

1. What information about hearing technology and related health care services is available to consumers who may be shopping for these goods and services? How useful do they find this information?

#### Hearing Aids

On the internet, consumers are able to purchase hearing aids with different types of company support related to selection, fitting, and follow-up services ranging from information posted on the website, phone call support only, to support that is established with a hearing aid practitioner in the consumer's geographic area. There are many internet sites and purchase options and if I were considering a purchase I would not know the best route to take.

Within the community, consumers are able to purchase hearing aids at local offices with support services offered through those offices. Consumers still would need to determine the hearing aid choices and services offered through different offices in their community. This is often accomplished through either a hearing aid consultation or auditory rehabilitative evaluation of patient needs.

#### PSAPs

Consumers are also able to purchase personal sound amplifiers (PSAPs) on the internet and in some community-based offices. These are not fit to a prescription based on hearing sensitivity measures and often are available at significantly lower prices than hearing aids. The information offered on PSAPs is confusing in that they are described as being hearing solutions for those who have normal hearing whereas in fact they are low-cost hearing aids. There are community practitioners who are willing to offer guidance related to PSAP use but consumers would need to understand that there would be fees associated with the time offered by a practitioner.

#### Patient Needs/Knowledge

Ideally, an audiologist would evaluate the rehabilitative needs of the consumer and that evaluation might not even indicate the needs for hearing technology but could lead to other helpful recommendations. If technology were indicated the audiologist could then work with the consumer and determine the actual features/level of technology needed and desired by the patient and meet other needs such as those related to hearing/communication strategies, listening training, and/or counseling.

In my experience, those who are seeking a first hearing aid often have little or no knowledge about hearing aids or the features they might need in a hearing aid. A one-to-one evaluation and/or consultation is a great way to learn about what might best suit the needs of an individual.

2. How are hearing aids and other forms of hearing technology commonly distributed and sold? To what extent are new sellers of hearing devices, as well as new methods of distribution and sales, affecting the range of goods, services, and prices available to consumers?

As stated above, hearing aids can be sold via the internet or a local office. When hearing aids are sold, consumers should be advised as to the need for possible assistance with the fit, loudness, sound quality, speech improvement, maintenance, care and repairs. Consumers then need to determine if these

services are billed as needed or if they are included in the purchase package for a pre-determined number of years on a service plan. Consumers may not realize that a less expensive hearing aid may be less expensive because the purchase price does not include services but that this approach could be advantageous in spreading the costs of hearing aid ownership over the years of use.

It is my hope that the advent of hearing aid sales and PSAPs on the internet will prompt the major hearing aid manufacturers to develop more basic/economy models to meet the needs of those with restricted finances.

PSAPs that cost under \$100 have been found in several studies to have limited high frequency gain, excessive low frequency gain and high levels of internal noise. Higher cost PSAPs have been found to have reasonable gain and noise levels.

It would be helpful if manufacturers of all devices offered information on typical repair rates and life of devices to assist with patient choice.

The unbundling of patient care and hearing aid costs should be of help in cost containment. One complication is that insurance companies do not reimburse audiologists for auditory rehabilitation/follow-up care so these visits would be billed to the patient.

3. How are innovations in hearing technology – including hearing aids, personal sound amplification products (PSAPs), and other devices and platforms – changing the competitive landscape and expanding the range of viable options to ameliorate hearing loss? What other innovations and developments are on the horizon?

Over the next 5-10 years, there should be improvements in managing background noise to allow for better hearing of speech in noise. It appears that hearing aid amplification may be included in other devices, such as phones. If amplified sound levels exceed OSHA recommendations for sound level exposure, then these devices should be labeled with cautions.

4. To what extent are hearing aids, PSAPs, or “hearables” interoperable with different adjustment or programming tools, as well as other technologies and communications systems? What standard setting efforts are underway and how might standard setting further competition and innovation (or fail to do so)?

I do not know of attempts to make hearing aids, PSAPs and other “hearables” compatible. If there were greater similarity in setting/programming hearing aids, then it would be simpler for practitioners to help adjust products with which they are less familiar. Otherwise, the practitioner needs the proprietary programming software for each manufacturer and the knowledge on how to use it.

5. To what extent might existing federal and state regulations be modified or streamlined to better accommodate new technologies and business models, consistent with promoting competition and innovation while meeting legitimate consumer protection objectives?

The hearing aid manufacturers should be asked to share data on the long-term reliability and satisfaction with their devices and I believe that the PSAP manufacturers should share that data also.

I am not opposed to OTC hearing aids. However, consumers can purchase PSAPs at this point in time so what is the advantage of re-classifying them as OTC hearing aids? Is there evidence related to the long-term reliability, safety and benefits from PSAP use?

Consumers could be advised that any hearing device should offer comfortable fit, acceptable loudness and sound quality, limited if no feedback and most importantly, improved hearing for speech. If any/all of these basic requirements are not met, then consumers should seek adjustments or if not resolved then they should return devices within the return policy timeframe.