shaped by personal and social factors will be critical. Based on my review of the literature on management of chronic conditions, patient activation or engaging persons with hearing difficulties who have not yet taken action in self-management of their hearing health is critical. Stated differently, we need to find ways to reach and equip “the postponers” with the knowledge, skills, and confidence they need to actively participate in and self-manage their hearing health care.<sup>8</sup> In short, reduced access and postponement of timely care may merely reflect challenges in understanding that the burden of hearing loss extends well beyond the ear and that hearing and the ability to effectively communicate are health care priorities.<sup>9</sup>

To explain, it is well accepted that persons with higher activation make greater use of preventive care, take less time before seeking needed health care, and enjoy greater medication adherence.<sup>10</sup> Patient activation is strongly related to health outcomes and chronically ill persons with higher activation scores are more likely to follow through on recommended treatments and importantly can better self manage their conditions.<sup>10-12</sup>

In mining the data from the Medicare Current Beneficiary Survey (MCBS) nationally representative rotating panel survey administered by the Centers for Medicare and Medicaid Services, we found that self rated hearing difficulty was strongly associated with level of patient activation.<sup>8</sup> In our sample, close to 50% of respondents had some degree of hearing difficulty and 13% of respondents reportedly wore hearing aids. Not only did persons with self rated difficulty hearing have lower overall patient activation

they had lower scores in each of the domains listed in Table 1.

**Table 1. Areas in Which Persons with Hearing Loss are Disadvantaged on the Patient Activation Supplement**

1. Confidence in seeking and recognizing need for health care
2. Communicating with their physician
3. Seeking information about health care concerns

Behavioral interventions which entail training individuals to better participate in their own health is key to optimizing activation. Steps to be taken include encouraging small achievable steps for the low activated individual, focusing on more difficult behaviors and helping to maintain behaviors for those at higher levels of activation.<sup>11</sup>

According to Hibbard and colleagues at the early stage of activation interventions must be designed to increase knowledge about their condition and treatment options.<sup>10</sup>

Incorporating a space in one's office where individuals can try less costly alternatives such as OTC devices or hearables might be an option to consider. As people advance in their stage of activation they will need interventions designed to increase their skills and confidence in self-management. For example, communication strategies training to optimize speech understanding in sub-optimal listening environments to foster self efficacy and engagement might be the next step. Once the highest stage of activation is reached the type of intervention will likely change, as perhaps will be the desire to invest more in one's hearing health and well-being.

In sum, persons with hearing difficulties who have postponed seeking assistance likely represent an untapped resource that if tapped, may have payoffs that accrue not only to your practice, but most importantly to your patients.<sup>11</sup> By reframing your practice and using social media to spread the word that hearing loss is on the rise, is costly and there are solutions that begin with a visit to a hearing health care profession, you may become a successful disrupter/innovator expanding options for persons with hearing difficulties. In this way you will be expanding access and helping to meet the needs of the growing number of persons with hearing loss.

## References

1. Simpson A, Matthews L, Cassarly C, Dubno J. Time from hearing aid candidacy to hearing aid adoption: A longitudinal cohort study. *Ear and Hearing* 2018;40. DOI: 10.1097/AUD.0000000000000641
2. Powers TA, Rogin CM, MarkeTrak 10. Hearing aids in an era of disruption and DTC/OTC devices. *Hearing Review* 2019;26:12–20.
3. Fischer ME, Cruickshanks KJ, Wiley TL. Determinants of hearing aid acquisition in older adults. *Am J Public Health* 2011 Aug;101(8):1449–55. doi: 10.2105/AJPH.2010.300078. Epub 2011 Jun 16.
4. Hartley D, Rochtchina E, Newall P, et al. Use of hearing AIDS and assistive listening devices in an older Australian population. *J Am Acad Audiol* 2010;21;642–53.
5. Humes L, Kinney D, Main A, and Rogers S. A follow-up clinical trial evaluating the consumer-decides service delivery model. *Am J Audiol* 2018;28:69–84.
6. Bennett R, Laplante-Levesque A, Meyer C, Eikelboom R. Exploring hearing aid problems: Perspectives of hearing aid owners and clinicians. *Ear & Hearing* 2018;39:172–87.
7. Von Korff M., Gruman J, Schaefer S. et al. Collaborative Management of Chronic Illness. *Ann Intern Med* 1997;127:1097–102.
8. Chang J, Weinstein B, Chodosh J, Greene J, and Blustein J. Hearing loss is associated with low patient activation. *J Am Geriatr Soc* 2019;67:1423–29.
9. Wilson R, Tucci D, Merson M, and O’Donoghue G. Global hearing health care: new findings and perspectives. *Lancet* 2017;390:2503–15.
10. Hibbard JH, Stockard J, Mahoney ER, Tusler M. Development of the Patient Activation Measure (PAM): Conceptualizing and measuring activation in patients and consumers. *Health Serv Res* 2004;39:1005–26.
11. Greene J and Hibbard J. Why does patient activation matter? an examination of the relationships between patient activation and health-related outcomes. *J Gen Intern Med* 2012; 27:520–26.
12. Mosen DM, Schmittiel J, Hibbard J, Sobel D, Remmers C, Bellows J. Is patient activation associated with outcomes of care for adults with chronic conditions? *J Ambul Care Manage* 2007;30:21–29.

