

# How to Improve Audiology Services: The Patient Perspective

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**H**earing aids are a common management option in audiological rehabilitation, but hearing aid use remains low, as only 17% of people who need the devices use them.<sup>1</sup> This is particularly concerning with nearly 2.5 billion people estimated to have some degree of hearing loss by 2050, and of whom at least 30% will require rehabilitation services.<sup>2</sup> Hearing loss treatment is increasingly indicating pervasive positive effects extending beyond only improving hearing to enhancing a person's well-being—whether cognitive, socio-emotional, or physical—such as protecting from or slowing down cognitive decline, lowering the risk of depression, and ultimately improving quality of life.<sup>3-5</sup>

It is important for audiologists to reconsider the potential barriers causing such low numbers of hearing aid uptake and use. Numerous factors have been ascribed as reasons for this underutilization, from access and affordability<sup>6</sup>, continued difficulty understanding speech in a group or noisy situation even when wearing hearing aids<sup>5</sup>, to the well-known factor of stigma associated with hearing aids.<sup>7,8</sup> Merely owning hearing aids does not necessarily result in their use. There is continuous interaction between the user, the hearing aids, and the hearing care professional (HCP) throughout the hearing aid journey. This journey is defined by three stages: pre-fitting, during fitting, and post-fitting.<sup>9</sup> Successful hearing aid use and outcomes requires a partnership between patients and their HCP to ensure that the hearing aid journey and rehabilitation program are personalized, have realistic goals, and have continuous education, training, and support by the audiologist.<sup>10,11</sup> With the FDA releasing draft regulations for over-the-counter (OTC) hearing devices in October 2021, where people will be able to select, fit, and use OTC hearing aids without involvement of a HCP, the dawn of the OTC service delivery model is near.<sup>12</sup> The substantial difference between the traditional pathway for obtaining and using hearing aids versus an OTC model lies within the professional services offered. Therefore, it is increasingly important for HCPs to examine factors that influence and could differentiate the quality of the services they deliver. This article provides recommendations for improved audiology services from hearing aid users' experiences reported in qualitative studies.

## STUDY DESIGN

Recently, we conducted a systematic review of qualitative



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studies, according to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA 2020) statement<sup>13</sup> and the Synthesis Without Meta-analysis (SWiM) reporting guideline.<sup>14</sup> The aim of the review was to identify and integrate the most frequently reported concepts that hearing aid owners use when they describe their experiences during the fitting and post-fitting stages of the hearing aid journey. It was interesting to note that specific concepts were reported across these stages of the hearing aid journey. These concepts were grouped as related to clinical service delivery, the hearing device(s), and the hearing aid owner. The results from the data extracted on the methodological aspects and the main findings of the 25 included studies are reported elsewhere.<sup>15</sup> However, in this article we shift the focus to highlight the recommendations or suggestions that emerged from 19 of the 25 studies included during this systematic review on how to improve clinical audiological services from patients' perspectives.

## RESULTS AND DISCUSSION

Table 1 summarizes the suggestions from hearing aid users' perspectives to improve clinical audiological service delivery to improve hearing aid use and experiences and ultimately outcomes.

### **The core: Patient-centered care**

The reports from hearing aid users across 14 studies recommended a patient-centered care approach in audiology, emphasizing the importance of this service delivery model to support satisfactory experiences and positive outcomes for



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**Table 1. Recommendations to Improve Audiological Service Delivery to Enhance Hearing Aid Use, Experiences, and Outcomes from Qualitative Hearing Aid User Perspectives**

Recommendation (n*)	Descriptions
<b>Patient centered care (PCC) (14)</b>	<ul style="list-style-type: none"> <li>• Understand the patient’s attitude toward hearing loss and hearing aids (self-perceived need for hearing aids)</li> <li>• Understand patient’s self-perceived severity of his/her hearing difficulty</li> <li>• Shared decision-making, goal setting and action plans based on client’s needs and participation restrictions to improve communication and participation in daily living (well hearing = well-being)</li> <li>• Recognize and consider individual needs, experiences: holistic approach — psychological, social, functional, technological, educational needs</li> <li>• Hearing aid use goals: according to client’s perceived benefit, functional abilities, daily activities, frequent listening environments</li> <li>• Encourage clients to be active collaborator in their hearing health care</li> </ul>
<b>Schedule follow-up appointments (9)</b> In-person or via tele-audiology/virtual	<ul style="list-style-type: none"> <li>• Fine tuning: improve hearing aid function and sound quality</li> <li>• Hearing aids, accessories/ALD/apps: use, care, management, maintenance</li> <li>• Ensure comfort and good fit of hearing devices</li> <li>• Counseling: expectation management, information counseling</li> <li>• Further referrals: where to go or contact for help/support</li> </ul>
<b>Information counseling: before and after fitting (8)</b> Written information: accurate and simple language, only most important points Digital format	<ul style="list-style-type: none"> <li>• All available intervention/management options</li> <li>• Shared decision-making based on patient’s needs: selection, fitting, post-fitting</li> <li>• Expectation management: benefits, limitations</li> </ul>
<b>Hands-on training (7)</b>	<ul style="list-style-type: none"> <li>• HA handling, care and maintenance</li> <li>• Enhance patient’s self-confidence regarding HA use</li> </ul>
<b>Audiologist characteristics (5)</b>	<ul style="list-style-type: none"> <li>• High level of professionalism</li> <li>• Empathetic</li> <li>• Considerate</li> <li>• Enable/empower patient</li> <li>• Reframe hearing aids positively</li> <li>• Good interpersonal skills</li> <li>• Good listener</li> <li>• Sincere interest in patient</li> <li>• Motivational: patient to take active role in personal hearing care plan</li> <li>• Trustworthy: gain client’s trust</li> </ul>
<b>Involvement of significant others and communication partners (2)</b>	<ul style="list-style-type: none"> <li>• Pre-fitting, fitting, and follow-up</li> </ul>
<b>Aided hearing assessment (1)</b>	<ul style="list-style-type: none"> <li>• Determine and explain difference/improvement in hearing</li> </ul>
<b>Aural rehabilitation (1)</b>	<ul style="list-style-type: none"> <li>• Active listening and communication strategies</li> </ul>

\*Number in brackets indicate the number of studies which the implied recommendation was extracted from. Ordered from most to least for categories identified.

HA = hearing aid; ALD = assistive listening devices

patients. The definition of patient-centered care reminds audiologists to be “respectful of and responsive to individual patient preferences, needs, and values . . . ensuring that patient values guide all clinical decisions.”<sup>16</sup> In practice, it implies that the audiologist and the patient should be equal partners in the hearing aid journey, with the audiologist being the expert in the field of audiology and hearing rehabilitation and the patient being the expert in his or her own experience of hearing loss and hearing needs.<sup>17</sup> Audiologists can start implementing patient-centered care during initial consultations by striving to understand the patient’s attitude toward hearing loss and hearing aids. This is important because, out of a group of 31 factors, self-perceived hearing difficulty was identified as

the only factor that can positively affect help-seeking, hearing aid uptake, hearing aid use and satisfaction.<sup>9</sup> Indeed, hearing aid users reported that once they have accepted their hearing loss and realize the need for hearing aids, it leads to greater commitment to use their hearing aids.<sup>18-21</sup>

When discussing rehabilitation options, audiologists should remember that patients want solutions for their specific hearing and communication challenges, not just amplification of sound. Audiologists can use a multi-dimensional model such as the World Health Organization’s International Classification of Functioning, Disability, and Health framework (WHO-ICF)<sup>22</sup>, and more specifically the ICF Core Sets for Hearing Loss<sup>23</sup>, to better understand patients’ needs and goals based on their

activity limitations and participation restrictions in their most-frequent listening situations in their everyday life. Subsequently, the audiologist and the patient can use this information to make decisions together about all possible rehabilitation options (e.g., hearing aids, assistive listening devices, communication skills training) to improve the patient's communication and meaningful participation in daily life. In this way, the audiologist can help the patient understand and experience how improved hearing can also improve well-being, tailored to each patient's situation. Hearing aid users highly value audiologists who recognize and consider their individual experiences and needs, and who actively involve them through shared decision-making throughout the hearing aid journey.<sup>20,24-27</sup> In essence, when audiologists guide from a patient-centered approach, they encourage patients to be active collaborators in their hearing health care and well-being.

***A journey, not a destination: Schedule follow-up appointments***

The hearing aid fitting is only a moment in the ongoing hearing aid journey. Follow-up appointments are required to guide and support hearing aid users along the initial days of getting used to their hearing aids as well as during the following long-term hearing aid use. Not only do hearing aid users report that they value follow-up appointments, moreover, they specifically voiced a need for scheduled follow-up appointments. Patients perceive this as a commitment from the audiologist in terms of ongoing availability and support, whether the consultation is in-person or via teleaudiology.<sup>24</sup> From the hearing aid user's perspective, several aspects are suggested to be addressed by the audiologist during these scheduled follow-up sessions, namely: training in the care, handling and maintenance of hearing aids; fine tuning of hearing aids to improve function and sound quality; ensuring a comfortable and good fit of the hearing aid and/or sound delivery system (e.g., ear mold; slim tube and dome) and addressing issues of a proper fit with the use of glasses or face masks; expectation management; basic trouble shooting of hearing aids; and knowing who to contact or where to go when in need of support.<sup>19,21,24,28</sup> Thus, scheduled follow-up appointments are ideally situated for training and practicing of hearing aid handling skills and repetition of useful information.

***Information counselling: Before and after fitting***

With health information readily available on the internet, patients bring some information and expectations to the table. However, they still report a need that the audiologist should share accurate and comprehensible information on all available management options, but in a patient-centered way.<sup>19,20,29</sup> As emphasized earlier, the core of audiology service delivery—patient-centered care—should form the basis of all information counseling that audiologists give. Before hearing aid fitting, patients want information counseling related to expectations of the chosen intervention option(s), (e.g., discussing the benefits and limitations of hearing aids).<sup>27,30</sup> During fitting, counseling in the form of orientation on the practical handling of hearing devices is vital.<sup>19,24,27,30</sup> After fitting, hearing aid users report a need for continuous information counseling to review and repeat previous information and to reframe hearing aids

positively with regard to how it positively affects the patient's purposeful engagement in everyday life (e.g., increased social connectedness and interactions).<sup>31</sup>

Further recommendations include providing informational counseling material in written format. For written material, hearing aid users suggest that only the most important points be summarized in simple, yet accurate language to ensure understanding.<sup>20,24</sup> Audiologists can even consider making information available in a digital format or through online videos or referral of patients to appropriate online content so that they can view and review it at a time and place convenient for them.<sup>32</sup>

***Hands-on to keep hearing aids on: Training on handling hearing aids***

Hearing aid users' reports made it clear that they have a need for specific training on hearing aid handling, care, and maintenance.<sup>24,27,28,30,33</sup> Therefore, it is important that audiologists address the handling issues explicitly, especially during scheduled follow-up appointments. Audiologists can utilize behavior change techniques of instruction, demonstration, practice (e.g., role play) and rehearsal<sup>31</sup> to successfully facilitate hands-on training of these practical aspects. This can improve hearing aid users' self-confidence to use and handle their hearing devices.<sup>20</sup>

***Audiologist characteristics: What patients value***

Patients report valuing specific characteristics in audiologists that may contribute to the quality of care and service delivery they experience and ultimately affect hearing aid outcomes. From hearing aid users' points of view, the following qualities were identified as important in an audiologist: being highly professional, yet possessing good interpersonal and listening skills; being empathetic and considerate with a genuine interest in the patient; and being motivational to empower the patient to take an active role in his/her personal hearing health care as well as to reveal the positive effects hearing aids can bear for the user and his/her significant others.<sup>20, 24-26, 31</sup>

***The social network: Involve significant communication partners***

Hearing loss can be a lonely experience because it negatively influences verbal communication. Yet, communication is an integral and vital aspect of daily functioning and is a social affair. As opposed to hearing loss being a lonely path, the hearing aid journey should not be. Hearing aid users report that they want their family members, significant others, or close friends to be involved during their hearing aid journey because this social support encourages adoption and use of their hearing aids.<sup>24,26</sup> It is well-known that involving significant others or communication partners throughout the hearing aid journey is important to achieve and sustain successful hearing aid outcomes.<sup>34</sup> This is also aligned with patient-centered care and can expand beyond involving only direct family members to also include people with whom the hearing aid user communicates regularly (e.g., friends, children, grandchildren, colleagues, caregivers). Audiologists should strive to ensure that significant others/communication partners are active collaborators in the patient's hearing aid journey by providing opportunity to be part of conversations and shared decision-

making, welcoming and valuing their contributions, and acknowledging their experiences and needs.<sup>35</sup>

### **Other considerations**

Additional suggestions from hearing aid users to improve audiological service delivery included conducting aided hearing assessments to help explain the improvement in hearing due to hearing aid use.<sup>19</sup> Audiologists should also offer or refer to aural rehabilitation (whether individual or in a group setting) where active listening and communication strategies can be taught.<sup>33</sup> This is another strategy to support hearing aid users' communication and meaningful participation in daily life.

### **CONCLUSION**

Gaining insight from hearing aid users' perspectives on how audiological service delivery can be enhanced to improve

hearing aid use, experiences, and outcomes can support audiology practice and patient satisfaction within a patient-centered care approach. Even though the recommendations that emerged from hearing aid users' reports are not new, it is worthwhile to revisit these aspects from our patients' points of view. The most important pointers for audiologists from patient feedback included to serve and guide from a patient-centered and family-centered approach, book follow-up appointments to provide the needed information counseling and hands-on training, capitalize on the benefit of involving significant others, and enclose all of this in a trustworthy and sincere manner. 

References for this article can be found at <http://bit.ly/HJcurrent>.