



## ASU Speech & Hearing Clinic Hearing Aid Services

Thank you for considering the ASU Speech & Hearing Clinic for your hearing healthcare needs. The purchase and fitting of hearing instruments is a very important process and one that involves so much more than simply purchasing a quality product. Hearing aids are medical devices and not a retail “one-size fits all” type of product. An essential component to every successful fitting is the skill and expertise of the audiologist in selecting an appropriate hearing instrument for your individual needs and then appropriately fitting the hearing aid using advanced measurement and fitting techniques designed to verify that the hearing aid is programmed correctly for your hearing loss and needs. The quality of the fitting is paramount to your success with a hearing aid. A 10-year old hearing aid fit well following best practice guidelines will outperform a high-end expensive digital hearing aid that is fit using manufacturer first-fit algorithms without appropriate real ear verification measurements. Therefore, before deciding where to be fit with a hearing aid, consider the quality of service as well as the quality of the product.

While the majority of hearing aids currently available on the market are high quality instruments and provide significant benefits to those with hearing loss, not all hearing instruments are created equal. Hearing aid technology ranges from very basic digital circuits to very sophisticated digital hearing aid circuits. The appropriateness of circuitry type as well as the selection of hearing aid style and other options depends on a number of audiological and non-audiological factors. In general, hearing aids *are* capable of amplifying sounds as needed to compensate for a given individual’s hearing loss and *can* substantially improve an individual’s ability to hear and understand speech in a variety of communication situations. However, it is important to realize that these devices do *not* restore hearing to normal, do *not* eliminate all unwanted sounds, and do *not* enable the user to understand conversational speech perfectly in *every* situation, particularly in those situations made more difficult due to noise, distance and reverberation. The type of hearing aid recommended and the amount of benefit one receives from hearing aids is not the same for all users and is dependent on a number of factors including:

1. the severity and type of hearing loss
2. the ability to utilize residual hearing to understand speech
3. the appropriateness of hearing aid characteristics and how well the hearing aid is programmed for the individual
4. the listening demands in a variety of circumstances
5. the user’s expectations and desires for improvement
6. the user’s ability and determination to adjust to hearing aid use

Remember, no two hearing impaired people are alike. Professional guidance from our nationally recognized and state-licensed audiologists is essential in selecting which

hearing aid will best meet your needs. The ASU Speech & Hearing Clinic provides the full range of comprehensive hearing aid services needed to ensure a successful outcome including an audiological evaluation, Communication Needs Assessment, hearing aid programming and fitting, hearing aid orientation and follow-up. Proper functioning and fitting of existing hearing aids is determined through coupler and real-ear electroacoustic measurements. If necessary, repair and/or reprogramming can be performed to ensure that you are receiving maximum benefit from your existing hearing aids. Our clinic's audiologists remain current with the relevant research in order to provide state-of-art and evidence-based hearing healthcare diagnostics and treatment to our patients while training the next generation of audiologists.

**UNBUNDLED PRICING = AFFORDABLE AND HIGH QUALITY HEARING HEALTH CARE**

The ASU Speech & Hearing Clinic uses an unbundled pricing model that separates the professional fees for assessment and the fitting and follow-up procedures from the products that are selected and fitted. This leads to more affordable hearing care because you pay less upfront and then pay only for those services that you need after the initial fitting and adjustment period. Traditionally, the cost of the services for the fitting and follow-up is bundled into the cost of the hearing aids. With the traditional bundled approach, the patient pays upfront for the purchase of the hearing aids as well as the fees for services to fit the instruments and for follow-up appointments for a specified time period. With a bundled model you pay thousands of dollars upfront for services that you may never use and you may or may not receive the same type or level of services depending upon where the instruments are fitted; however, because the cost is not itemized you don't know what or how much you are paying for the aids versus other services.

At the ASU Speech & Hearing Clinic, regardless of which hearing aid is chosen, the patient pays the wholesale cost for the hearing aid in addition to the professional service fees to properly fit the hearing aids, following best practice guidelines, and follow-up for the evaluation and adjustment period of 45-days. The cost of the professional fitting fees is the same regardless of the hearing aid make/model dispensed and the cost for those services is completely transparent, that is, itemized so you know what you paid for. All follow-up services for maintenance and follow-up are charged as the services are rendered and needed by the patient. With an unbundled approach, patients with existing hearing aids purchased elsewhere may choose to have their hearing aids reprogrammed at the ASU Speech & Hearing Clinic and will pay for the procedures needed to refit them properly. Below compares the bundled versus unbundled approach to fitting hearing aids:

<b>Bundled Pricing Model</b>	
Advantages	Disadvantages

Familiar pricing structure	Upfront, initial price is higher
No charge for routine maintenance and follow-up (length of no charge period depends on the clinic)	Your contract for services is with a specific clinic
	If you do not follow-up regularly with your dispenser you have paid for services you never received
	You don't know what you are paying for and may not get the services needed to properly fit the hearing aids
	If you travel or move away the services you paid for upfront will not transfer
	Due to high upfront cost, users wait years to upgrade to newer technology
	Consumer incorrectly perceives that they are buying just a hearing aid and devalue the professional services integral to a successful fitting
	Sales-model: the dispenser may use hard sales tactics and push high-end technology to drive higher profits

<b>Unbundled Pricing Model</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Low upfront purchase price of hearing aids and initial fitting/follow-up services. Fair, transparent pricing of hearing aids at or close to single unit wholesale price	Less familiar pricing structure
You can seek quality audiological care wherever you are; your contract is not with a specific clinic	Because patients pay for maintenance and follow-up services they may not reliably return as recommended for services
You pay only for appointments and services that are needed and when they are needed	Some patients may dislike the "pay-as-you-go" approach where they are charged for every visit and procedure. For these patients, all-inclusive maintenance and follow-up plans are provided as alternative
With a lower initial price, users can choose when they want to upgrade their hearing aids	
Pricing is completely transparent; you know exactly what service you are receiving and paying for	

Anyone, regardless of where they purchased their hearing aids, can be fit or refit using best practice	
Establishes value for the professional services and expertise of the audiologist	
Medical model: the clinic focuses on providing high quality fitting and follow-up services and not on selling hearing aids.	

Below is a description of the hearing aid services provided at the ASU Speech & Hearing Clinic, outlining the steps involved in obtaining a hearing aid from the initial hearing evaluation to successful hearing aid use. The appropriate provision of amplification is a multi-stage process that follows best practice protocols. There are 6 basic steps and all are integral to a successful outcome: 1) Comprehensive Audiological Evaluation, 2) Communication Needs Assessment, 3) Pre-fit programming and verification measures, 4) Initial hearing aid fitting & verification of targets, 5) Post-fit management and 6) Validation measures (long-term outcomes).

► **Comprehensive Audiological Evaluation:** The first step in obtaining a hearing aid is a comprehensive hearing test or audiological evaluation. The hearing evaluation at ASU takes approximately 1 ½ hours and includes a detailed history including measures of self-reported handicap and disability, immittance testing, air and bone conduction audiometry, and comprehensive speech audiometry. Other tests, such as otoacoustic emissions, are included as deemed medically necessary by the test results and/or the patient’s history. The results of this evaluation enable us to determine the type and severity of the hearing loss, the necessity for medical consultation, and whether or not hearing aid use is an appropriate treatment option. Based upon the test results, the patient’s candidacy for one or two hearing aids can be determined and it is recommended that the patient return for a more in-depth Communication Needs Assessment for additional testing to determine the specific hearing aid recommendation by matching the best technology to the patient’s needs. During the evaluation, an ASU clinical supervisor (state-licensed and certified by the American Speech-Language and Hearing Association), together with a Doctor of Audiology student clinician, will complete the testing, explain your test results and discuss your needs and desires for hearing improvement. The fee for the comprehensive audiological evaluation is \$180.00.

► **Communication Needs Assessment:** The next step in obtaining a hearing aid is a consultation with the audiologist to select the best hearing aid for your particular hearing loss and communication needs. During this appointment, additional testing, not completed during the audiological evaluation, will be completed that will help to identify areas of difficulty and need. Self-report questionnaires provide information about your

perception of activity limitations (disability) and participation restrictions (handicap) as well as expectations and preferences. If you have existing hearing aids, they will also be tested at this time to determine their function and appropriateness. It may be the case that existing hearing aids require refitting to improve your performance rather than the purchase of new hearing aids. After a thorough review of all audiological and non-audiological needs, we will discuss with you our professional recommendations regarding your potential for benefit from hearing aid use and your desires and needs for hearing improvement. Additionally, the appropriateness of different hearing aid circuitry, hearing aid styles, and the need for different features in a hearing aid will be determined. At the ASU Speech & Hearing Clinic, we use a wide variety of advanced technology products from many major manufacturers including Widex, Oticon, Phonak, GNResound, Sonic Innovations, Siemens, Unitron, and Starkey. If additional assistive technology or services are deemed necessary to help you with full accommodation of your hearing loss at home, work, or school they may be recommended at this time or a separate Hearing Assistive Technology (HAT) assessment may be recommended. It is very helpful to have a family member or friend present with you at this time, and throughout the process of obtaining hearing aids, so that he/she can provide support and assistance as you (or your child) learn to use hearing aids. The fee for the Communication Needs Assessment is \$135.00.

At the end of the Communication Needs Assessment, a specific hearing aid recommendation will be provided. You may choose to purchase the recommended hearing aid(s) anywhere. If you elect to purchase the recommended hearing aid(s) from the ASU Speech & Hearing Clinic, a price quote will be prepared for you and ear impressions will be taken as well as an electroacoustic measurement called the RECD (real-ear-to-coupler difference). The additional fees for the ear impressions and the RECD testing will apply as well as the fee for custom earmolds and the payment for these items and services is due at this appointment. ***Please note: the professional services provided and the cost of the custom earmolds are non-refundable should I decide to return any hearing aids subsequently fitted.***

Once the decision is made to obtain hearing aids, an impression of the ear is taken so that the hearing aid or earmold can be shaped to fit properly in the ear canal. We take great care in obtaining a good ear impression through the use of an open-jaw technique and the use of high viscosity impression material. The use of this technique has significantly reduced the need for remakes due to a poorly fitting shell or earmold. The fee for the earmold impression and any custom earmolds is due at this appointment. Lastly, a real ear measurement (real-ear-to-coupler difference) is taken to determine the acoustic size of your ear canal. The RECD is an important measurement to correctly convert your hearing thresholds into accurate hearing aid amplification targets.

► **Hearing Aid Pre-Fitting:** Following best practice guidelines, before you come in to be fit with your hearing aids, our audiologists and student clinicians complete a variety of

tests important for quality assurance and electroacoustic measurements to ensure the hearing aids are properly programmed to your hearing aid prescription. Prior to your arrival, we will have performed an electroacoustic analysis on the hearing aids to ensure proper functioning and adherence to the manufacturer's specifications. This analysis also includes a test of processing time delay and phase measurements as well as a verification of directional microphone performance. Additionally, prior to fitting the hearing aids to you, your hearing aids will have been pre-programmed to an appropriate prescriptive target using electroacoustic measurements to verify that all hearing aid parameters have been set properly. This programming includes all the hearing aid programs including the telecoil program, which is often overlooked.

► **Hearing Aid Fitting and Follow-up:** Our comprehensive hearing aid fitting protocol is carefully designed and implemented to ensure a satisfactory hearing aid fitting. Approximately two weeks after the hearing aids and/or earmolds are ordered, you will return to the ASU Hearing Clinic for evaluation and fitting of the hearing aids. During the actual fitting appointment, we will further verify that the hearing aids have been set properly for your hearing loss by measuring the sound pressure delivered to your ear canal while the hearing aids are worn (real ear probe microphone measurements). This test will ensure that soft, average and loud speech inputs are appropriately amplified within your range of hearing and that very loud environmental inputs never exceed your maximum discomfort levels. Hearing aid programming adjustments are made, as necessary, based on these results and your listening preferences.

Thorough hearing aid counseling and orientation will be provided to teach you how to use and care for your new hearing aids. During the appointment you will practice operating the aids to assure that you will be able to handle the aids independently at home. We will also practice telephone use and the operation of your hearing aids' telecoil. Finally, the audiologist will review proper expectations and suggestions to assist you during the adjustment period. A packet of useful information will be provided for you to take home covering the importance of audiological rehabilitation. Participation in our group audiological Rehabilitation program called Living WELL with Hearing Loss will be recommended and encouraged.

During the **45-day evaluation & adjustment period**, it is important that you return to the ASU Hearing Clinic for appropriate follow-up appointments to assure that the hearing aids are adjusted properly. We would like to see you for follow-up appointments at least as often as listed below:

- ***One, two weeks, and four weeks after the initial hearing aid fitting:***
  - During these appointments, aided soundfield testing will be completed to measure maximum aided audibility as well as speech recognition in quiet and in noise; hearing aid reprogramming will be completed as indicated.
- ***Near the end of the 45-day evaluation & adjustment period—six weeks post fitting:***

- By the end of the adjustment period, adaptation to the new hearing aids should be nearly complete. At this time outcome measures will be used to further validate the success of the fitting and to determine the degree of hearing aid benefit.

► **Post-Fitting Management:**

After the initial hearing aid fitting and 45-day evaluation & adjustment period has ended, you may choose how you will pay for additional follow-up services. Option 1) **Pay-As-You-Go:** this option allows you to pay for only those follow-up services that you use. Per our unbundled pricing structure, appointments falling outside the evaluation & adjustment period *will be billed for services rendered during each appointment.* At a minimum, each appointment will have a \$45.00 office visit fee and the charges for any additional tests and services needed during the visit will apply. Option 1 is recommended for patients who require only routine follow-up or only reside in the Phoenix area part of the year. Option 2) **All-Inclusive Patient Comprehensive Care Plan:** this option allows you to pre-pay for all post-fitting services either annually (PCCP-I) or for a period of three years (PCCP-II). While covered under the PCCP, all appointments through the ASU Speech & Hearing Clinic for follow-up and maintenance of your hearing aids are included as well as plan-specific discounts for accessories, new earmolds, etc. Additional fees to repair your hearing aids if they are not in-warranty with the manufacturer, will apply.

**RECOMMENDED FOLLOW-UP:** Adhering to the recommended schedule of routine follow-up appointments is important to helping you be successful with your hearing aids and to receive the proper maintenance. Regular follow-up for hearing aids is recommended approximately every three months based on the following schedule of services. Please note, these are examples; your audiologist will determine what is needed during each follow-up appointment.

3-month follow-up appointment

- Hearing aid visual and listening inspection
- Hearing aid cleaning
- Programming adjustments, if needed

6-month follow-up appointment

- Hearing aid visual and listening inspection
- Electroacoustic analysis to determine functioning
- Hearing aid cleaning
- Small parts replacement: mic screens, tone hooks, tubing, etc., as needed
- Programming adjustments, if needed

9-month follow-up appointment

- Hearing aid visual and listening inspection
- Hearing aid cleaning
- Programming adjustments, if needed

12-month annual check-up

Hearing re-evaluation

Hearing aid visual and listening inspection

Electroacoustic analysis to determine functioning

Hearing aid cleaning

Small parts replacement: mic screens, tone hooks, tubing, etc., as needed

Programming adjustments, if needed

Annual manufacturer overhaul as needed

► **Living WELL with Hearing Loss Audiological Rehabilitation Groups:**

Participation in an audiological rehabilitation group is encouraged to help you achieve the most benefit from your hearing aids. These 7-week classes meet once a week for two hours. More information regarding the Living with Hearing Loss group is available on our website.