



Patient Decision Aids

Innovative Tools for Counseling in Hearing Health Care Settings

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Designed to improve patient outcomes and to optimize shared decision making, patient decision aids (PDAs) are excellent adjuncts to delivery of patient-centered hearing health care. Decision aids provide information about treatment options, including risks, benefits and cost. They have increasingly been adopted for use by a wide array of health care professionals. Emerging evidence suggests that PDAs are powerful tools that can help a person make informed choices about their treatment as part of the clinical encounter. When used as part of the shared decision making process between a health care provider and a patient, decision aids serve as a vehicle for patient participation and patient activation. They can reveal a person's level of motivation, personal preferences, knowledge level, cultural values, desire to self manage and expectations.

Stacey, et al., (2014) conducted a systematic review and concluded that patient decision aids could increase a patient's knowledge of available treatments and empower them to make informed choices with greater clarity. Furthermore, decision aids can lead to more realistic expectations regarding possible treatment outcomes. In fact, Stacey, et al., (2014) found that individuals who use decision aids are more likely to reach decisions that are consistent with their values and are far less likely to remain passive or undecided. These factors lend themselves to improved overall health status and quality of life. Table 1 lists the contributions of PDAs to patient management. Potential outcomes to be achieved using PDAs include increased knowledge about potential hearing care solutions, increased patient participation in decision making, increased adherence to treatment plans and improved patient experience.

Table 1

Value of PDAs in Management of Persons with Hearing Loss (Lee & Emanuel, 2013)

- Relationship building
- Assists in exploring patient needs, expectations and values
- Supports information sharing and increased patient knowledge
- Optimizes opportunity for collaborative goal setting
- Helps in action planning and adherence
- Facilitates a greater understanding of risk perceptions
- Reduces internal conflicts regarding decisions one will ultimately make
- Increases likelihood that care will be aligned with patient values
- Has positive effect on patient provider communication

Table 2

Health Literacy Assessment Tools

- Shortened version of the test of functional health literacy in adults (TOFHLA) (Oldfield, 1999)
- Single Item Literacy Screener (SILS) (Morris, et al., 2006)
- Rapid Estimate of Adult Literacy in Medicine (REALM) (Safeer, 2005)

New to the profession of audiology, PDAs are integral to counseling, which is at the heart of patient-centered care with its focus on shared decision making. They help to engage patients and elicit information from their perspective in order to shed light on their sentiments regarding a newly received diagnosis of sensorineural hearing loss, and available options to manage this chronic health condition.

Whether or not to purchase a hearing aid or another hearing care solution is a difficult decision. Many factors and variables must be weighed including personal needs, preferences and values of the patient, as well as knowledge regarding treatment options. From an unbundling perspective, using decision aids to explore various treatment options could involve one session, which might include demonstrating or simulating the experience occasioned by trying technologies of interest to the patient. Considerable thought should go into development of patient decision aids depending on the goals one hopes to achieve.

The first step in developing a decision aid, of which an infographic is one variant, is to identify the thought process the patient goes through when deciding on available treatment options. One important consideration is the documented value of taking action in general and of a particular hearing health care solution in particular (including not taking action to overcome the consequences posed by hearing loss). The evidence included in the PDA must be high quality and depends in large part upon the purpose of the decision aid being developed (McCaffrey et al. 2012). Objective evidence is important, because even though untreated hearing loss has numerous well documented negative psychosocial correlates, uptake remains low, in part, due to cost and stigma and, we would argue, the lack of transparency regarding the evidence supporting the value of taking action, rather than adopting a “wait and see” attitude and the outcomes associated with a particular intervention (e.g. hearing aid use).

The second step in developing a decision aid is to support users in clarifying their values and preferences. A hearing health care decision aid is considered effective, if in the end the patient is encouraged to be actively involved in decision making. Similarly, it must guide patients in the decision-making process and help the patient to collaborate with family members in his effort to come to a resolution about a hearing health care solution. For persons with mild to moderate hearing loss, a first step might be use of a situation-specific PDA and possibly an overview of the value of hearing aids for when the perceived psychosocial difficulties and communication challenges become too great to ignore and they return to the practice to “make the leap to hearing aids!”

The third step in creating PDAs is to insure that the decision aid is at the appropriate literacy level using some of the systems available to evaluate this important domain, and to verify the patient’s health literacy using a health literacy assessment tool. Regarding the latter, a number of health literacy

assessment tools are available to clinicians as shown in Table 2. While the seven-minute TOFHLA is considered the gold standard, the REALM and SILS are briefer to administer and are considered to be valid measures for use in health care. Regarding the former, content, design and readability are of utmost importance when developing PDAs. The Suitability of Assessment Materials (SAM) is one of the few standardized methods for evaluating the content and design of health care materials. It was tested and validated with individuals from a variety of cultural backgrounds (Doak et al, 1996) and has been used in a number of studies assessing written health care materials (e.g. Weintraub et al, 2004). Caposecco, Hickson & Meyer (2012) utilized the SAM to assess the literacy level of various instructional brochures distributed by hearing aid manufacturers. In addition to being at the literacy level of patients, the content included in PDAs should reflect the information listed in Table 3.

Failure to involve patients in decisions about their care can have a detrimental effect upon the quality of care, patient safety, and, potentially, upon health care economics. To this end, a provision of the Affordable Care Act (ACA) encourages greater use of shared decision making to optimize the possibility that medical care is better aligned with patient preferences and values (Lee & Emanuel, 2013). Lee & Emmanuel (2013) suggest that use of PDAs is an effective way to implement shared decision making, using written interactive materials designed to inform patients and their families about treatment options; outcomes associated with these options, benefits; and costs of selected solutions. Furthermore, Lee & Emanuel (2013) believe so strongly in the use of PDAs to promote shared decision making that they have advocated that the Centers for Medicare and Medicaid Services (CMS) certify and implement patient decision aids into care management. The aim of such an initiative would be to: (1) promote an ideal approach to clinician–patient decision making, (2) to improve the quality of medical decisions, and (3) to reduce costs.

The importance of PDAs as a mechanism for increasing patient knowledge, promoting patient engagement and offering targeted intervention options to persons with hearing loss cannot be overstated, especially when choices have important consequences with lasting implications. Another value added feature of PDAs is that they help to align the patient’s approach to decision making with that of the hearing health care professional. As is shown in Table 4, audiologists are well poised to foster active patient engagement when

Table 3

| Ideal Content To Be Included in PDAs (Lee & Emanuel, 2013) | |
|---|--|
| <ul style="list-style-type: none"> • Scientific evidence detailing outcomes associated with treatments being recommended • Risks and benefits of tests, treatments or recommended hearing health care solutions • Relative effectiveness of interventions • Cost of recommended interventions | |

Table 4

| Audiologist versus Patient Approach to Decision Making | |
|--|---|
| AUDIOLOGIST | PERSONS WITH HEARING LOSS |
| <ul style="list-style-type: none"> • Audiologic knowledge • Practical experience • Clinician preferences • Manufacturer, research evidence | <ul style="list-style-type: none"> • Self perception of impacts of hearing loss • Lifestyle • Experiences of friends and family members • Recommendations from family physician |

decision aids are used as a complement to informational and adjustment counseling. Prototypes of two variants of PDAs we have created are shown in Figure 1. The choice of PDA depends on the setting, the hearing health care solution being considered, and the goal of the counseling session. The Hearing Aid Research Lab (HARL) webpage created by Dr. Robin Cox provides prototypes that her research team has developed. In establishing a web presence, Dr. Cox acknowledges the value of these visual tools in helping to individualize care, to organize and to systematize the set of



hearing health care treatment options audiologists present to their patients (http://harlmemphis.org/files/5613/9629/0521/treatment-decision-aid_3-14.pdf).

In sum, partnering with well-informed patients and patients who are active in their health care is ideal for both groups of stakeholders. Patients receive the care they need, have a voice in their care and are more likely to follow through on the care they require. Hearing health care professionals can boast improved hearing health-care outcomes, a partnership with their patients, and will have an increase in word of mouth referrals because their patients will be happier. ■

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References

- Baker, D. W., Williams, M. V., Parker, R. M., Gazmararian, J. A., & Nurss, J. (1999). Development of a brief test to measure functional health literacy. *Patient education and counseling*, 38(1), 33-42.
- Doak, C. C., Doak, L. G., & Root, J. H. (1996). Teaching patients with low literacy skills. *AJN The American Journal of Nursing*, 96(12), 16M.
- McCaffery K, Sheridan S, Nutbeam D, Clayman M, Kelly Blake K, Rovner M, Rovner D, Smith S, Wolf M. (2012) Addressing Health Literacy. In Volk R & Llewellyn Thomas H (editors). 2012 Update of the International Patient Decision Aids Standards (IPDAS) Collaboration's Background Document. Chapter J. <http://ipdas.ohri.ca/resources.html>.
- Morris, N. S., MacLean, C. D., Chew, L. D., & Littenberg, B. (2006). The Single Item Literacy Screener: evaluation of a brief instrument to identify limited reading ability. *BMC Family Practice*, 7(1), 21.
- Oshima Lee, E., & Emanuel, E. J. (2013). Shared decision making to improve care and reduce costs. *New England Journal of Medicine*, 368(1), 6-8.
- Safeer, R. S., & Keenan, J. (2005). Health literacy: the gap between physicians and patients. *Am Fam Physician*, 72(3), 463-468.
- Stacey, D., Légaré, F., Col, N. F., Bennett, C. L., Barry, M. J., Eden, K. B., ... & Trevena, L. (2014). Decision aids for people facing health treatment or screening decisions. *Cochrane Database Syst Rev*, 1(1).

Figures 1 and 2. Sample prototypes of PDAs for use in the counseling and rehabilitation of older adults with hearing loss.

| SHOULD I GET HEARING AIDS? | |
|--|---|
| If I Do Not Get Hearing Aids | If I Get Hearing Aids |
| <p>Communication</p> <p>I will still have trouble with hearing speech I will read lips I will ask for repetition I will miss what is said, especially in noise I may or may not be successful filling in the gaps</p> <p>I am doing fine at work, at home and when I socialize I can get by reading people's faces I am not frustrated</p> | <p>Speech will be louder I will still use facial expressions to follow along, and the hearing aids will help I may ask for repetition less Listening in noise might be easier or less frustrating Filling in the gaps will be more successful</p> <p>I can try the hearing aids for 45 days I can ask my audiologist for helpful tips for using the hearing aids I can always return and have adjustments to the hearing aids if things don't sound right</p> |
| <p>Others</p> <p>Others will continue to have to repeat what they tell me Others may feel frustrated by my hearing loss because of constant repetition will keep the TV up loud even though others do not have my hearing loss</p> <p>These things are not important to me</p> | <p>Others may find they repeat things less Others may find it easier to include me in conversations Others may appreciate the TV volume being lowered Others will have to learn that my hearing aids do not "fix" my hearing loss completely</p> <p>Hearing aids can help reduce the burden on my conversation partners I want TV to be mutually enjoyable for my partners My audiologist can help explain to me and my partners the best strategies for communication</p> |
| <p>Personal Adjustment</p> <p>I will not need to adjust to having hearing aids Things may stay the same Things could get worse over time because my brain pathways that process speech may "forget" how to work efficiently and effectively I feel "left out" when others converse and I do not follow everything</p> <p>These things are not important to me</p> | <p>Hearing aids take time to get used to Learning to hear with hearing aids will keep the pathways in my brain that process speech active I might feel more connected to others I might socialize more, or socializing might be less tiring I may find things that I stopped enjoying are enjoyable again</p> <p>My audiologist will fine tune the hearing aids to best fit me My audiologist will help me with tips to get used to hearing aids My hearing aids can have settings for different sound environments</p> |

On a scale of 1-10, how ready are you to try hearing aids?

| | | | | | |
|-----------|-----------|----------------|-------------------------|-----------------------|------|
| 0-1 | 2-3 | 4-5 | 6-7 | 8-9 | 10 |
| Not ready | Undecided | Possibly ready | Ready, some reservation | Ready, no reservation | Yes! |